



# WELCOME TO ALL STEELS TRADING LTD

All Steels Trading Ltd is one of Europe's fastest growing steel trading companies with strong alliances to mills around the globe and an ability to provide short lead time deliveries from extensive dockside stocks.

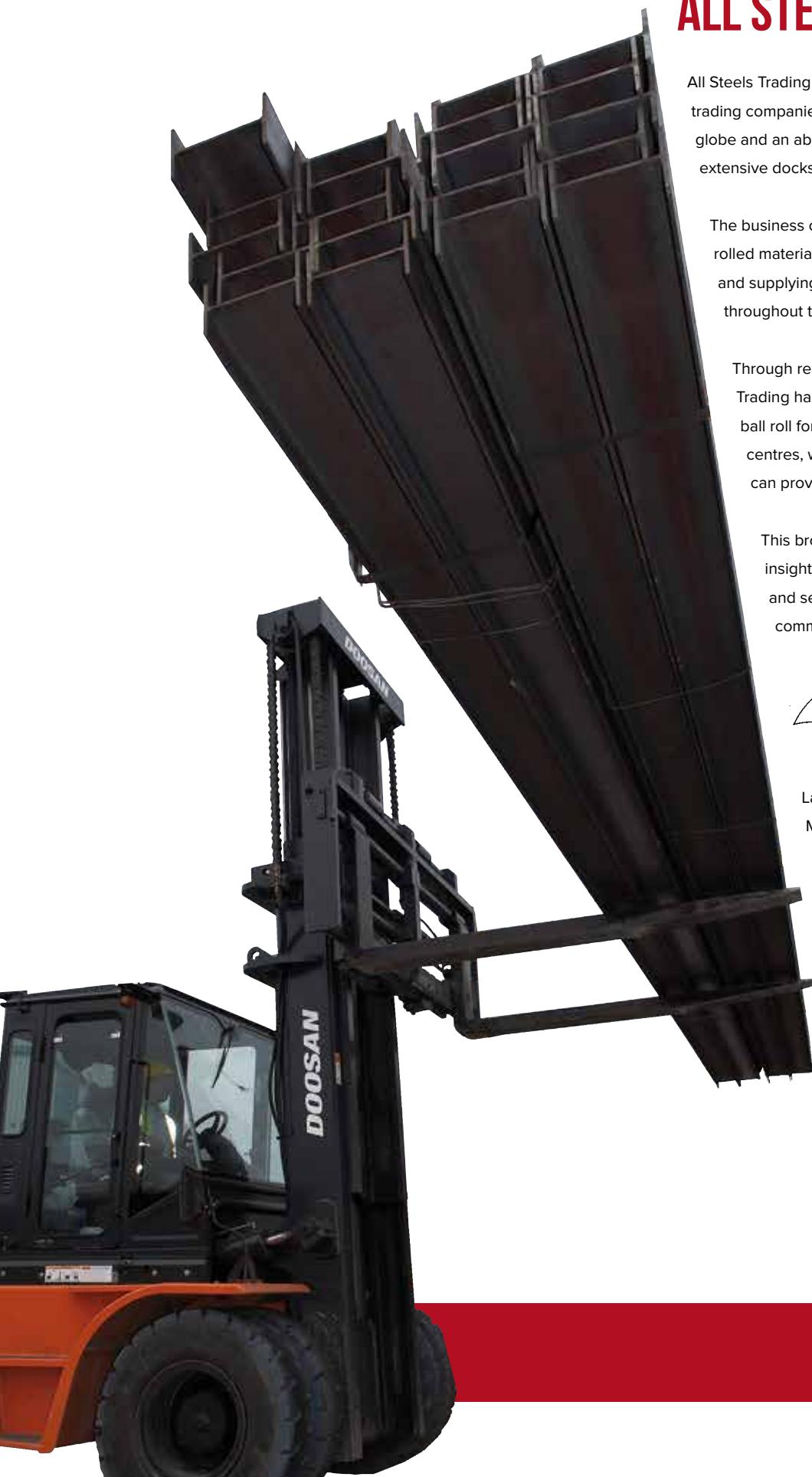
The business offers a wide range of long products and flat rolled material plus the company also has a skill in sourcing and supplying niche market products for customers throughout the world.

Through relationships with sister companies All Steels Trading has access to a special section re-rolling mill, a ball roll forging mill and a number of steel processing centres, which widens the service that the business can provide.

This brochure has been created to give you an insight into the comprehensive range of products and services we offer, which demonstrates our commitment to satisfying customer demand.



Laurence McDougall  
Managing Director



# WILLKOMMEN BEI ALL STEELS TRADING LTD

All Steels Trading Ltd gehört zu den wachstumsstärksten Stahlhandelsunternehmen Europas.

Das Unternehmen verfügt über ein weitreichendes Netzwerk mit Stahlwerken rund um den Globus und ermöglicht kurzfristige Lieferungen aus seinen riesigen Hafenlagern.

Das Unternehmen bietet eine vielfältige Palette an Lang- und Flachstahlerzeugnissen an und hat sich zugleich auf die Beschaffung und Lieferung von Nischenprodukten für Kunden aus aller Welt spezialisiert. Durch die Zusammenarbeit mit seinen Schwesterunternehmen hat All Steels Trading Zugang zu einem Nachwalzwerk für Spezialprofile, ein Kugelwalzwerk und mehreren Stahlverarbeitungsanlagen, um so einen noch facettenreicher Service anbieten zu können.

Diese Broschüre soll Ihnen einen Überblick über unsere umfassende Produkt- und Servicepalette geben und zeigen, dass die Zufriedenheit unserer Kunden bei uns an erster Stelle steht.

Laurence McDougall  
Geschäftsführer

# BIENVENUE À ALL STEELS TRADING LTD

All Steels Trading Ltd est l'une des entreprises du secteur sidérurgique qui connaît la croissance la plus rapide en Europe et ce, grâce à de solides alliances avec les aciéries du monde entier.

All Steels Trading fonctionne en tant qu'importateur d'une large gamme de produits laminés longs et plats en vrac et combine ce service avec une grande offre de stock à quai livrable dans les 48 heures après commande. La société offre aussi sa compétence unique dans le domaine de la recherche et de la fourniture des produits de niche pour les clients du monde entier.

Compte-tenu des relations privilégiées qu'elle entretient avec ses sociétés soeurs, All SteelsTrading a accès à un lamoir spécialisé dans la fabrication de profilés spéciaux, un lamoir à chaud qui produit des billes de broyage et un certain nombre de centres de transformation de l'acier en mesure de fournir des services tels que la coupe à longueur, le grenaillage et la couche d'apprêt.

Cette brochure a été préparée pour vous donner un aperçu de la gamme complète de produits et de services offerts et pour vous démontrer que nous sommes engagés à satisfaire la demande de nos clients.

Laurence McDougall  
Directeur Général



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# A BRIEF HISTORY

All Steels Trading Ltd was incorporated in April 2006.

From a standing start the business has grown at a breath-taking pace and its customer base now stretches out to many of Europe's leading steel distributors.

The business enjoys very close working relationships with mills throughout the world and these supply partners have been carefully selected in order to provide All Steels Trading with an additional ability to supply products of a less standardised nature.

In the main the business operates as a virtual steel stockholder with imported material being held at strategically positioned docks for delivery within 48 hours from the time of order receipt. Most of the logistics in terms of steel movement from vessel discharge, stock management to customer deliveries is outsourced to Groveport Logistics Ltd who typically handle well in excess of 250,000 tonnes of steel per annum.

All Steels Trading's head office is situated in North Yorkshire, UK and a combination of employees and agents help to service our widening customer base.

Even though the business is growing at a rapid rate we will always pride ourselves on the quality of products we supply. Our steel is only sourced from those mills that have the appropriate accreditations and certification standards and all material is thoroughly inspected at the time each vessel is discharged and again at the point it makes its final journey to our customers.

All Steels Trading is also totally committed to providing its customers and suppliers with an excellent service and a friendly working relationship. In March 2017 the company was awarded the prestigious certification of BSI ISO 9001:2015. The directors are very proud of the company's achievements and we look forward to new trade partners putting us to the test and the continuation of repeat business with our regular customers and suppliers.



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## DIE UNTERNEHMENSGESCHICHTE IM ÜBERBLICK

All Steels Trading Ltd wurde im April 2006 gegründet.

Mit einem atemberaubenden Tempo wuchs das Geschäft sozusagen von Null auf Hundert an und kann heute zahlreiche führende Stahlhändler in ganz Europa zu seinem Kundenstamm zählen. Das Geschäft pflegt sehr enge Partnerschaften mit Stahlwerken weltweit und diese Lieferpartner wurden sorgfältig ausgesucht, wodurch All Steels Trading auch Produkte abseits der Norm liefern kann.

Im Rahmen des als virtuelles Stahl-Lagerhaus betriebene Hauptgeschäft werden die importierten Materialien an strategisch platzierten Hafenanlagen gelagert, um innerhalb von 48 Stunden nach Bestellung ausgeliefert zu werden. Unseren logistischen Bereich - vom Entladen der Schiffe über die Lagerverwaltung bis zu den Kundenauslieferungen - haben wir größtenteils auf die Groveport Logistics Ltd übertragen, die in einem typischen Jahr weit über 250.000 Tonnen Stahl handhaben.

Die Hauptniederlassung von All Steels Trading befindet sich in der britischen Grafschaft North Yorkshire. Hier betreuen unsere Mitarbeiter und Handelsvertreter unseren wachsenden Kundenstamm. Trotz unseres rapiden anwachsenden Geschäfts nimmt die Qualität der von uns gelieferten Erzeugnisse nach wie vor einen überaus hohen Stellenwert ein. Wir beziehen unseren Stahl ausschließlich aus Werken mit anerkannten Qualitätsiegeln und Zertifizierungsstandards. Alle Materialien werden einer ersten gründlichen Qualitätskontrolle unterzogen, sobald sie vom Schiff entladen werden und durchlaufen eine weitere Inspektion, bevor sie zum Kunden geliefert werden.

Darüber hinaus legen wir bei All Steels Trading allerhöchsten Wert darauf, unseren Kunden und Zulieferern einen hervorragenden Service und eine freundliche Geschäftsbeziehung zu garantieren. Im März 2017 wurde dem Unternehmen die angesehene Akkreditierung des BSI ISO 9001:2015 zuerkannt. Die Geschäftsleitung blickt mit Stolz auf den Erfolg des Unternehmens und freut sich sowohl auf neue Handelspartner, die uns beim Wort nehmen wollen, als auch auf die Fortsetzung bestehender Kontakte mit unseren Stammkunden und langjährigen Zulieferern.



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## HISTORIQUE RAPIDE

L'entreprise All Steels Trading Ltd a été constituée en avril 2006.

Partie de rien, l'entreprise a connu un développement rapide et sa clientèle s'étend maintenant aux principaux distributeurs d'acier européens. L'entreprise bénéficie de relations professionnelles étroites avec les sidérurgistes du monde entier et ces fournisseurs partenaires ont été soigneusement sélectionnés pour que la société All Steels Trading soit également en mesure d'assurer sa capacité d'approvisionnement en produits de nature moins standardisée.

Pour l'essentiel, l'entreprise fonctionne comme un stockiste d'acier en ligne dont les produits importés sont entreposés sur des quais situés dans des endroits stratégiques pour que la livraison ait lieu dans les 48 heures qui suivent la date de réception de la commande. La plupart de la logistique en termes de mouvements d'acier depuis le déchargement du navire en passant par l'inspection des marchandises, l'entreposage et la gestion des stocks jusqu'à la livraison au client est sous-traitée à l'entreprise Groveport Logistics Ltd qui, à la satisfaction générale, traite plus de 250 000 tonnes d'acier par an.

Le siège social de All Steels Trading est situé au Royaume-Uni dans le North Yorkshire et tous nos employés et agents conjuguent leurs efforts afin de proposer les meilleurs services à une clientèle de plus en plus importante. Même si l'entreprise connaît une croissance rapide, nous mettons toujours un point d'honneur à proposer des produits et des services de très grande qualité.

Nos aciers ne proviennent que des aciéries accréditées et certifiées aux normes appropriées et tous les matériaux sont tout d'abord soigneusement contrôlés une première fois lors du déchargement de chacun des navires, puis une deuxième fois au moment où ils sont finalement livrés à nos clients. All Steels Trading s'engage fermement à offrir à ses clients et fournisseurs un excellent service et des relations de travail cordiales. En mars 2017, la société a obtenu la prestigieuse certification BSI ISO 9001:2015. Les administrateurs sont très fiers des résultats de la société et nous serons heureux de travailler en étroite collaboration avec les partenaires commerciaux existants comme avec les nouveaux, et ce tout en poursuivant notre essor.



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### WHY CHOOSE ALL STEELS TRADING LTD?

- COMPETITIVE PRICES.
- EXTENSIVE STOCK RANGE.
- TOP QUALITY MATERIAL.
- NICHE MARKET PRODUCTS.
- RELIABLE EFFICIENT SERVICE.

- DELIVERY WITHIN 48 HOURS.
- FRIENDLY AND HELPFUL STAFF.

**ALL STEELS TRADING LTD: SOURCING STEEL FROM AROUND THE WORLD FOR DELIVERY TO OUR UK CUSTOMERS WITHIN 48 HOURS.**

**WARUM ALL STEELS TRADING LTD?**

- WETTBEWERBSFÄHIGE PREISE.
- UMFANGREICHER LAGERBESTAND.
- QUALITATIV HOCHWERTIGE MATERIALIEN.
- NISCHENPRODUKTE.
- ZUVERLÄSSIGER, EFFIZIENTER SERVICE.
- LIEFERUNG INNERHALB VON 48 STUNDEN.
- FREUNDLICHE UND HILFSBEREITE MITARBEITER.

ALL STEELS TRADING LTD: STAHL AUS ALLER WELT ZUR LIEFERUNG AN UNSERE KUNDEN  
IM VEREINIGTEN KÖNIGREICH INNERHALB VON 48 STUNDEN.

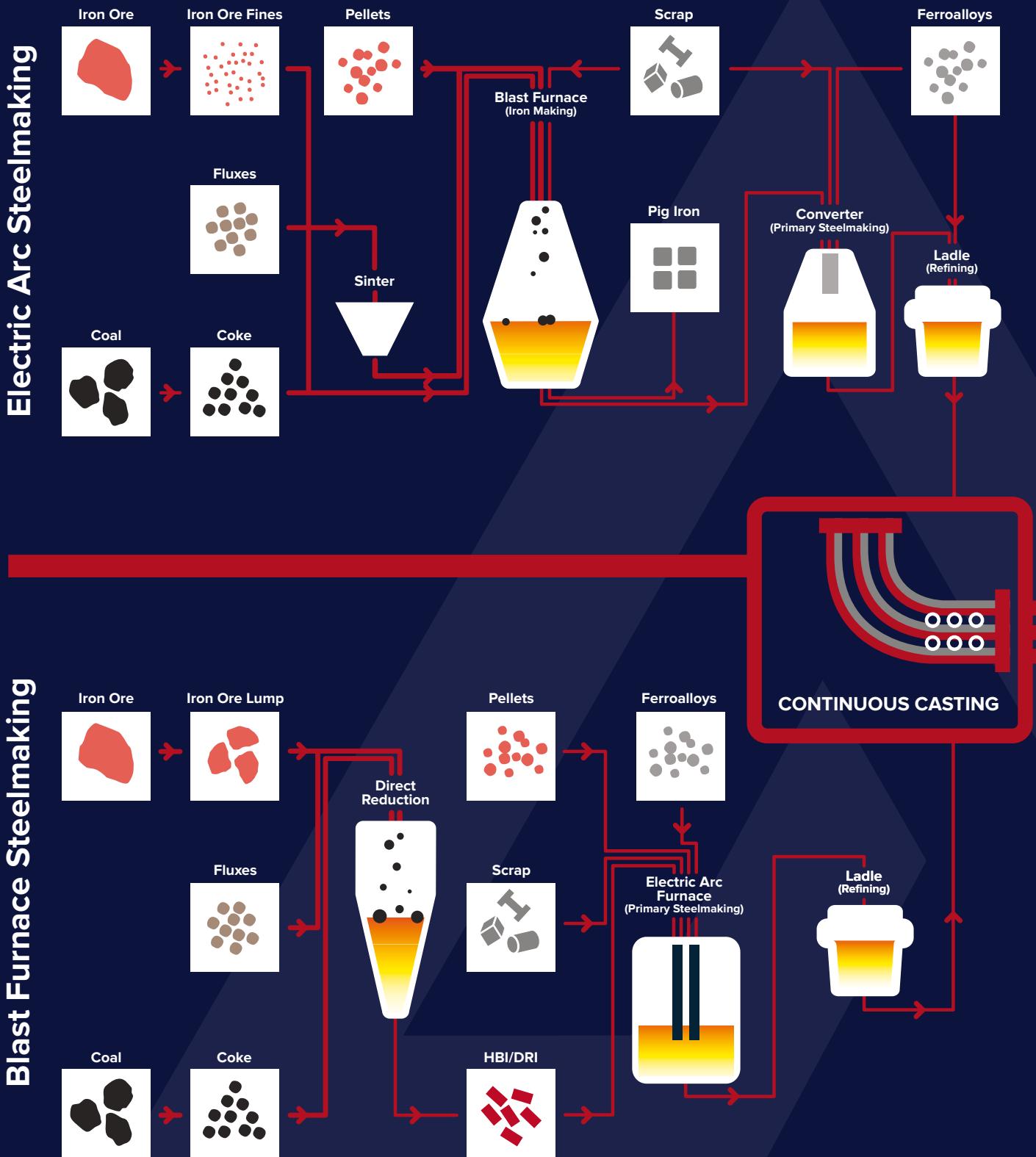
**POURQUOI CHOISIR ALL STEELS TRADING LTD?**

- PRIX COMPÉTITIFS.
- NOMBREUSES RÉFÉRENCES EN STOCK.
- PRODUITS DE TRÈS GRANDE QUALITÉ.
- PRODUITS DE NICHE.
- SERVICE FIDABLE ET EFFICACE.
- LIVRAISON SOUS 48 HEURES.
- PERSONNEL SYMPATHIQUE ET SERVIABLE.

ALL STEELS TRADING LTD: LIVRAISON DES ACIERS EN PROVENANCE DU MONDE ENTIER  
SOUS 48 HEURES.

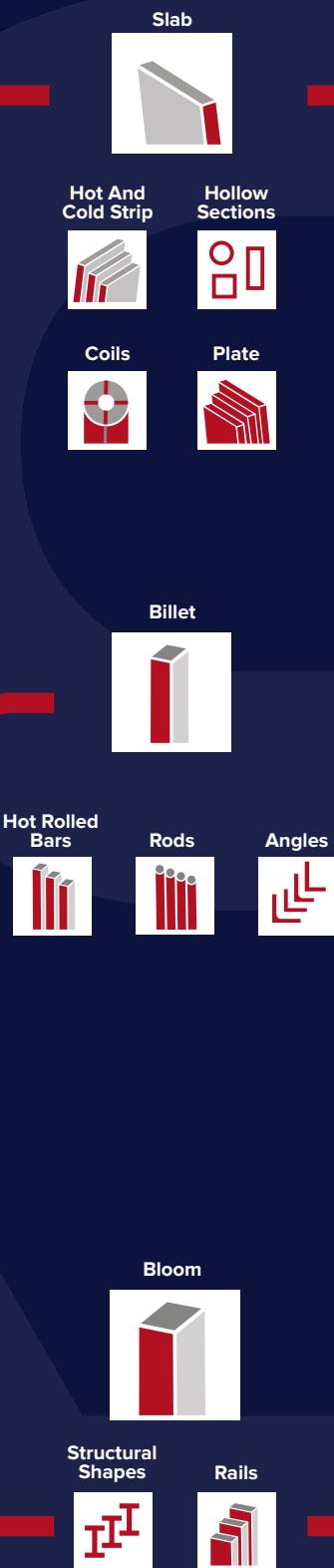
# ALL STEELS TRADING'S

## STEEL PRODUCTION



# ROLE IN THE STEEL SUPPLY CHAIN

CHANNEL TO MARKET



International Steel Trading & Finance



Shipping & Breaking Bulk



Dockside Storage Facility



Distribution



Steel Stockholding



END USER

Bridge Building



Railways



Automotive



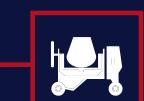
Wind Power



Yellow Goods

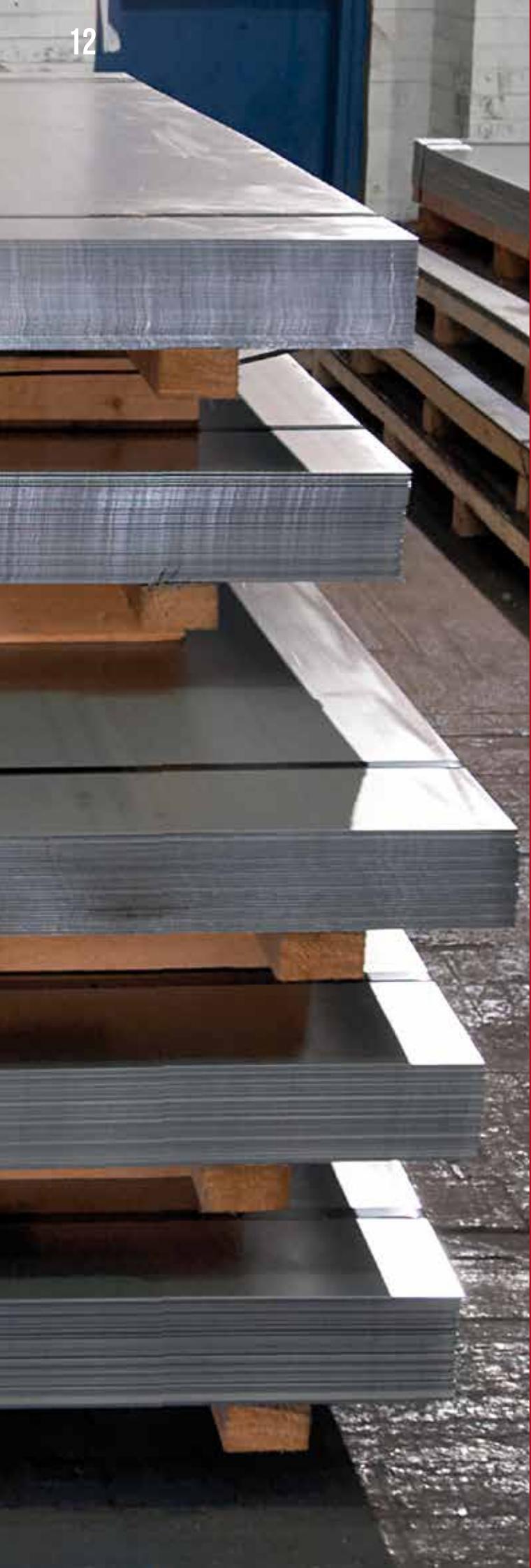


Construction



White Goods





## ENVIRONMENTAL POLICY

All Steels Trading Ltd operates as a general steel trading business with the added service of offering a large range of dockside stocks for sale and delivery within 48 hours from the time of order receipt.

As we are not directly involved in the manufacture of the steel, the environmental impact of our activity is minimal. However, we are acutely aware of the processes involved in steel making and therefore have a strong policy to mitigate any supply chain environmental impact.

It is the company's policy to supply and deliver its products in a manner that minimises the impact on the environment where practicable.

The company considers that matters regarding the environment are an objective to be shared by all employees, suppliers and customers of the company and it regards environmental issues as being of equal value to Quality, Health and Safety, or any other business objective.

It is the company's policy to implement systems for continuous improvement in all fields of operation and these will be integrated into all management functions.

Our aims include to:

- Establish procedures to assess, monitor and examine the impact of all current or new activities and processes on the environment.
- Establish monitoring procedures and, where measurement and testing is deemed necessary, ensure that data records and results are regularly kept, maintained and updated.
- Eliminate or reduce pollutant materials, to help conserve valuable resources.
- Reduce and re-cycle waste materials, where possible, to help conserve valuable resources.
- Encourage and empower staff through education and leadership to apply standards both in the work place and at home, which are commensurate with the company's own standards.
- Endeavour to purchase environmentally preferable goods and services where possible. To use, where applicable, suppliers or supply chains who have proven good environmental track records.
- Be totally committed to pollution prevention and strive to comply with all applicable environmental legislation.

# UMWELTPOLITIK

Neben seinem Betrieb als Stahlhändler verfügt All Steels Trading Ltd über umfassende Lagerbestände am Hafen, mit Verkauf und Lieferservice innerhalb von 48 Stunden nach Bestelleingang.

Da wir nicht direkt an der Stahlerzeugung beteiligt sind, ist die Umweltauswirkung unserer Aktivitäten gering. Wir sind uns jedoch der Verfahren in der Stahlherstellung sehr bewusst und eine Reduzierung des Umwelteinflusses, die jede logistische Kette mit sich bringt, gehört zu unseren festen Grundsätzen.

Die Firmenrichtlinien unseres Unternehmens umfassen Bereitstellung und Lieferung unserer Produkte - wenn durchführbar - in einer Weise, die Auswirkungen auf die Umwelt verringern.

Das Unternehmen betrachtet Angelegenheiten, die den Umweltschutz betreffen, als Aufgabe, die alle unsere Mitarbeiter, Lieferfirmen und Kunden betrifft, und Umweltschutz wird von der Firma gleichwertig wie Qualität, Gesundheit und Sicherheit sowie jedes weitere Geschäftsziel angesehen.

Die Einführung von Systemen zur ständigen Verbesserung in allen Betriebsbereichen, welche in alle Verwaltungsfunktionen integriert werden, gehört zu unserer Unternehmensphilosophie.

Unsere Planziele umfassen:

- Verfahren zu etablieren, mit denen Auswirkungen gegenwärtiger und zukünftiger Aktivitäten und Prozesse auf die Umwelt eingeschätzt, überwacht und untersucht werden.
- Überwachungsverfahren zu etablieren und, dort wo Messungen und Tests als notwendig erachtet werden, regelmäßige Aufzeichnung, Wartung und Aktualisierung von Daten und Ergebnissen zu gewährleisten.
- Schadstoffe zu beseitigen oder zu reduzieren, um wertvolle Rohstoffquellen zu erhalten.
- Zur Erhaltung wertvoller Ressourcen Abfallstoffe zu reduzieren und, wenn möglich, wiederzuverwerten.
- Unsere Mitarbeiter durch Ausbildung und Leitung zu fördern, Umweltmaßstäbe, die den Standards des Unternehmens entsprechen, sowohl am Arbeitsplatz als auch zu Hause, anzuwenden.
- Wann immer möglich den Kauf von umweltverträglichen Gütern und Dienstleistungen anzustreben. Wenn zutreffend, Lieferfirmen oder Lieferketten zu verwenden, die umweltfreundliche Leistungen nachweisen können.
- Das Unternehmen setzt sich für das Verhindern von Umweltverschmutzung ein und strebt die Einhaltung aller zutreffenden Umweltgesetze an.

# POLITIQUE ENVIRONNEMENTALE

All Steels Trading Ltd agit en tant qu'entreprise générale spécialisée dans le négoce de l'acier offrant un service supplémentaire, des stocks à quai disponibles pour livraison dans les 48 heures qui suivent la date de réception de commande.

Étant donné que nous ne participons pas directement à la fabrication de l'acier, l'impact environnemental de nos activités est minimal. Cependant, nous avons parfaitement conscience des processus impliqués dans la fabrication de l'acier et nous suivons donc une politique stricte visant à atténuer l'impact environnemental de la chaîne d'approvisionnement.

La politique de l'entreprise est de fournir et de livrer ses produits tout en réduisant, dans la mesure du possible, l'impact sur l'environnement.

La société considère que les objectifs qui concernent l'environnement doivent être partagés par tous les employés, les fournisseurs et les clients de la société et que les questions environnementales importent autant que la qualité, la santé et la sécurité ou tout autre objectif fixé par l'entreprise.

La politique de l'entreprise est de mettre en œuvre des systèmes permettant l'amélioration continue dans tous les domaines opérationnels et de les intégrer dans toutes les fonctions de gestion.

Nos objectifs consistent à:

- Établir des procédures pour évaluer, contrôler et examiner l'impact de toutes les activités et opérations existantes ou en projet sur l'environnement.
- Établir des procédures de contrôle et si des mesures et des essais sont requis, veiller à ce que les enregistrements des données et les résultats soient régulièrement sauvegardés, ajoutés et mis à jour.
- Éliminer ou réduire les matières polluantes, pour participer à la préservation des ressources naturelles essentielles.
- Réduire et recycler les déchets dans la mesure du possible, afin de participer à la préservation des ressources naturelles essentielles.
- Encourager et responsabiliser le personnel à se conformer aux normes appliquées dans la société, par le biais de l'éducation et de l'aptitude à diriger, aussi bien sur le lieu de travail qu'à la maison.
- Dans la mesure du possible, privilégier les achats de biens et de services les plus respectueux de l'environnement. Faire appel, à chaque fois que cela est possible, à des fournisseurs ou à des chaînes d'approvisionnement qui ont prouvé leur engagement en faveur de l'environnement.
- S'investir totalement dans la prévention de la pollution et s'efforcer de respecter la législation environnementale en vigueur.

## THE TEAM

Our management team collectively share over 100 years of service in the steel and metal industry and this helps to ensure that we direct the business in the best possible way to satisfy customer expectations.

Within All Steels Trading we have first-hand knowledge of steel manufacturing and re-rolling and it is this expertise that has enabled us to quickly develop high volume niche market products with our mill partners.

It is this ability combined with low cost outsourcing of all our steel logistics that helps to differentiate our company from other steel trading businesses to provide a competitive advantage. If you are searching for steel products that are not readily available by virtue of their shape, length, steel specification, special tolerances or surface finish our team would welcome the challenge of finding you a solution.

## DAS TEAM

Zusammen verfügt unser Managementteam über mehr als 100 Jahre Serviceerfahrung in der Stahl- und Metallindustrie, dank derer wir unser Unternehmen so leiten können, dass die Erwartungen unserer Kunden optimal erfüllt werden.

Wir bei All Steels Trading kennen uns mit der Fertigung von Stahlerzeugnissen und dem Nachwalzen von Bandstahl aus. Dieses Know-how hat es uns ermöglicht, in Zusammenarbeit mit unseren Partnerwerken schnell Nischenprodukte mit hohen Stückzahlen zu entwickeln. Durch diese Kombination von Kompetenz und kosteneffektivem

Outsourcing unserer gesamten Stahllogistik heben wir uns von anderen Stahlhandelsunternehmen ab und können unsere Kunden von einzigartigen Wettbewerbsvorteilen profitieren lassen. Wenn Sie auf der Suche nach Stahlerzeugnissen sind, die aufgrund ihrer Form, Länge, Spezifikation, speziellen Toleranzen oder Oberflächengüte nicht ohne Weiteres erhältlich sind, nimmt unser Team die Herausforderung gerne an, um für Sie eine perfekte Lösung zu finden.

## L'ÉQUIPE

Nos dirigeants et nos cadres partagent non seulement une vaste expérience mais aussi le savoir-faire dans le domaine de la transformation des métaux et des aciers et ceci apporte une aide précieuse à notre façon de gérer les affaires : c'est pour nous, la garantie de répondre au mieux aux attentes de la clientèle.

Au sein de la société All Steels Trading, nous avons une connaissance directe de la fabrication et du relaminage de l'acier et c'est grâce à cette expertise que nous avons pu développer rapidement de gros volumes de produits de niche avec nos partenaires du secteur sidérurgique.

C'est cette capacité de développement qui, combinée à des solutions logistiques très efficaces d'approvisionnement en acier, aide la société à se différencier des autres négociants en lui apportant un net avantage concurrentiel. Si vous recherchez des produits sidérurgiques qui ne sont pas disponibles en raison de leur forme, leur longueur, leur spécification, de leurs tolérances spéciales ou de leur finition, notre équipe mettra tout en œuvre pour vous trouver une solution.





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## FLAT BARS AND WIDE FLAT BARS

FLACHSTAHL UND BREITFLACHSTAHL

FERS EN BARRES ET FERS EN BARRE DE SECTION RÉDUITE/ÉTROITE VOIRE LISSE

F

Width mm	Thickness mm												
	2	3	4	5	6	7	8	10	12	14	15	16	18
kg/m													
10		0.236											
12		0.283	0.377	0.471	0.565								
13		0.306	0.408	0.510	0.612								
15		0.353	0.471	0.589	0.707								
16		0.377	0.502	0.628	0.754	0.879	1.005	1.256					
18		0.424	0.565	0.707	0.848	0.989	1.130	1.413					
20		0.471	0.628	0.785	0.942	1.099	1.256	1.570	1.884	2.198	2.355		
22		0.518	0.691	0.864	1.036	1.209	1.382	1.727	2.072	2.418	2.591		
25		0.589	0.785	0.981	1.178	1.374	1.570	1.963	2.355	2.748	2.944	3.140	3.533
30		0.707	0.942	1.178	1.413	1.649	1.884	2.355	2.826	3.297	3.533	3.768	4.239
35		0.824	1.099	1.374	1.649	1.923	2.198	2.748	3.297	3.847	4.121	4.396	4.946
40		0.942	1.256	1.570	1.884	2.198	2.512	3.140	3.768	4.396	4.710	5.024	5.652
45	0.707	1.060	1.413	1.766	2.120	2.473	2.826	3.533	4.239	4.946	5.299	5.652	6.359
50	0.785	1.178	1.570	1.963	2.355	2.748	3.140	3.925	4.710	5.495	5.888	6.280	7.065
55	0.864	1.295	1.727	2.159	2.591	3.022	3.454	4.318	5.181	6.045	6.476	6.908	7.772
60	0.942	1.413	1.884	2.355	2.826	3.297	3.768	4.710	5.652	6.594	7.065	7.536	8.478
65	1.021	1.531	2.041	2.551	3.062	3.572	4.082	5.103	6.123	7.144	7.654	8.164	9.185
70	1.099	1.649	2.198	2.748	3.297	3.847	4.396	5.495	6.594	7.693	8.243	8.792	9.891
75		1.766	2.355	2.944	3.533	4.121	4.710	5.888	7.065	8.243	8.831	9.420	10.598
80		1.884	2.512	3.140	3.768	4.396	5.024	6.280	7.536	8.792	9.420	10.048	11.304
85		2.002	2.669	3.336	4.004	4.671	5.338	6.673	8.007	9.342	10.009	10.676	12.011
90		2.120	2.826	3.533	4.239	4.946	5.652	7.065	8.478	9.891	10.598	11.304	12.717
95		2.237	2.983	3.729	4.475	5.220	5.966	7.458	8.949	10.441	11.186	11.932	13.424
100		2.355	3.140	3.925	4.710	5.495	6.280	7.850	9.420	10.990	11.775	12.560	14.130
105		2.473	3.297	4.121	4.946	5.770	6.594	8.243	9.891	11.540	12.364	13.188	14.837
110		2.591	3.454	4.318	5.181	6.045	6.908	8.635	10.362	12.089	12.953	13.816	15.543
115		2.708	3.611	4.514	5.417	6.319	7.222	9.028	10.833	12.639	13.541	14.444	16.250
120		2.826	3.768	4.710	5.652	6.594	7.536	9.420	11.304	13.188	14.130	15.072	16.956
125		2.944	3.925	4.906	5.888	6.869	7.850	9.813	11.775	13.738	14.719	15.700	17.663
130		3.062	4.082	5.103	6.123	7.144	8.164	10.205	12.246	14.287	15.308	16.328	18.369
140		3.297	4.396	5.495	6.594	7.693	8.792	10.990	13.188	15.386	16.485	17.584	19.782
150		3.533	4.710	5.888	7.065	8.243	9.420	11.775	14.130	16.485	17.663	18.840	21.195
160					7.536	8.792	10.048	12.560	15.072	17.584	18.840	20.096	22.608
170					8.007	9.342	10.676	13.345	16.014	18.683	20.018	21.352	24.021
180					8.478	9.891	11.304	14.130	16.956	19.782	21.195	22.608	25.434
190					8.949	10.441	11.932	14.915	17.898	20.881	22.373	23.864	26.847
200				7.85	9.420	10.990	12.560	15.700	18.840	21.980	23.550	25.120	28.260
210					9.891	11.540	13.188	16.485	19.782	23.079	24.728	26.376	29.673
220					10.362	12.089	13.816	17.270	20.724	24.178	25.905	27.632	31.086
230					10.833	12.639	14.444	18.055	21.666	25.277	27.083	28.888	32.499
240					11.304	13.188	15.072	18.840	22.608	26.376	28.260	30.144	33.912
250					11.775	13.738	15.700	19.625	23.550	27.475	29.438	31.400	35.325
260					12.246	14.287	16.328	20.410	24.492	28.574	30.615	32.656	36.738
270					12.717	14.837	16.956	21.195	25.434	29.673	31.793	33.912	38.151
275					12.953	15.111	17.270	21.588	25.905	30.223	32.381	34.540	38.858
280					13.188	15.386	17.584	21.980	26.376	30.772	32.970	35.168	39.564
290					13.659	15.936	18.212	22.765	27.318	31.871	34.148	36.424	40.977
300					14.130	16.485	18.840	23.550	28.260	32.970	35.325	37.680	42.390
320						20.096	25.120	30.144	35.168	37.680	40.192	45.216	
350						21.980	27.475	32.970	38.465	41.213	43.960	49.455	
360							28.260	33.912	39.564	42.390	45.216	50.868	
370							29.045	34.854	40.663	43.568	46.472	52.281	
380							29.830	35.796	41.762	44.745	47.728	53.694	
390							30.615	36.738	42.861	45.923	48.984	55.107	
400							31.400	37.680	43.960	47.100	50.240	56.520	
450							35.325	42.390	49.455	52.988	56.520	63.585	
500							39.250	47.100	54.950	58.875	62.800	70.650	

# FLAT BARS AND WIDE FLAT BARS

FLACHSTAHL UND BREITFLACHSTAHL

FERS EN BARRES ET FERS EN BARRE DE SECTION RÉDUITE/ÉTROITE VOIRE LISSE

F

Width mm	Thickness mm											
	20	25	30	35	40	45	50	60	70	75	80	90
	kg/m											
10												
12												
13												
15												
16												
18												
20												
22												
25	3.925											
30	4.710											
35	5.495	6.869	8.243									
40	6.280	7.850	9.420									
45	7.065	8.831	10.598									
50	7.850	9.813	11.775	13.738	15.700							
55	8.635	10.794	12.953	15.111	17.270							
60	9.420	11.775	14.130	16.485	18.840	21.195	23.550					
65	10.205	12.756	15.308	17.859	20.410	22.961	25.513					
70	10.990	13.738	16.485	19.233	21.980	24.728	27.475	32.970	38.465			
75	11.775	14.719	17.663	20.606	23.550	26.494	29.438	35.325	41.213			
80	12.560	15.700	18.840	21.980	25.120	28.260	31.400	37.680	43.960			
85	13.345	16.681	20.018	23.354	26.690	30.026	33.363	40.035	46.708			
90	14.130	17.663	21.195	24.728	28.260	31.793	35.325	42.390	49.455			
95	14.915	18.644	22.373	26.101	29.830	33.559	37.288	44.745	52.203			
100	15.700	19.625	23.550	27.475	31.400	35.325	39.250	47.100	54.950			
105	16.485	20.606	24.728	28.849	32.970	37.091	41.213	49.455	57.698			
110	17.270	21.588	25.905	30.223	34.540	38.858	43.175	51.810	60.445			
115	18.055	22.569	27.083	31.596	36.110	40.624	45.138	54.165	63.193			
120	18.840	23.550	28.260	32.970	37.680	42.390	47.100	56.520	65.940			
125	19.625	24.531	29.438	34.344	39.250	44.156	49.063	58.875	68.688			
130	20.410	25.513	30.615	35.718	40.820	45.923	51.025	61.230	71.435			
140	21.980	27.475	32.970	38.465	43.960	49.455	54.950	65.940	76.930			
150	23.550	29.438	35.325	41.213	47.100	52.988	58.875	70.650	82.425			
160	25.120	31.400	37.680	43.960	50.240	56.520	62.800	75.360	87.920			
170	26.690	33.363	40.035	46.708	53.380	60.053	66.725	80.070	93.415			
180	28.260	35.325	42.390	49.455	56.520	63.585	70.650	84.780	98.910	105.975	113.040	127.170
190	29.830	37.288	44.745	52.203	59.660	67.118	74.575	89.490	104.405	111.863	119.320	134.235
200	31.400	39.250	47.100	54.950	62.800	70.650	78.500	94.200	109.900	117.750	125.600	141.300
210	32.970	41.213	49.455	57.698	65.940	74.183	82.425	98.910	115.395	123.638	131.880	148.365
220	34.540	43.175	51.810	60.445	69.080	77.715	86.350	103.620	120.890	129.525	138.160	155.430
230	36.110	45.138	54.165	63.193	72.220	81.248	90.275	108.330	126.385	135.413	144.440	162.495
240	37.680	47.100	56.520	65.940	75.360	84.780	94.200	113.040	131.880	141.300	150.720	169.560
250	39.250	49.063	58.875	68.688	78.500	88.313	98.125	117.750	137.375	147.188	157.000	176.625
260	40.820	51.025	61.230	71.435	81.640							
270	42.390	52.988	63.585	74.183	84.780							
275	43.175	53.969	64.763	75.556	86.350							
280	43.960	54.950	65.940	76.930	87.920							
290	45.530	56.913	68.295	79.678	91.060							
300	47.100	58.875	70.650	82.425	94.200							
320	50.240	62.800	75.360	87.920	100.480							
350	54.950	68.688	82.425	96.163	109.900							
360	56.520	70.650	84.780	98.910	113.040							
370	58.090	72.613	87.135	101.658	116.180							
380	59.660	74.575	89.490	104.405	119.320							
390	61.230	76.538	91.845	107.153	122.460							
400	62.800	78.500	94.200	109.900	125.600							
450	70.650	88.313	105.975	123.638	141.300							
500	78.500	98.125	117.750	137.375	157.000							

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**BULB FLATS**

WULSTFLACHSTAHL

PLATS À BOUDIN

BF

Width mm	Thickness mm									
	5.0	6.0	6.5	7.0	8.0	8.5	9.0	9.5	10.0	10.5
kg/m										
80	4.250	4.880		5.500						
100		6.080		6.860	7.650					
120		7.320		8.260	9.200					
140			9.210	9.750	10.850				13.050	
160				11.460	12.720		13.970			
180					14.800		16.220		17.630	
200						17.800	18.570		20.140	
220							21.040		22.770	
240								24.400	25.500	
260									28.350	
280										32.400
300										
320										
340										
370										
400										
430										



**BULB FLATS**

WULSTFLACHSTAHL

PLATS À BOUDIN

**BF**

Width mm	Thickness mm										
	11.0	11.5	12.0	12.5	13.0	14.0	15.0	16.0	17.0	19.0	20.0
	kg/m										
80											
100											
120											
140											
160	16.490	17.300									
180	19.040	19.700									
200	21.710		23.280								
220	24.500		26.220								
240	27.390		29.270								
260	30.390		32.430								
280	33.500		35.700		37.900						
300	36.700		39.090		41.440						
320		41.200	42.600		45.090	47.600					
340			46.200		48.860	51.500	54.200				
370				53.100	54.700	57.600	60.500	63.500			
400					60.800	63.960	67.100	70.200			
430						70.600	73.900		80.700	87.400	90.800



**FLAT BARS - CONVEX - FEATHER EDGE**

KONVEXER STAHL

MAIN COURANTE - BOUTS POINTUS

**CONV-FE**

Product Size mm	Thickness mm						
	5	6	7	8	9	10	12
	kg/m						
12	0.370	0.444					
13	0.401	0.481	0.561				
14	0.432	0.518	0.604	0.691	0.777	0.863	
15	0.462	0.555	0.647	0.740	0.832	0.925	
16	0.493	0.592	0.691	0.789	0.888	0.986	
17	0.524	0.629	0.734	0.838	0.943	1.048	
18	0.555	0.666	0.777	0.888	0.999	1.110	
20	0.617	0.740	0.863	0.986	1.110	1.233	1.480
20	0.617	0.740	0.863	0.986	1.110	1.233	1.480
22	0.678	0.814	0.949	1.085	1.221	1.356	1.628
25	0.771	0.925	1.079	1.233	1.387	1.541	1.850
30	0.925	1.110	1.295	1.480	1.665	1.850	2.220
32	0.986	1.184	1.381	1.578	1.776	1.973	2.368
35	1.079	1.295	1.511	1.726	1.942	2.158	2.589
38	1.171	1.406	1.640	1.874	2.109	2.343	2.811
40	1.233	1.480	1.726	1.973	2.220	2.466	2.959
45	1.387	1.665	1.942	2.220	2.497	2.774	3.329
50	1.541	1.850	2.158	2.466	2.774	3.083	3.699
65	2.004	2.404	2.805	3.206	3.607	4.007	4.809
75	2.312	2.774	3.237	3.699	4.162	4.624	5.549

**FLAT BARS - CONVEX - SQUARE EDGE**

KONVEXER FLACHSTAHL - RECHTWINKELIGE KANTE

MAIN COURANTE - BOUTS CHAMFRÉNÉS

**CONV-SE**

Product Size mm	kg/m
25.40 x 6.00 x 2.00	1.025
27.50 x 7.00 x 2.50	1.303
38.10 x 9.50 x 4.75	2.536
38.10 x 10.00 x 5.00	2.670
38.10 x 12.70 x 6.35	3.391
38.10 x 13.00 x 6.50	3.471
40.00 x 10.00 x 5.00	2.803
40.00 x 12.00 x 6.00	3.364
50.00 x 12.00 x 6.00	4.205
51.00 x 12.70 x 6.30	4.535
51.00 x 13.00 x 6.50	4.646



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



Product Size mm <sup>2</sup>	kg/m
4.00	0.126
5.00	0.196
6.00	0.283
8.00	0.502
10.00	0.785
12.00	1.130
13.00	1.327
14.00	1.539
15.00	1.766
16.00	2.010
18.00	2.543
20.00	3.140
22.00	3.799
24.00	4.522
25.00	4.906
26.00	5.307
28.00	6.154
30.00	7.065
32.00	8.038
35.00	9.616
40.00	12.560
45.00	15.896
50.00	19.625
55.00	23.746
60.00	28.260
65.00	33.166
70.00	38.465
75.00	44.156
80.00	50.240
85.00	56.716
90.00	63.585
95.00	70.846
100.00	78.500
110.00	94.985
120.00	113.040

Product Size Inches <sup>2</sup>	Equivalent mm <sup>2</sup>	kg/m
1/4	6.350	0.317
3/8	9.525	0.712
1/2	12.700	1.266
5/8	15.875	1.978
3/4	19.050	2.849
7/8	22.225	3.878
1	25.400	5.065
1 1/4	31.750	7.913
1 1/2	38.100	11.395
1 3/4	44.449	15.509
2	50.800	20.258
2 1/2	63.500	31.653
2 3/4	69.850	38.300
3 1/4	82.550	53.494
4	101.600	81.032
4 1/2	114.300	102.556
4 3/4	120.650	114.268



**OCTAGONS**

ACHTKANTSTAHL

OCTOGONES

**OCT**

Product Size mm	kg/m
9.50	0.587
12.00	0.936
12.50	1.016
13.00	1.099
14.00	1.275
15.90	1.644
16.00	1.665
18.00	2.107
19.50	2.473
20.00	2.601
22.00	3.147
22.20	3.205
25.00	4.064
30.00	5.853

Product Size Inches	Equivalent mm	kg/m
$\frac{1}{2}$	12.700	1.049
$\frac{5}{8}$	15.875	1.639
$\frac{3}{4}$	19.050	2.360
$\frac{7}{8}$	22.225	3.212
1	25.400	4.195
$1\frac{1}{4}$	31.750	6.555

Measurement taken across the flat

Breitenmessung des Flachstahls

Mesure à travers le plat

**HEXAGONS**

SECHSKANTSTAHL

HEXAGONES

**HEX**

Product Size mm	kg/m
12.00	0.979
13.00	1.149
14.00	1.332
15.00	1.530
16.00	1.740
17.00	1.965
18.00	2.203
19.00	2.454
20.00	2.719
21.00	2.998
22.00	3.290
23.00	3.596
24.00	3.916
25.00	4.249
26.00	4.596
30.00	6.118

Product Size Inches	Equivalent mm	kg/m
$\frac{1}{2}$	12.700	1.096
$\frac{5}{8}$	15.875	1.713
$\frac{3}{4}$	19.050	2.467
$\frac{7}{8}$	22.225	3.358
1	25.400	4.386
$1\frac{1}{4}$	31.7500	6.853

Measurement taken across the flat

Breitenmessung des Flachstahls

Mesure à travers le plat

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# ROUND BARS - HOT ROLLED

WARMGEWALZTER RUNDSTAHL

BARRES RONDES LAMINÉS À CHAUD

Product Size Diameter mm	kg/m
6.00	0.222
7.00	0.302
7.50	0.347
8.00	0.395
9.00	0.499
10.00	0.617
11.00	0.746
12.00	0.888
13.00	1.042
14.00	1.209
15.00	1.387
16.00	1.579
17.00	1.782
18.00	1.998
19.00	2.226
20.00	2.466
21.00	2.719
22.00	2.984
23.00	3.262
23.60	3.434
24.00	3.552
25.00	3.854
26.00	4.168
26.70	4.396
27.00	4.495
28.00	4.834
29.00	5.186
29.50	5.366
29.70	5.439
30.00	5.550
31.00	5.926
32.00	6.314
33.00	6.715
34.00	7.128
34.40	7.297
35.00	7.554
35.70	7.859
36.00	7.991
37.00	8.441
38.00	8.904
39.00	9.379
39.20	9.475

Product Size Diameter mm	kg/m
40.00	9.866
42.00	10.877
44.00	11.938
45.00	12.487
46.00	13.048
47.00	13.621
48.00	14.207
49.20	14.926
50.00	15.415
51.00	16.038
52.00	16.673
53.00	17.321
54.00	17.981
55.00	18.653
55.80	19.199
56.00	19.337
57.00	20.034
58.00	20.743
59.00	21.464
60.00	22.198
62.00	23.703
63.00	24.474
65.00	26.052
70.00	30.214
75.00	34.685
80.00	39.464
85.00	44.551
90.00	49.946
95.00	55.650
100.00	61.662
105.00	67.982
110.00	74.611
115.00	81.548
120.00	88.793
130.00	104.208
140.00	120.857
150.00	138.739
160.00	157.854
170.00	178.202
180.00	199.784
190.00	222.599
200.00	246.647

## ROUND BARS - HOT ROLLED

WARMGEWALZTER RUNDSTAHL

BARRES RONDES - LAMINÉS À CHAUD

R

Product Size Diameter Inches	Equivalent mm	kg/m
$\frac{1}{2}$	12.700	0.995
$\frac{5}{8}$	15.875	1.554
$\frac{3}{4}$	19.050	2.238
$\frac{7}{8}$	22.250	3.053
1	25.400	3.978
$1\frac{1}{8}$	28.575	5.035
$1\frac{1}{4}$	31.750	6.216
$1\frac{1}{8}$	34.925	7.521
$1\frac{1}{2}$	38.100	8.951



## HALF ROUND BARS - HOT ROLLED

HALBRUNDSTAHL - WARMGEWALZTE AUSFÜHRUNG

BARRES DEMI-RONDE - LAMINÉS À CHAUD

HALF-R

Product Size Diameter mm	Radius mm	kg/m
12.700	6.350	0.497
16.000	8.000	0.789
18.000	9.000	0.999
20.000	10.000	1.233
26.000	13.000	2.084
30.000	15.000	2.775
40.000	20.000	4.933
50.000	25.000	7.708
60.000	30.000	11.099
76.000	38.000	17.808
100.000	50.000	30.831

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# ROUND BARS - BRIGHT

BLANKSTAHL - RUND

BARRES RONDES - ÉTIRÉES

BR

Product Size Diameter mm	kg/m
3.000	0.055
3.175	0.062
4.000	0.099
4.763	0.140
5.000	0.154
6.000	0.222
7.937	0.388
8.000	0.395
9.525	0.559
10.000	0.617
11.113	0.761
12.000	0.888
14.000	1.209
15.000	1.387
16.000	1.579
20.000	2.466
25.000	3.854
28.000	4.834
30.000	5.550
32.000	6.314
35.000	7.554
40.000	9.866
44.500	12.211
45.000	12.487
50.800	15.913
55.000	18.653
60.000	22.198
60.300	22.421
65.000	26.052
70.000	30.214
75.000	34.685
80.000	39.464
90.000	49.946
95.000	55.650
100.000	61.662

Product Size Diameter Inches	Equivalent mm	kg/m
$\frac{1}{8}$	3.180	0.062
$\frac{1}{16}$	4.750	0.139
$\frac{1}{4}$	6.350	0.249
$\frac{5}{16}$	7.950	0.390
$\frac{3}{8}$	9.520	0.559
$\frac{7}{16}$	11.100	0.760
$\frac{1}{2}$	12.700	0.995
$\frac{5}{8}$	15.900	1.559
$\frac{3}{4}$	19.100	2.249
$\frac{7}{8}$	22.200	3.039
1	25.400	3.978
$1\frac{1}{2}$	28.600	5.044
$1\frac{1}{4}$	31.800	6.235
$1\frac{3}{8}$	34.900	7.510
$1\frac{1}{2}$	38.100	8.951
$1\frac{5}{8}$	41.300	10.518
$1\frac{3}{4}$	50.000	15.415
$2\frac{1}{2}$	63.500	24.864
$2\frac{3}{4}$	69.850	30.085
3	76.200	35.804



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

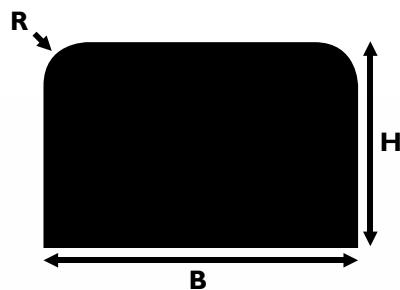
**CRANE RAILS**

KRANLAUFSCHEINEN

RAILS DE GRUE

**CR**

Product Size (mm)			kg/m
B	H	R	
50	30	6	11.60
60	40	10	18.50
70	40	10	21.67
80	60	6	37.56



**EQUAL ANGLES - ROUND ROOT**

GLEICHSCHENKLIGER WINKELSTAHL - RUNDKANTIG

CORNIÈRES À AILES ÉGALES - COINS ARRONDIS

EA



Product Size mm	Thickness mm															
	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0
	kg/m															
15 x 15			0.640													
20 x 20	0.600	0.750	0.882		1.140			1.600								
25 x 25		0.940	1.110		1.450		1.770									
30 x 30		1.150	1.360		1.780		2.180	2.570								
35 x 35		1.350	1.600	1.850	2.090		2.570	3.040								
40 x 40		1.550	1.840		2.420		2.970	3.520								
45 x 45			2.090		2.740	3.050	3.380	4.000								
50 x 50			2.330		3.060	3.410	3.770	4.470	5.150	5.820						
55 x 55						4.180	4.950	4.120		4.890						
60 x 60				3.700	4.130	4.570	5.420	6.260	7.090	7.900	8.690					
65 x 65						4.981	5.910	6.830	7.730							
70 x 70						5.370	6.380	7.380	8.360	9.340	10.300	11.20				
75 x 75				4.650		5.760	6.850	7.930	8.990		11.100					
80 x 80						6.170	7.340	8.480	9.645		11.900		14.000			
90 x 90							8.300	9.610	10.900	12.200	13.400	14.700	15.900	17.14		
100 x 100							9.200	10.700	12.200	13.500	15.000	16.400	17.800	19.200	20.600	
110 x 110									13.500	15.000	16.600	18.200	19.700	21.200	22.800	
120 x 120									14.700	16.500	18.200	19.900	21.600	23.300	25.000	
130 x 130										17.900	19.800	21.700	23.600	25.400	27.200	
140 x 140											21.400	23.400	25.400	27.400	29.700	
150 x 150											23.000	25.200	27.300	29.500	31.600	
160 x 160															33.900	
180 x 180														35.700	38.300	
200 x 200																
250 x 250																

**EQUAL ANGLES - SQUARE ROOT**

GLEICHSCHENKLIGER WINKELSTAHL - SCHARFKANTIG

CORNIÈRES À AILES ÉGALES - COIN À ANGLE DROIT

EA-SQRT



Product Size mm	Thickness mm									
	2.5	3.0	4.0	4.5	5.0	5.2	5.3	5.7	6.0	8.0
	kg/m									
13 x 13		0.542								
16 x 16		0.683								
20 x 20	0.736	0.871								
25 x 25	0.932	1.107	1.444		1.766				2.072	
30 x 30	1.128	1.342	1.758		2.159				2.543	
40 x 40	1.521	1.813	2.386		2.944	3.053	3.108	3.325	3.485	
45 x 45		2.049	2.700	3.020	3.336	3.462	3.524	3.772	3.956	
50 x 50		2.284	3.014		3.729	3.870	3.940	4.219	4.427	5.778
60 x 60					4.514					

**EQUAL ANGLES - ROUND ROOT**

GLEICHSCHENKLIGER WINKELSTAHL - RUNDKANTIG

CORNières à AILES ÉGALes - COINS ARRONDIS

EA



Product Size mm	Thickness mm															
	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	32.0	35.0
	kg/m															
15 x 15																
20 x 20																
25 x 25																
30 x 30																
35 x 35																
40 x 40																
45 x 45																
50 x 50																
55 x 55																
60 x 60																
65 x 65																
70 x 70																
75 x 75																
80 x 80																
90 x 90																
100 x 100	21.900	23.200														
110 x 110	24.300	25.700														
120 x 120	26.600	28.300	29.900	31.500												
130 x 130	29.000	30.800	32.600	34.400												
140 x 140	31.400	33.300	35.300	37.200												
150 x 150	33.800	35.900	38.000	40.100		44.200										
160 x 160	36.200	38.400	40.700			46.240										
180 x 180	40.900	43.500	46.000	48.600	51.100	53.700	56.200	58.600	61.100	63.600	66.000					
200 x 200	45.600	48.500	51.400	54.200	57.100	59.900	62.800	65.500	68.300	71.100	73.900	76.600		82.000		
250 x 250						75.600	79.200	82.800	86.400	90.000	93.500	97.000	101.000	104.000	118.000	128.000

**UNEQUAL ANGLES - SQUARE ROOT**

UNGLEICHSCHENKLIGER WINKELSTAHL - SCHARFKANTIG

CORNières à AILES INÉGALes - COIN À ANGLE DROIT

UA-SQRT



Product Size mm	Thickness mm		
	3.0 mm		
	kg/m		
20 x 10		0.669	
20 x 14		0.768	
25 x 15		0.917	



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



## UNEQUAL ANGLES - ROUND ROOT

UNGLEICHSCHENKLIGER WINKELSTAHL - RUNDKANTIG

CORNIÈRES À AILES INÉGALES - COINS ARRONDIS

UA



Product Size mm	Thickness mm							
	10.0	11.0	12.0	13.0	14.0	15.0	16.0	18.0
	kg/m							
30 x 20								
35 x 20								
40 x 20								
40 x 25								
45 x 30								
50 x 30								
50 x 40								
60 x 30								
60 x 40								
65 x 50								
70 x 50								
75 x 50	9.050							
75 x 55								
75 x 65	10.240							
80 x 40	8.670							
80 x 50								
80 x 60								
80 x 85	10.700							
90 x 60								
90 x 65	11.450							
90 x 70	11.800							
90 x 75	12.230							
100 x 50	11.100							
100 x 65	12.300	13.400	14.500					
100 x 75	13.000	14.300	15.400					
100 x 80	13.400							
100 x 90	14.230		16.870					
110 x 70	13.400		15.900					
120 x 60	13.400							
120 x 80	15.000		17.800		20.540			
125 x 75	15.000		17.800					
125 x 90	16.210		19.240			23.650		
130 x 65	14.600		17.300					
130 x 90	16.600		19.700		22.800			
135 x 65	15.000		17.800					
140 x 90	17.400		20.600		23.800			
150 x 75	17.000	18.600	20.200			24.800		
150 x 90	18.200	19.900	21.600	23.300		26.600		
150 x 100	19.000		22.500		26.100	27.790		
160 x 80	18.200	19.900	21.600					
200 x 100	23.000	25.100	27.300	29.500	31.600	33.750	35.900	
200 x 150			32.000			39.600		47.100
250 x 90	26.100		31.100		36.000		40.900	

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**INVERTED ANGLES - ROUND ROOT**

UNGLEICHSCHENKLIGER WINKELSTAHL MIT UMGEKEHRTEN SCHENKELLÄNGEN - RUNDKANTIG

CORNières INVERSÉS - COINS ARRONDIS

IA L

Product Size (mm)	Thickness (mm)		kg/m
	Long Leg	Short Leg	
200 x 90	10	14	24.7
250 x 90	10	15	29.4
250 x 90	12	16	33.7
300 x 90	11	16	36.3
300 x 90	13	17	41.3
350 x 100	12	17	45.3
400 x 100	11.5	16	48
400 x 100	13	18	53.8
450 x 125	11.5	18	57.4

**60 DEGREE ANGLES - ROUND ROOT**

60-GRAD-WINKELSTAHL - RUNDKANTIG

CORNières À AILES ÉGALÉS - COINS ARRONDIS

60DA L

Product Size mm	Thicknesses							
	5	6	7	8	10	12	15	20
	kg/m							
80 x 80	6.23	7.49	8.71	9.91				
100 x 100			10.89	12.43	15.46			
120 x 120					18.57	22.16		
150 x 150						27.99	34.67	
200 x 200							46.55	61.25



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## TEES - EQUAL FLANGE

GLEICHSCHENKLIGER T-STAHL

T EN ACIER À AILES ÉGALES



Product Size mm	Thickness mm										
	3.0	3.5	4.0	4.5	5.0	5.5	6.0	7.0	8.0	9.0	10.0
kg/m											
20	0.871		1.130								
25	1.200	1.280		1.610							
30	1.347		1.770		2.160						
35		1.830	2.070	2.330		2.780					
40			2.390		2.957		3.490				
45						3.670					
50					3.742		4.447	5.110			
60								6.230	7.030		
70									8.320	9.260	
80										10.700	11.800
100											16.600

## TEES - UNEQUAL FLANGE

UNGLEICHSCHENKLIGER T-STAHL

T EN ACIER À AILES INÉGALES



Product Size mm	Thickness mm		
	4.0	4.5	5.5
kg/m			
35 x 30	1.950		
40 x 35		2.500	
45 x 40			3.150

## Z SHAPE SECTION

Z-FORMSTAHL

Z-FORME



Description	Product Size mm	kg/m
Z 30	30.0 x 30.0 x 4.0	3.390
Z 40	40.0 x 40.0 x 4.5	4.260
Z 50	50.0 x 43.0 x 5.0	5.310
Z 60	60.0 x 45.0 x 5.0	6.210
Z 80	80.0 x 50.0 x 6.0	8.710
Z 100	100.0 x 55.0 x 6.5	11.400
Z 120	120.0 x 60.0 x 7.0	14.300
Z 140	140.0 x 65.0 x 8.0	18.000
Z 160	160.0 x 70.0 x 8.5	21.600

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**UNIVERSAL BEAMS**  
**UNIVERSALTRÄGERN**  
**POUTRELLES UNIVERSELLES**

**I**  
**UB**

Product Size mm	kg/m	Flange Thickness mm	Web Thickness mm
127 x 76 x 13	13.0	7.6	4.0
152 x 89 x 16	16.0	7.7	4.5
178 x 102 x 19	19.0	7.9	4.8
203 x 102 x 23	23.1	9.3	5.4
203 x 133 x 25	25.1	7.8	5.7
203 x 133 x 30	30.0	9.6	6.4
254 x 102 x 22	22.0	6.8	5.7
254 x 102 x 25	25.2	8.4	6.0
254 x 102 x 28	28.3	10.0	6.3
254 x 146 x 31	31.1	8.6	6.0
254 x 146 x 37	37.0	10.9	6.3
254 x 146 x 43	43.0	12.7	7.2
305 x 102 x 25	24.8	7.0	5.8
305 x 102 x 28	28.2	8.8	6.0
305 x 102 x 33	32.8	10.8	6.6
305 x 127 x 37	37.0	10.7	7.1
305 x 127 x 41	41.9	12.1	8.0
305 x 127 x 48	48.1	14.0	9.0
305 x 165 x 40	40.3	10.2	6.0
305 x 165 x 46	46.1	11.8	6.7
305 x 165 x 54	54.0	13.7	7.9
356 x 127 x 33	33.1	8.5	6.0
356 x 127 x 39	39.1	10.7	6.6
356 x 171 x 45	45.0	9.7	7.0
356 x 171 x 51	51.0	11.5	7.4
356 x 171 x 57	57.0	13.0	8.1
356 x 171 x 67	67.1	15.7	9.1
406 x 140 x 39	39.0	8.6	6.4
406 x 140 x 46	46.0	11.2	6.8
406 x 178 x 54	54.1	10.9	7.7
406 x 178 x 60	60.1	12.8	7.9
406 x 178 x 67	67.1	14.3	8.8
406 x 178 x 74	74.2	16.0	9.5
457 x 152 x 52	52.3	10.9	7.6
457 x 152 x 60	59.8	13.3	8.1
457 x 152 x 67	67.2	15.0	9.0
457 x 152 x 74	74.2	17.0	9.6
457 x 152 x 82	82.1	18.9	10.5
457 x 191 x 67	67.1	12.7	8.5
457 x 191 x 74	74.3	14.5	9.0
457 x 191 x 82	82.0	16.0	9.9
457 x 191 x 89	89.3	17.7	10.5
457 x 191 x 98	98.3	19.6	11.4

**UNIVERSAL BEAMS**  
**UNIVERSALTRÄGERN**  
**POUTRELLES UNIVERSELLES**

**I**  
**UB**

Product Size mm	kg/m	Flange Thickness mm	Web Thickness mm
533 x 210 x 82	82.2	13.2	9.6
533 x 210 x 92	92.1	15.6	10.1
533 x 210 x 101	101.0	17.4	10.8
533 x 210 x 109	109.0	18.8	11.6
533 x 210 x 122	122.0	21.3	12.7
533 x 312 x 150	150.6	20.3	12.7
533 x 312 x 182	181.5	24.4	15.2
533 x 312 x 219	218.8	29.2	18.3
533 x 312 x 272	273.2	37.6	21.1
610 x 229 x 101	101.2	14.8	10.5
610 x 229 x 113	113.0	17.3	11.1
610 x 229 x 125	125.1	19.6	11.9
610 x 229 x 140	139.9	22.1	13.1
610 x 305 x 149	149.1	19.7	11.8
610 x 305 x 179	179.0	23.6	14.1
610 x 305 x 238	238.1	31.4	18.4
686 x 254 x 125	125.2	16.2	11.7
686 x 254 x 140	140.1	19.0	12.4
686 x 254 x 152	152.4	21.0	13.2
686 x 254 x 170	170.2	23.7	14.5
762 x 267 x 134	134.0	15.5	12.0
762 x 267 x 147	146.9	17.5	12.8
762 x 267 x 173	173.0	21.6	14.3
762 x 267 x 197	196.8	25.4	15.6
838 x 292 x 176	175.9	18.8	14.0
838 x 292 x 194	193.8	21.7	14.7
838 x 292 x 226	226.5	26.8	16.1
914 x 305 x 201	200.9	20.2	15.1
914 x 305 x 224	224.2	23.9	15.9
914 x 305 x 253	253.4	27.9	17.3
914 x 305 x 289	289.1	32.0	19.5
914 x 419 x 343	343.3	32.0	19.4
914 x 419 x 388	388.0	36.6	21.4
1016 x 305 x 222	222.0	21.1	16.0
1016 x 305 x 249	249.0	26.0	16.5
1016 x 305 x 272	272.0	31.0	16.5
1016 x 305 x 314	314.0	35.9	19.1
1016 x 305 x 350	350.0	40.0	21.1
1016 x 305 x 393	393.0	43.9	24.4
1016 x 305 x 415	415.0	46.0	26.0
1016 x 305 x 438	438.0	49.0	26.9
1016 x 305 x 494	494.0	54.0	31.0
1016 x 305 x 584	584.0	64.0	36.0

Other and intermediate sizes available upon request.  
 Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# UNIVERSAL BEARING PILES WITH WIDE FLANGES

UNIVERSAL BREITFLANSCHTRÄGER

POUTRELLES-PIEUX À LARGES AILES

UBP



Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
203 x 203 x 45	44.900	9.5	9.5
203 x 203 x 54	53.900	11.3	11.4
254 x 254 x 63	63.000	10.6	10.7
254 x 254 x 71	71.000	12.0	12.0
254 x 254 x 85	85.100	14.4	14.3
305 x 305 x 79	78.900	11.0	11.1
305 x 305 x 88	88.000	12.4	12.3
305 x 305 x 95	94.900	13.3	13.3
305 x 305 x 110	110.000	15.3	15.4
305 x 305 x 126	126.100	17.5	17.6
305 x 305 x 149	149.100	20.6	20.7
305 x 305 x 186	186.000	25.5	25.6
305 x 305 x 223	222.900	30.3	30.4
356 x 368 x 109	108.900	12.8	12.9
356 x 368 x 133	133.000	15.6	15.7
356 x 368 x 152	152.000	17.8	17.9
356 x 368 x 174	173.900	23.0	20.4



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# UNIVERSAL COLUMNS

BREITFLANSCHTRÄGER

POTEAUX UNIVERSELS



Product Size mm	kg/m	Flange Thickness mm	Web Thickness mm
152 x 152 x 23	23.000	6.8	5.8
152 x 152 x 30	30.000	9.4	6.5
152 x 152 x 37	37.000	11.5	8.0
203 x 203 x 46	46.100	11.0	7.2
203 x 203 x 52	52.000	12.5	7.9
203 x 203 x 60	60.000	14.2	9.4
203 x 203 x 71	71.000	17.3	10.0
203 x 203 x 86	86.100	20.5	12.7
254 x 254 x 73	73.100	14.2	8.6
254 x 254 x 89	88.900	17.3	10.3
254 x 254 x 107	107.100	20.5	12.8
254 x 254 x 132	132.000	25.3	15.3
254 x 254 x 167	167.100	31.7	19.2
305 x 305 x 97	96.900	15.4	9.9
305 x 305 x 118	117.900	18.7	12.0
305 x 305 x 137	136.900	21.7	13.8
305 x 305 x 158	158.100	25.0	15.8
305 x 305 x 198	198.100	31.4	19.1
305 x 305 x 240	240.000	37.7	23.0
305 x 305 x 283	282.900	44.1	26.8
356 x 368 x 129	129.000	17.5	10.4
356 x 368 x 153	152.900	20.7	12.3
356 x 368 x 177	177.000	23.8	14.4
356 x 368 x 202	201.900	27.0	16.5
356 x 406 x 235	235.100	30.2	18.4
356 x 406 x 287	287.100	36.5	22.6
356 x 406 x 340	339.900	42.9	26.6
356 x 406 x 393	393.000	49.2	30.6
356 x 406 x 467	467.000	58.0	35.8
356 x 406 x 551	551.000	67.5	42.1
356 x 406 x 634	633.900	77.0	47.6

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



**JOISTS - TAPERED FLANGE - BRITISH**

I-TRÄGER MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - BRITISCHE NORM

POUTRELLES À AILES INCLINÉES - BRITANNIQUE

RSJ



Product Size mm	kg/m	Flange Thickness mm	Web Thickness mm
76 x 76	12.800	8.4	5.1
76 x 76	15.000	8.4	8.9
89 x 89	19.500	9.9	9.5
102 x 44	7.440	6.1	4.3
102 x 68	11.500	9.4	6.5
102 x 102	23.000	9.5	10.3
114 x 114	26.900	10.7	9.5
127 x 76	16.500	9.6	5.6
127 x 114	26.900	11.4	7.4
127 x 114	29.300	11.5	10.2
152 x 127	37.300	13.2	10.4
203 x 152	52.300	16.5	8.9
254 x 114	37.200	12.8	7.6
254 x 203	82.000	19.9	10.2

**I SECTIONS - TAPERED FLANGE - EUROPEAN**

I-TRÄGER MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

PROFIL DE TYPE I - POUTRELLES À AILES INCLINÉES NORMALES - EUROPÉENS

IPN



Description	Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
IPN 80	80 x 42	5.940	3.9	5.9
IPN 100	100 x 50	8.340	4.5	6.8
IPN 120	120 x 58	11.100	5.1	7.7
IPN 140	140 x 66	14.300	5.7	8.6
IPN 160	160 x 74	17.900	6.3	9.5
IPN 180	180 x 82	21.900	6.9	10.4
IPN 200	200 x 90	26.200	7.5	11.3
IPN 220	220 x 98	31.100	8.1	12.2
IPN 240	240 x 106	36.200	8.7	13.1
IPN 260	260 x 113	41.900	9.4	14.1
IPN 280	280 x 119	47.900	10.1	15.2
IPN 300	300 x 125	54.200	10.8	16.2
IPN 320	320 x 131	61.000	11.5	17.3
IPN 340	340 x 137	68.000	12.2	18.3
IPN 360	360 x 143	76.100	13.0	19.5
IPN 380	380 x 149	84.000	13.7	20.5
IPN 400	400 x 155	92.400	14.4	21.6
IPN 450	450 x 170	115.000	16.2	24.3
IPN 500	500 x 185	141.000	18.0	27.0
IPN 550	550 x 200	166.000	19.0	30.0
IPN 600	600 x 215	199.000	21.6	32.4

**I SECTIONS - PARALLEL FLANGE - EUROPEAN**

I-TRÄGER MIT PARALLELEN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

PROFIL DE TYPE I - POUTRELLES À AILES PARALLÈLES - EUROPÉENS

IPE



Description	Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
IPE AAAA 80	78 x 46	3.99	2.9	3.1
IPE AAA 80	78 x 46	4.69	3.0	4.0
IPE AA 80	78 x 46	4.900	3.2	4.2
IPE A 80	78 x 46	5.000	3.3	4.2
IPE 80	80 x 46	6.000	3.8	5.2
IPE AAAA 100	96 X 55	5.460	2.9	3.6
IPE AAA 100	97 X 55	6.410	3.4	4.3
IPE AA 100	97.6 x 55	6.700	3.6	4.5
IPE A 100	98 x 55	6.900	3.6	4.7
IPE 100	100 x 55	8.100	4.1	5.7
IPE AAAA 120	117 X 64	6.730	3.0	3.9
IPE AAA 120	117 X 64	7.900	3.5	4.6
IPE AA 120	117 x 64	8.400	3.8	4.8
IPE A 120	117.6 x 64	8.700	3.8	5.1
IPE 120	120 x 64	10.400	4.4	6.3

# I SECTIONS - PARALLEL FLANGE - EUROPEAN

I-TRÄGER MIT PARALLELEN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

PROFIL DE TYPE I - POUTRELLES À AILES PARALLÈLES - EUROPÉENS

IPE

I

Description	Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
IPE AAAA 140	134 X 73	8.300	3.3	4.1
IPE AAA 140	136 X 73	9.520	3.5	5.0
IPE AA 140	137 X 73	10.100	3.8	5.2
IPE A 140	137 X 73	10.500	3.8	5.6
IPE 140	140 x 73	12.900	4.7	6.9
IPE AAAA 160	154 X 82	10.240	3.6	4.3
IPE AAA 160	156 X 82	11.760	3.7	5.4
IPE AA 160	156.4 x 82	12.100	4.0	5.6
IPE A 160	157 x 82	12.700	4.0	5.9
IPE 160	160 x 82	15.800	5.0	7.4
IPE AAAA 180	174 X 91	12.570	3.9	4.9
IPE AAA 180	176 X 91	14.130	3.9	6.0
IPE AA 180	176.4 x 91	14.900	4.3	6.2
IPE A 180	177 x 91	15.400	4.3	6.5
IPE 180	180 x 91	18.800	5.3	8.0
IPE O 180	182 x 92	21.300	6.0	9.0
IPE AAAA 200	193 X 100	15.020	4.1	5.2
IPE AAA 200	196 X 100	17.120	4.1	6.5
IPE AA 200	196.4 x 100	18.000	4.5	6.7
IPE A 200	197 x 100	18.400	4.5	7.0
IPE 200	200 x 100	22.400	5.6	8.5
IPE O 200	202 x 100	25.100	6.2	9.5
IPE AA 220	216.4 x 110	21.200	4.7	7.4
IPE A 220	217 x 110	22.200	5.0	7.7
IPE 220	220 x 110	26.200	5.9	9.2
IPE O 220	222 x 112	29.400	6.6	10.2
IPE AA 240	236.4 x 120	24.900	4.8	8.0
IPE A 240	237 x 120	26.200	5.2	8.3
IPE 240	240 x 120	30.700	6.2	9.8
IPE O 240	242 x 122	34.300	7.0	10.8
IPE A 270	267 x 135	30.700	5.5	8.7
IPE 270	270 x 135	36.100	6.6	10.2
IPE O 270	274 x 136	42.300	7.5	12.2
IPE A 300	297 x 150	36.500	6.1	9.2
IPE 300	300 x 150	42.200	7.1	10.7
IPE O 300	304 x 152	49.300	8.0	12.7
IPE A 330	327 x 160	43.000	6.5	10.0
IPE 330	330 x 160	49.100	7.5	11.5
IPE O 330	334 x 162	57.000	8.5	13.5
IPE A 360	357.6 x 170	50.200	6.6	11.5
IPE 360	360 x 170	57.100	8.0	12.7
IPE O 360	364 x 172	66.000	9.2	14.7
IPE A 400	397 x 180	57.400	7.0	12.0
IPE 400	400 x 180	66.300	8.6	13.5
IPE O 400	404 x 182	75.700	9.7	15.5
IPE A 450	447 x 190	67.200	7.6	13.1
IPE 450	450 x 190	77.600	9.4	14.6
IPE O 450	456 x 192	92.400	11.0	17.6
IPE A 500	497 x 200	79.400	8.4	14.5
IPE 500	500 x 200	90.700	10.2	16.0
IPE O 500	506 x 202	107.000	12.0	19.0
IPE A 550	547 x 210	92.100	9.0	15.7
IPE 550	550 x 210	106.000	11.1	17.2
IPE O 550	556 x 212	123.000	12.7	20.2
IPE A 600	597 x 220	108.000	9.8	17.5
IPE 600	600 x 220	122.000	12.0	19.0
IPE O 600	610 x 224	154.000	15.0	24.0
IPE 750 x 137	753 x 263	137.000	11.5	17.0
IPE 750 x 147	753 x 265	147.000	13.2	17.0
IPE 750 x 173	762 x 267	173.000	14.4	21.6
IPE 750 x 196	770 x 268	196.000	15.6	25.4

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## I SECTIONS - WIDE FLANGE BEAMS - EUROPEAN

BREITFLANSCHTRÄGER - EUROPÄISCHE NORM

PROFIL DE TYPE I - POUTRELLES À AILES LARGES PARALLÈLES - EUROPÉENS

HE I

Description	Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
HE 100 AA	91 x 100	12.200	4.2	5.5
HE 100 A	96 x 100	16.700	5.0	8.0
HE 100 B	100 x 100	20.400	6.0	10.0
HE 100 C	110 x 103	30.900	9.0	15.0
HE 100 M	120 x 106	41.800	12.0	20.0
HE 120 AA	109 x 120	14.600	4.2	5.5
HE 120 A	114 x 120	19.900	5.0	8.0
HE 120 B	120 x 120	26.700	6.5	11.0
HE 120 C	130 x 123	39.200	9.5	16.0
HE 120 M	140 x 126	52.100	12.5	21.0
HE 140 AA	128 x 140	18.100	4.3	6.0
HE 140 A	133 x 140	24.700	5.5	8.5
HE 140 B	140 x 140	33.700	7.0	12.0
HE 140 C	150 x 143	48.200	10.0	17.0
HE 140 M	160 x 146	63.200	13.0	22.0
HE 160 AA	148 x 160	23.800	4.5	7.0
HE 160 A	152 x 160	30.400	6.0	9.0
HE 160 B	160 x 160	42.600	8.0	13.0
HE 160 C	170 x 163	59.200	11.0	18.0
HE 160 M	180 x 166	76.200	14.0	23.0
HE 180 AA	167 x 180	28.700	5.0	7.5
HE 180 A	171 x 180	35.500	6.0	9.5
HE 180 B	180 x 180	51.200	8.5	14.0
HE 180 C	190 x 183	69.800	11.5	19.0
HE 180 M	200 x 186	88.900	14.5	24.0
HE 200 AA	186 x 200	34.600	5.5	8.0
HE 200 A	190 x 200	42.300	6.5	10.0
HE 200 B	200 x 200	61.300	9.0	15.0
HE 200 C	210 x 203	81.900	12.0	20.0
HE 200 M	220 x 206	103.000	15.0	25.0
HE 220 AA	205 x 220	40.400	6.0	8.5
HE 220 A	210 x 220	50.500	7.0	11.0
HE 220 B	220 x 220	71.500	9.5	16.0
HE 220 C	230 x 223	94.100	12.5	21.0
HE 220 M	240 x 226	117.000	15.5	26.0
HE 240 AA	224 x 240	47.400	6.5	9.0
HE 240 A	230 x 240	60.300	7.5	12.0
HE 240 B	240 x 240	83.200	10.0	17.0
HE 240 C	255 x 244	119.000	14.0	24.5
HE 240 M	270 x 248	157.000	18.0	32.0
HE 260 AA	244 x 260	54.100	6.5	9.5
HE 260 A	250 x 260	68.200	7.5	12.5
HE 260 B	260 x 260	93.000	10.0	17.5
HE 260 C	275 x 264	132.000	14.0	25.0
HE 260 M	290 x 268	172.000	18.0	32.5
HE 280 AA	264 x 280	61.200	7.0	10.0
HE 280 A	270 x 280	76.400	8.0	13.0
HE 280 B	280 x 280	103.000	10.5	18.0
HE 280 C	295 x 284	145.000	14.5	25.5
HE 280 M	310 x 288	189.000	18.5	33.0
HE 300 AA	283 x 300	69.800	7.5	10.5
HE 300 A	290 x 300	88.300	8.5	14.0
HE 300 B	300 x 300	117.000	11.0	19.0
HE 300 C	320 x 305	177.000	16.0	29.0
HE 300 M	340 x 310	238.000	21.0	39.0
HE 320 AA	301 x 300	74.200	8.0	11.0
HE 320 A	310 x 300	97.600	9.0	15.5
HE 320 B	320 x 300	127.000	11.5	20.5
HE 320 C	340 x 305	186.000	16.0	30.5
HE 320 M	359 x 309	245.000	21.0	40.0
HE 340 AA	320 x 300	78.900	8.5	11.5
HE 340 A	330 x 300	105.000	9.5	16.5

# WIDE FLANGE BEAMS - EUROPEAN

BREITFLANSCHTRÄGER - EUROPÄISCHE NORM

PROFIL DE TYPE I - POUTRELLES À AILES LARGES PARALLÈLES - EUROPÉENS

HE I

Description	Product Size mm	kg/m	Web Thickness mm	Flange Thickness mm
HE 340 B	340 x 300	134.000	12.0	21.5
HE 340 M	377 x 309	248.000	21.0	40.0
HE 360 AA	339 x 300	83.700	9.1	12.0
HE 360 A	350 x 300	112.000	10.0	17.5
HE 360 B	360 x 300	142.000	12.5	22.5
HE 360 M	395 x 308	250.000	21.0	40.0
HE 400 AA	378 x 300	92.400	9.5	13.0
HE 400 A	390 x 300	125.000	11.0	19.0
HE 400 B	400 x 300	155.000	13.5	24.0
HE 400 M	432 x 307	256.000	21.0	40.0
HE 450 AA	425 x 300	99.700	10.0	13.5
HE 450 A	440 x 300	140.000	11.5	21.0
HE 450 B	450 x 300	171.000	14.0	26.0
HE 450 M	478 x 307	263.000	21.0	40.0
HE 500 AA	472 x 300	107.000	10.5	14.0
HE 500 A	490 x 300	155.000	12.0	23.0
HE 500 B	500 x 300	187.000	14.5	28.0
HE 500 M	524 x 306	270.000	21.0	40.0
HE 550 AA	522 x 300	120.000	11.5	15.0
HE 550 A	540 x 300	166.000	12.5	24.0
HE 550 B	550 x 300	199.000	15.0	29.0
HE 550 M	572 x 306	278.000	21.0	40.0
HE 600 AA	571 x 300	129.000	12.0	15.5
HE 600 A	590 x 300	178.000	13.0	25.0
HE 600 B	600 x 300	212.000	15.5	30.0
HE 600 M	620 x 305	285.000	21.0	40.0
HE 600 x 337	632 x 310	337.000	25.5	46.0
HE 600 x 399	648 x 315	399.000	30.0	54.0
HE 650 AA	620 x 300	138.000	12.5	16.0
HE 650 A	640 x 300	190.000	13.5	26.0
HE 650 B	650 x 300	225.000	16.0	31.0
HE 650 M	668 x 305	293.000	21.0	40.0
HE 650 x 343	680 x 309	343.000	25.0	46.0
HE 650 x 407	696 x 314	407.000	29.5	54.0
HE 700 AA	670 x 300	150.000	13.0	17.0
HE 700 A	690 x 300	204.000	14.5	27.0
HE 700 B	700 x 300	241.000	17.0	32.0
HE 700 M	716 x 304	301.000	21.0	40.0
HE 700 x 352	728 x 308	352.000	25.0	46.0
HE 700 x 418	744 x 313	418.000	29.5	54.0
HE 800 AA	770 x 300	172.000	14.0	18.0
HE 800 A	790 x 300	224.000	15.0	28.0
HE 800 B	800 x 300	262.000	17.5	33.0
HE 800 M	814 x 303	317.000	21.0	40.0
HE 800 x 373	826 x 308	373.000	25.0	46.0
HE 800 x 444	842 x 313	444.000	30.0	54.0
HE 900 AA	870 x 300	198.000	15.0	20.0
HE 900 A	890 x 300	252.000	16.0	30.0
HE 900 B	900 x 300	291.000	18.5	35.0
HE 900 M	910 x 302	333.000	21.0	40.0
HE 900 x 391	922 x 307	391.000	25.0	46.0
HE 900 x 466	938 x 312	466.000	30.0	54.0
HE 1000 AA	970 x 300	222.000	16.0	21.0
HE 1000 x 249	980 x 300	249.000	16.5	26.0
HE 1000 A	990 x 300	272.000	16.5	31.0
HE 1000 B	1000 x 300	314.000	19.0	36.0
HE 1000 M	1008 x 302	349.000	21.0	40.0
HE 1000 x 393	1016 x 303	393.000	24.4	43.9
HE 1000 x 415	1020 x 304	415.000	26.0	46.0
HE 1000 x 438	1026 x 305	438.000	26.9	49.0
HE 1000 x 494	1036 x 309	494.000	31.0	54.0
HE 1000 x 584	1056 x 314	584.000	36.0	64.0

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## PARALLEL FLANGE CHANNEL - BRITISH

U-PROFILE MIT PARALLELEN FLANSCHFLÄCHEN - BRITISCHE

FERS U À AILES PARALLÈLES - BRITANNIQUE

PFC

Description	Product Size mm	kg/m
PFC 100 x 50	100 x 50 x 5	10.20
PFC 125 x 65	125 x 65 x 5.5	14.80
PFC 150 x 75	150 x 75 x 5.5	17.90
PFC 150 x 90	150 x 90 x 6.5	23.90
PFC 180 x 75	180 x 75 x 6	20.30
PFC 180 x 90	180 x 90 x 6.5	26.10
PFC 200 x 75	200 x 75 x 6	23.40
PFC 200 x 90	200 x 90 x 7	29.70
PFC 230 x 75	230 x 75 x 6.5	25.70
PFC 230 x 90	230 x 90 x 7.5	32.20
PFC 260 x 75	260 x 75 x 7	27.60
PFC 260 x 90	260 x 90 x 8	34.80
PFC 300 x 90	300 x 90 x 9	41.40
PFC 300 x 100	300 x 100 x 9	45.50
PFC 380 x 100	380 x 100 x 9.5	54.00
PFC 430 x 100	430 x 100 x 11	64.40

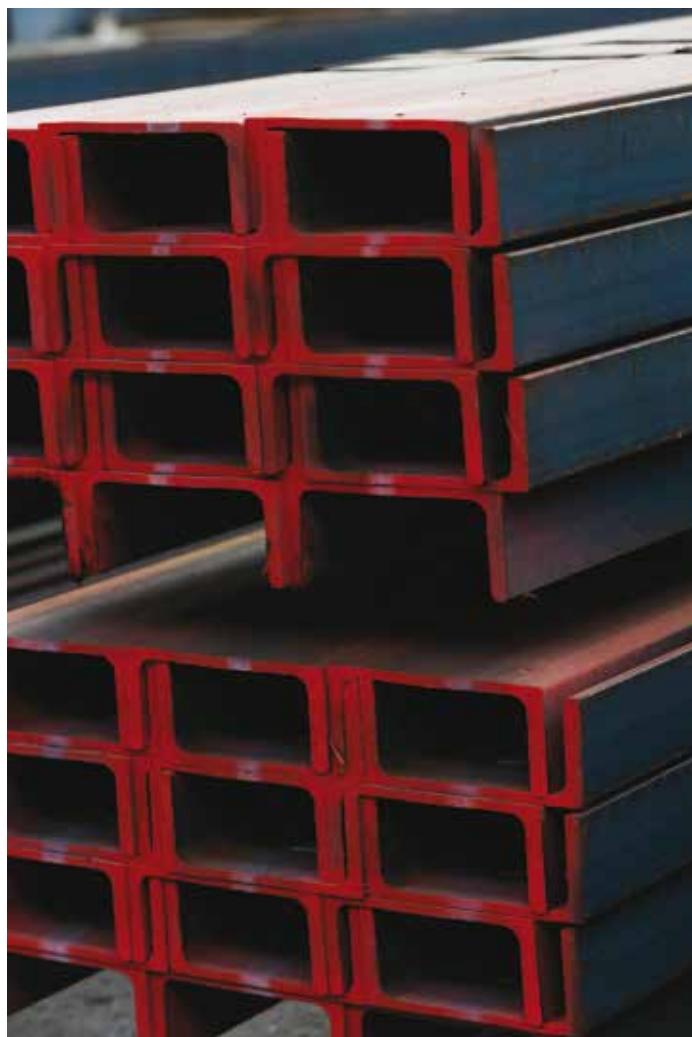
## TAPERED FLANGE CHANNEL - BRITISH

U-PROFILE MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - BRITISCHE

FERS U À AILES INCLINES - BRITANNIQUE

CH

Description	Product Size mm	kg/m
CH 40 x 20	40 x 20 x 5	2.87
CH 50 x 25	50 x 25 x 5	3.86
CH 50 x 38	50 x 38 x 5.5	5.59
CH 65 x 42	65 x 42 x 5.5	7.09
CH 76 x 38	76 x 38 x 5.1	6.70
CH 102 x 51	102 x 51 x 6.1	10.42
CH 127 x 64	127 x 64 x 6.4	14.90
CH 152 x 76	152 x 76 x 6.4	17.88
CH 152 x 89	152 x 89 x 7.1	23.84
CH 178 x 76	178 x 76 x 6.6	20.84
CH 178 x 89	178 x 89 x 7.6	26.81
CH 203 x 76	203 x 76 x 7.1	23.82
CH 203 x 89	203 x 89 x 8.1	29.78
CH 229 x 76	229 x 76 x 7.6	26.06
CH 229 x 89	229 x 89 x 8.6	32.76
CH 254 x 76	254 x 76 x 8.1	28.29
CH 254 x 89	254 x 89 x 9.1	35.74
CH 305 x 89	305 x 89 x 10.2	41.69
CH 305 x 102	305 x 102 x 10.2	46.18
CH 381 x 102	381 x 102 x 10.4	55.10
CH 432 x 102	432 x 102 x 12.2	65.54



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



**U PROFILES - TAPERED FLANGE CHANNEL - EUROPEAN**

U-PROFILE MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

FERS U À AILES INCLINÉES - EUROPÉENS



Description	Product Size mm	kg/m
U 25	25 x 12 x 4	1.300
U 30	30 x 15 x 4	2.200
U 30	30 x 33 x 5	4.270
U 35	35 x 17.5 x 4	2.150
U 40	40 x 20 x 4	2.650
U 40	40 x 20 x 5	2.870
U 40	40 x 35 x 5.5	4.870
U 50	50 x 25 x 5	3.860
U 50	50 x 38 x 5.5	5.590
U 60	60 x 30 x 6	5.070
U 60	60 x 40 x 6	6.300
U 65	65 x 42 x 5.5	7.090
U 70	70 x 40 x 6	6.725

**U PROFILES - TAPERED FLANGE CHANNEL - EUROPEAN**

UE-PROFILE MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

FERS UE À AILES INCLINÉES - EUROPÉENS



Description	Product Size mm	kg/m
UE 50	50 x 32 x 4.4	4.840
UE 65	65 x 36 x 4.4	5.900
UE 80	80 x 40 x 4.5	7.050
UE 100	100 x 46 x 4.5	8.590
UE 120	120 x 52 x 4.8	10.400
UE 140	140 x 58 x 4.9	12.300
UE 160	160 x 64 x 5	14.200
UE 180	180 x 70 x 5.1	16.300
UE 200	200 x 76 x 5.2	18.400
UE 240	240 x 90 x 5.6	24.000
UE 270	270 x 95 x 6	27.700
UE 300	300 x 100 x 6.5	31.800
UE 400	400 x 115 x 8	48.300

## U PROFILES - TAPERED FLANGE CHANNEL - EUROPEAN

UPN-PROFILE MIT GENEIGTEN INNEREN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

FERS UPN À AILES INCLINÉES - EUROPÉENS

UPN



Description	Product Size mm	kg/m
UPN 30	30 x 15 x 3.3	1.560
	30 x 15 x 4	1.740
UPN 40	40 x 20 x 3	2.330
	40 x 20 x 3.2	2.470
	40 x 20 x 5	2.870
UPN 50	50 x 25 x 3.17	3.280
	50 x 25 x 5	3.860
UPN 50	50 x 38 x 5	5.590
UPN 60	60 x 30 x 5	4.530
UPN 65	65 x 42 x 5.5	7.090
UPN 70	70 x 39.3 x 4.5	6.120
UPN 80	80 x 45 x 6	8.640
UPN 100	100 x 50 x 6	10.600
UPN 120	120 x 55 x 7	13.400
UPN 140	140 x 60 x 7	16.000
UPN 160	160 x 65 x 7.5	18.800
UPN 180	180 x 70 x 8	22.000
UPN 200	200 x 75 x 8.5	25.300
UPN 220	220 x 80 x 9	29.400
UPN 240	240 x 85 x 9.5	33.200
UPN 260	260 x 90 x 10	37.900
UPN 280	280 x 95 x 10	41.800
UPN 300	300 x 100 x 10	46.200
UPN 320	320 x 100 x 14	59.500
UPN 350	350 x 100 x 14	60.600
UPN 380	380 x 102 x 13.5	63.100
UPN 400	400 x 110 x 14	71.800

## U PROFILES - PARALLEL FLANGE CHANNEL - EUROPEAN

U-PROFILE MIT PARALLELEN FLANSCHFLÄCHEN - EUROPÄISCHE NORM

FERS U À AILES PARALLÈLES - EUROPÉENS

UPE



Description	Product Size mm	kg/m
UPE 80	80 x 50 x 4	7.900
UPE 100	100 x 55 x 4.5	9.820
UPE 120	120 x 60 x 5	12.100
UPE 140	140 x 65 x 5	14.500
UPE 160	160 x 70 x 5.5	17.000
UPE 180	180 x 75 x 5.5	19.700
UPE 200	200 x 80 x 6	22.800
UPE 220	220 x 85 x 6.5	26.600
UPE 240	240 x 90 x 7	30.200
UPE 270	270 x 95 x 7.5	35.200
UPE 300	300 x 100 x 9.5	44.400
UPE 340	330 x 105 x 11	53.200
UPE 360	360 x 110 x 12	61.200
UPE 400	400 x 115 x 13.5	72.200

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - CIRCULAR - HOT FORMED**

STAHLBAUHOL PROFILE - RUNDER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD

CHS-H



Product Size O/D Diameter mm	Intermediate Sizes				
	Thickness mm				
	2.00	3.50	4.50	9.00	14.20
	kg/m				
35.0		2.719			
48.3		3.867			
56.0	2.663				
60.3		4.903			
61.5		5.006			
62.2		5.067			
68.0	3.255				
88.9			7.371		
96.0				19.310	
114.3			9.564		
120.0			10.056		
125.0			10.487		
127.0			10.660		
133.0			11.178		
139.7			11.756		
193.7			20.997		
219.1			23.816		
323.9					108.455
355.6					119.556
406.4					137.346

**HOLLOW SECTION - CIRCULAR - HOT FORMED**

STAHLBAUHOLPROFILE - RUNDER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD

**CHS-H**

Product Size Diameter O/D mm	Thickness mm										
	1.50	2.00	2.30	2.50	2.90	3.00	3.20	3.60	4.00	5.00	6.00
	kg/m										
17.2	0.581	0.750	0.845	0.906							
21.3	0.732	0.952	1.078	1.159	1.316	1.354	1.428				
25.0	0.869	1.134	1.288	1.387	1.581	1.628					
26.9	0.940	1.228	1.395	1.504	1.716	1.768	1.870				
28.0	0.980	1.282	1.458	1.572	1.795	1.850	1.957				
30.0	1.054	1.381	1.571	1.695	1.938	1.998					
32.0	1.128	1.480	1.685	1.819	2.081	2.416					
33.7	1.191	1.564	1.781	1.924	2.203	2.271	2.407	2.672	2.930		
35.0	1.239	1.628	1.855	2.004	2.296	2.368	2.510	2.788	3.058		
37.5	1.332	1.751	1.997	2.158	2.475	2.552	2.707	3.010	3.305		
38.0	1.350	1.776	2.025	2.189	2.510	2.589	2.746	3.054	3.354	4.069	
39.0	1.387	1.825	2.082	2.250	2.582	2.663	2.825	3.143	3.453		
40.0	1.424	1.874	2.138	2.312	2.653	2.737	2.904	3.232	3.551		
41.5	1.480	1.948	2.223	2.404	2.761	2.848	3.023	3.365	3.699		
42.0	1.498	1.973	2.252	2.435	2.796	2.885	3.062	3.409	3.749		
42.4	1.513	1.993	2.275	2.460	2.825	2.915	3.094	3.445	3.788	4.612	5.386
44.5	1.591	2.096	2.394	2.589	2.975	3.070	3.259	3.631	3.995		
45.0	1.609	2.121	2.422	2.620	3.011	3.107	3.299	3.676	4.044	4.932	5.771
48.0	1.720	2.269	2.592	2.805	3.225	3.329	3.535	3.942	4.340		
48.3	1.731	2.284	2.609	2.824	3.247	3.351	3.559	3.969	4.370	5.339	6.259
48.6	1.742	2.298	2.626	2.842	3.268	3.374	3.583	3.995	4.400		
49.4	1.772	2.338	2.672	2.892	3.326	3.433	3.646	4.066	4.479	5.475	
50.0	1.794	2.368	2.706	2.929	3.369	3.477	3.693	4.119	4.538	5.549	6.511
51.0	1.831	2.417	2.762	2.990	3.440	3.551	3.772	4.208	4.636	5.672	6.659
52.0	1.868	2.466	2.819	3.052	3.512	3.625	3.851	4.297	4.735	5.795	6.807
55.0	1.979	2.614	2.989	3.237	3.726	3.847	4.088	4.563	5.031	6.165	7.250
57.0	2.053	2.713	3.103	3.360	3.869	3.995	4.246	4.741	5.228	6.412	7.546
58.0		2.762	3.159	3.422	2.941	4.069	4.325	4.830	5.327	6.535	7.694
60.0	2.164	2.861	3.273	3.545	4.084	4.217	4.482	5.007	5.524	6.782	7.990
60.3	2.175	2.876	3.290	3.564	4.105	4.239	4.506	5.034	5.554	6.819	8.035
61.5		2.935	3.358	3.638	4.191	4.328	4.601	5.140	5.672	6.967	8.212
62.0	2.238	2.959	3.386	3.668	4.227	4.365	4.640	5.185	5.721		
62.2		2.969	3.398	3.681	4.241	4.380	4.656	5.203	5.741	7.053	8.316
63.0	2.275	3.009	3.443	3.730	4.298	4.439	4.719	5.274	5.820	7.152	8.434
63.5	2.294	3.033	3.471	3.761	4.334	4.476	4.759	5.318	5.869	7.213	8.508
66.0		3.157	3.613	3.915	4.513	4.661	4.956	5.540	6.116	7.522	8.878
70.0	2.534	3.354	3.840	4.162	4.799	4.957	5.272	5.895	6.511	8.015	9.470
71.5		3.428	3.925	4.254	4.906	5.068	5.390	6.028	6.659	8.200	9.692
72.0		3.453	3.953	4.285	4.942	5.105	5.429	6.073	6.708	8.262	9.766
75.5		3.625	4.152	4.501	5.192	5.364	5.706	6.383	7.053	8.693	10.284
76.0	2.756	3.650	4.180	4.532	5.228	5.401	5.745	6.428	7.103	8.755	10.358
76.1	2.760	3.655	4.186	4.538	5.235	5.408	5.753	6.437	7.112	8.767	10.373
80.0	2.904	3.847	4.407	4.778	5.514	5.697	6.061	6.783	7.497	9.248	10.950
82.5	2.996	3.971	4.549	4.932	5.693	5.882	6.258	7.005	7.744	9.556	11.320
83.0	3.015	3.995	4.577	4.963	5.729	5.919	6.298	7.049	7.793	9.618	11.394
											11.917

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# HOLLOW SECTION - CIRCULAR - HOT FORMED

**STAHLBAUHÖL PROFILE - RUNDER QUERSCHNITT - WARMGEFERTIGT**

#### **TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD**

CHS-H



# HOLLOW SECTION - CIRCULAR - HOT FORMED

**STAHLBAUHÖLPROFILE - RUNDER QUERSCHNITT - WARMGEFERTIGT**

#### **TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD**

CHS-H



Product Size Diameter O/D mm	Thickness mm									
	6.30	7.00	8.00	10.00	12.00	12.50	16.00	20.00	25.00	30.00
	kg/m									
84.0	12.072									
88.9	12.833	14.138	15.961	19.458						
89.0	12.849									
90.0										
95.0	13.781									
96.0	13.936	15.364	17.362	21.209						
100.0	14.558	16.055	18.151							
101.6	14.807	16.331	18.467	22.590						
108.0	15.801	17.436	19.729	24.168						
110.0										
113.0	16.578	18.299	20.716							
114.0	16.733	18.471	20.913	25.648						
114.3	16.780	18.523	20.972	25.722						
120.0	17.665									
125.0	18.442	20.370	23.083	28.361	33.441					
127.0	18.753	20.716	23.478	28.854						
133.0	19.685	21.751	24.662	30.334						
139.7	20.726	22.908	25.983	31.986		39.212				
152.0	22.637	25.031	28.410	35.019		43.003				
152.4	22.699	25.100	28.489	35.118		43.127				
159.0	23.725	26.240	29.791	36.746						
164.0	24.501									
165.1	24.672	27.293	30.995							
168.0	25.123									
168.1										
168.3	25.170	27.845	31.626	39.039		48.028				
177.8	26.646	29.485	33.500	41.382	49.067	50.957				
193.7	29.116	32.230	36.637	45.303	53.772	55.858				
200.0	30.095	33.318	37.880							
219.1	33.062	36.615	41.648	51.567	61.289	63.688	80.140			
244.5	37.009	41.000	46.660	57.831	68.806	71.518	90.162			
273.0	41.437	45.920	52.282	64.860	77.240	80.304	101.408			
273.1	41.452	45.937	52.302	64.884	77.269					
323.9	49.345	54.707	62.325	77.412	92.303	95.995	121.492			
339.7	51.800	57.434	65.442	81.309						
355.6	54.270	60.179	68.579	85.230	101.684	105.767	134.001	165.528		
406.4	62.163	68.949	78.601	97.758	116.718	121.427	154.046	190.584	235.147	
457.0	70.024	77.684	88.584	110.237	131.692	137.025	174.012	215.542	266.344	315.914
508.0	77.948	86.488	98.646	122.814	146.785	152.747	194.135	240.696	297.788	353.646
610.0	93.795		118.770	147.969	176.971	184.191	234.383	291.006	360.674	429.110
711.0	109.487		138.696	172.877	206.861	215.326	274.236	340.822	422.945	503.834
762.0	117.411		148.758	185.454	221.954	231.047	294.360	365.977	454.388	541.567
813.0			158.820	198.032	237.046	246.769	314.483	391.131	485.832	579.299
914.0			178.747	222.940	266.936	277.904	354.336	440.948	548.102	654.023
1016.0			198.870	248.095	297.122	309.348	394.584	491.257	610.989	729.487
1067.0				260.672	312.215	325.069	414.708	516.412	642.432	767.219
1168.0				285.580	342.104	356.205	454.561	566.228	704.702	841.911
1219.0					357.197	371.926	474.685	591.383	736.146	879.676

**HOLLOW SECTION - SQUARE - HOT FORMED**

STAHLBAUHOLPROFILE - QUADRATISCHER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - CARRÉ - FORMÉS À CHAUD

**SHS-H**

Product Size mm	Thickness mm							
	1.5	2.00	2.50	3.00	4.00	5.00	6.00	6.30
	kg/m							
20 x 20	0.852	1.097	1.321	1.526				
22 x 22	0.947	1.222						
25 x 25	1.088	1.411	1.714	1.997	2.503			
30 x 30	1.323	1.725	2.106	2.468	3.131			
35 x 35	1.559	2.039	2.499	2.939	3.759			
38 x 38		2.227	2.734	3.221				
40 x 40	1.794	2.353	2.891	3.410	4.387	5.284		
42 x 42				3.598	4.638	5.598		
45 x 45	2.030	2.667	3.284	3.881	5.015	6.069		
48 x 48				4.163				
50 x 50	2.265	2.981	3.676	4.352	5.643	6.854	7.986	8.310
52 x 52				4.540				
55 x 55				4.823				
60 x 60	2.736	3.609	4.461	5.294	6.899	8.424	9.870	10.289
64 x 64			4.775	5.670				
65 x 65		3.923	4.854	5.765	7.527			
70 x 70	3.207	4.237	5.246	6.236	8.155	9.994	11.754	12.267
75 x 75				6.707				
80 x 80	3.678	4.865	6.031	7.178	9.411	11.564	13.638	14.245
90 x 90	4.149	5.493	6.816	8.120	10.667	13.134	15.522	16.223
100 x 100		6.121	7.601	9.062	11.923	14.704	17.406	18.201
110 x 110		6.749	8.366	10.001	13.179	16.274	19.290	20.180
120 x 120		7.377	9.171	10.946	14.435	17.844	21.174	22.158
125 x 125		7.691	9.564	11.417	15.063	18.629	22.116	23.147
130 x 130			9.956	11.888	15.691	19.414	23.058	24.136
140 x 140				12.830	16.947	20.984	24.942	26.114
150 x 150				13.772	18.203	22.554	26.826	28.092
160 x 160				14.714	19.459	24.124	28.710	30.071
175 x 175				16.127	21.343	26.479	31.536	33.038
180 x 180				16.598	21.971	27.264	32.478	34.027
200 x 200					24.483	30.404	36.246	37.983
220 x 220					26.995	33.544	40.014	41.940
250 x 250					30.763	38.254	45.666	47.874
260 x 260					32.019	39.824	47.550	49.853
300 x 300						46.104	55.086	57.765
325 x 325						50.029	59.796	62.711
350 x 350							64.506	67.656
400 x 400							73.926	77.547

Product Size mm	Intermediate Sizes		
	Thickness mm		
	3.50	3.60	5.00
kg/m			
70 x 70	7.205	7.397	
80 x 80	8.304	8.527	
90 x 90	9.403	9.657	
101.6 x 101.6			14.956
115 x 115			17.059

# HOLLOW SECTION - SQUARE - HOT FORMED

STAHLBAUHOLPROFILE - QUADRATISCHER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - ZARRÉ - FORMÉS À CHAUD

**SHS-H**



Product Size mm	Thickness mm						
	7.00	8.00	10.00	12.00	12.50	14.20	16.00
	kg/m						
20 x 20							
22 x 22							
25 x 25							
30 x 30							
35 x 35							
38 x 38							
40 x 40							
42 x 42							
45 x 45							
48 x 48							
50 x 50							
52 x 52							
55 x 55							
60 x 60							
64 x 64							
65 x 65							
70 x 70							
75 x 75							
80 x 80	15.633	17.547					
90 x 90	17.831	20.059					
100 x 100	20.029	22.571	27.418	31.945	33.028		
110 x 110	22.227	25.083	30.558	35.713	36.953		
120 x 120	24.425	27.595	33.698	39.481	40.878		
125 x 125	25.524	28.851	35.268	41.365	42.840		
130 x 130	26.623	30.107	36.838	43.249	44.803		
140 x 140	28.821	32.619	39.978	47.017	48.728		
150 x 150	31.019	35.131	43.118	50.785	52.653		65.165
160 x 160	33.217	37.643	46.258	54.553	56.578		70.189
175 x 175	36.514	41.411	50.968	60.205	62.465		
180 x 180	37.613	42.667	52.538	62.089	64.428		80.237
200 x 200	42.009	47.691	58.818	69.625	72.278	81.146	90.285
220 x 220	46.405	52.715	65.098	77.161	80.128	90.640	100.333
250 x 250	52.999	60.251	74.518	88.465	91.903	103.444	115.405
260 x 260	55.197	62.763	77.658	92.233	95.828	107.899	120.429
300 x 300	63.989	72.811	90.218	107.305	111.528	125.734	140.525
325 x 325	69.484	79.091	98.068				
350 x 350	74.979	85.371	105.918	126.145	131.153	148.028	165.645
400 x 400	85.969	97.931	121.618	144.985	150.778	170.322	190.765

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - RECTANGULAR - HOT FORMED**

STAHLBAUHOLPROFILE - RECHTECKIGER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À CHAUD

**RHS-H**

Product Size mm	Thickness mm								
	1.50	2.00	2.50	3.00	4.00	5.00	6.00	6.30	7.00
	kg/m								
25 x 15	0.852	1.097	1.321	1.526					
25 x 20	0.970	1.254	1.517	1.761					
30 x 10	0.852	1.097							
30 x 15	0.970	1.254	1.517	1.761					
30 x 20	1.088	1.411	1.714	1.997	2.503				
30 x 25	1.206	1.568	1.910	2.232	2.817				
35 x 10	0.970	1.254							
35 x 15	1.088	1.411							
35 x 20	1.206	1.568	1.910	2.232	2.817				
35 x 25	1.323	1.725	2.106	2.468	3.131				
35 x 27				2.562	3.256				
35 x 30	1.441	1.882	2.302	2.703	3.445				
40 x 10	1.088	1.411							
40 x 15	1.206	1.568	1.910	2.232					
40 x 20	1.323	1.725	2.106	2.468	3.131				
40 x 25	1.441	1.882	2.302	2.703					
40 x 27	1.488	1.945	2.381	2.797	3.570				
40 x 30	1.559	2.039	2.499	2.939	3.759				
40 x 35	1.677	2.196	2.695	3.174					
45 x 10	1.206								
45 x 15	1.323	1.725	2.106	2.468					
45 x 20	1.441	1.882	2.302	2.703					
45 x 25	1.559	2.039	2.499	2.939					
45 x 30	1.677	2.196	2.695	3.174	4.073				
45 x 35	1.794	2.353	2.891	3.410	4.387				
45 x 40		2.510	3.087	3.645	4.701				
48 x 25	1.630	2.133							
50 x 10	1.323	1.725	2.106	2.468					
50 x 15	1.441	1.882							
50 x 20	1.559	2.039	2.499	2.939					
50 x 25	1.677	2.196	2.695	3.174	4.073				
50 x 27		2.259	2.773	3.268	4.198				
50 x 30	1.794	2.353	2.891	3.410	4.387	5.284			
50 x 35	1.912	2.510	3.087	3.645					
50 x 40	2.030	2.667	3.284	3.881	5.015				
50 x 45		2.824	3.480	4.116	5.329				
50 x 48	2.218								
52 x 40				5.140					
60 x 10	1.559	2.039							
60 x 15	1.677	2.196	2.695	3.174					
60 x 20	1.794	2.353	2.891	3.410	4.387				
60 x 25	1.912	2.510	3.087	3.645					
60 x 27		2.573	3.166	3.739	4.826				
60 x 30	2.030	2.667	3.284	3.881	5.015				
60 x 34		2.792	3.441	4.069	5.266				
60 x 35	2.148	2.824	3.480	4.116					
60 x 40	2.265	2.981	3.676	4.352	5.643	6.854	7.986	8.310	9.039
60 x 45	2.383	3.138	3.872	4.587					
60 x 48		3.232							
60 x 50	2.501	3.295	4.069	4.823	6.271	7.639	8.928		
65 x 25	2.030	2.667	3.284	3.881					
65 x 35	2.265	2.981	3.676	4.352	5.643				
65 x 55		3.609							
70 x 20	2.030	2.667	3.284	3.881					
70 x 25	2.148	2.824	3.480	4.116					
70 x 27		2.887	3.558	4.210					
70 x 30	2.265	2.981	3.676	4.352	5.643	6.854	7.986		
70 x 35	2.383	3.138	3.872	4.587					
70 x 40	2.501	3.295	4.069	4.823	6.271	7.639	8.928	9.300	

# HOLLOW SECTION - RECTANGULAR - HOT FORMED

STAHLBAUHOLPROFILE - RECHTECKIGER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À CHAUD

RHS-H



Product Size mm	Thickness mm									
	1.50	2.00	2.50	3.00	4.00	5.00	6.00	6.30	7.00	8.00
kg/m										
70 x 50	2.736	3.609	4.461	5.294	6.899	8.424	9.870	10.289		
75 x 50				5.529						
80 x 15	2.148	2.824	3.480	4.116						
80 x 20	2.265	2.981	3.676	4.352	5.643	6.854	7.986	8.310		
80 x 22	2.312	3.044	3.755	4.446						
80 x 30	2.501	3.295	4.069	4.823	6.271	7.639	8.928	9.300		
80 x 40	2.736	3.609	4.461	5.294	6.899	8.424	9.870	10.289		
80 x 45	2.854	3.766	4.657	5.529	7.213	8.817	10.341	10.783		
80 x 50	2.972	3.923	4.854	5.765	7.527	9.209	10.812	11.278		
80 x 60	3.207	4.237	5.246	6.236	8.155	9.994	11.754	12.267		
90 x 20	2.501	3.295	4.069	4.823						
90 x 30	2.736	3.609	4.461	5.294	6.899	8.424	9.870			
90 x 40	2.972	3.923	4.854	5.765	7.527	9.209	10.812	11.278		
90 x 50	3.207	4.237	5.246	6.236	8.155	9.994	11.754	12.267		
90 x 60		4.551	5.639	6.707	8.783	10.779	12.696			
90 x 70		4.865	6.031	7.178						
100 x 20	2.736	3.609	4.461	5.294	6.899	8.424	9.870			
100 x 30	2.972	3.923	4.854	5.765	7.527					
100 x 40	3.207	4.237	5.246	6.236	8.155	9.994	11.754	12.267		
100 x 50	3.443	4.551	5.639	6.707	8.783	10.779	12.696	13.256		
100 x 60	3.678	4.865	6.031	7.178	9.411	11.564	13.638	14.245	15.633	17.547
100 x 70		5.179	6.424	7.649	10.039	12.349	14.580			
100 x 80	4.149	5.493	6.816	8.120	10.667	13.134	15.552	16.223	17.831	20.059
110 x 20		3.923								
110 x 30	3.207	4.237	5.246	6.236	8.155	9.994	11.754			
110 x 50		4.865	6.031	7.178	9.411	11.564	13.638		15.633	
110 x 60							14.580			
110 x 70	4.149	5.493	6.816	8.120	10.667	13.134	15.522	16.223		
110 x 100				9.533	12.551	15.489	18.348	19.191	21.128	
120 x 30	3.443	4.551	5.639	6.707	8.783	10.779	12.696			
120 x 40	3.678	4.865	6.031	7.178	9.411	11.564	13.638	14.245		
120 x 50	3.914	5.179	6.424	7.649	10.039	12.349	14.580	15.234		
120 x 55	4.032	5.336	6.620	7.884	10.353					
120 x 60	4.149	5.493	6.816	8.120	10.667	13.134	15.522	16.223	17.831	20.059

Product Size mm	Intermediate Sizes		
	Thickness mm		
3.50	3.60	9.00	
kg/m			
50 x 25	3.633		
90 x 50	7.205	7.397	
100 x 60	8.304	8.527	
120 x 60	9.403	9.657	
120 x 100			27.860

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## HOLLOW SECTION - RECTANGULAR - HOT FORMED

## STAHLBAUHÖLPROFILE - RECHTECKIGER QUERSCHNITT - WARMGEFERTIGT

## **TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À CHAUD**

RHS-H

# HOLLOW SECTION - RECTANGULAR - HOT FORMED

STAHLBAUHOLPROFILE - RECHTECKIGER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À CHAUD

RHS-H

Product Size mm	Thickness mm							
	7.00	8.00	10.00	12.00	12.50	14.20	16.00	20.00
	kg/m							
120 x 80	20.029	22.571	27.418	31.945	33.028			
120 x 100	22.227	25.083	30.558	35.713	36.953			
130 x 50								
140 x 40								
140 x 60	20.029	22.571						
140 x 70	21.128	23.827						
140 x 80	22.227	25.083	30.558	35.713	36.953			
140 x 100	24.425	27.595	33.698	39.481	40.878			
140 x 120	26.623	30.107	36.838	43.249	44.803			
150 x 30								
150 x 50								
150 x 70								
150 x 75								
150 x 90	24.425	27.595	33.698	39.481	40.878			
150 x 100	25.524	28.851	35.268	41.365	42.840			
150 x 130	28.821	32.619	39.978	47.017	48.728			
160 x 40								
160 x 50								
160 x 60	22.227	25.083						
160 x 80	24.425	27.595	33.698	39.481	40.878			
160 x 90	25.524	28.851	35.268	41.365	42.840			
160 x 100	26.623	30.107	36.838	43.249	44.803			
160 x 120	28.821	32.619	39.978	47.017	48.728			
160 x 140	31.019	35.131	43.118	50.785	52.653			
180 x 40								
180 x 60	24.425	27.595	33.698	39.481	40.878			
180 x 70	25.524	28.851						
180 x 80	26.623	30.107	36.838	43.249	44.803			
180 x 100	28.821	32.619	39.978	47.017	48.728			
180 x 120	31.019	35.131	43.118	50.785	52.653			
180 x 140	33.217	37.643	46.258	54.553	56.578			
185 x 65								
200 x 80	28.821	32.619	39.978	47.017	48.728			
200 x 100	31.019	35.131	43.118	50.785	52.653			
200 x 120	33.217	37.643	46.258	54.553	56.578	63.311		
200 x 150	36.514	41.411	50.968	60.205	62.465	69.999		
200 x 160	37.613	42.667	52.538	62.089	64.428			
220 x 100	33.217	37.643	46.258	54.553	56.578			
220 x 120	35.415	40.155	49.398	58.321	60.503	67.770		
220 x 130	36.514	41.411	50.968	60.205	62.465			
220 x 140	37.613	42.667	52.538	62.089	64.428			
220 x 180	42.009	47.691	58.818	69.625	72.278			
240 x 80	33.217	37.643	46.258	54.553	56.578			
250 x 50	31.019	35.131						
250 x 100	36.514	41.411	50.968	60.205	62.465			
250 x 150	42.009	47.691	58.818	69.625	72.278	90.285		
250 x 180								
250 x 200	47.504	53.971	66.668	79.045	82.090	92.293		
260 x 100	37.613	42.667	52.538	62.089	64.428			
260 x 140	42.009	47.691	58.818	69.625	72.278	81.186		
260 x 180	46.405	52.715	65.098	77.161	80.128	90.064	100.333	
300 x 50	36.514	41.411						
300 x 100	42.009	47.691	58.818	69.625	72.278	90.285		
300 x 150	47.504	53.971	66.668	79.045	82.090	92.293	102.845	
300 x 200	52.999	60.251	74.518	88.465	91.903	103.440	115.405	
300 x 220	55.197	62.763	77.658	92.233	95.828			
350 x 150	52.999	60.251	74.518	88.465	91.903	103.440		
350 x 250	63.989	72.811	90.218	107.305	111.528	125.734	140.525	
400 x 100	52.999	60.251	74.518	88.465	91.903			
400 x 200	63.989	72.811	90.218	107.305	111.528	125.734	140.525	
400 x 250	69.484	79.091						
400 x 300	74.979	85.371	105.918	126.145	131.153	148.028	165.645	
450 x 250	74.979	85.371	105.918	126.145	131.153	148.028	165.645	
500 x 200	74.979	85.371	105.918	126.145	131.153	148.028	203.871	
500 x 300		97.931	121.618	144.985	150.778	170.322	190.765	235.271

Other and intermediate sizes available upon request.  
Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - OVAL - HOT FORMED**

STAHLBAUHOLPROFILE - ELLIPTISCHER QUERSCHNITT - WARMGEFERTIGT

TUBE DE STRUCTURE - OVALE - FORMÉS À CHAUD

**OHS-H**

Product Size mm	Thickness mm						
	4.00	5.00	6.30	8.00	10.00	12.50	16.00
	kg/m						
150 x 75	10.70	13.30	16.50				
200 x 100		17.90	22.30	28.00	32.50	42.20	
250 x 125			28.20	35.40	43.80	53.90	
300 x 150				42.80	53.00	65.50	82.50
400 x 200				57.60	71.50	88.60	112.00
500 x 250					90.00	112.00	142.00

**HOLLOW SECTION - JUMBO SQUARE - HOT FORMED**

STAHLBAUHOLPROFILE - GROSSER QUADRATISCHER QUERSCHMIDT - WARMGEFERTIGT

TUBE DE STRUCTURE - CARRÉ LARGE - FORMÉS À CHAUD

**JSHS-H**

Product Size mm	Thickness mm								
	12.00	16.00	19.00	22.00	25.00	28.00	32.00	36.00	40.00
	kg/m								
350 x 350			190.00	217.00	242.00				
400 x 400				251.00	282.00				
450 x 450	162.00	213.00	250.00	286.00	321.00	355.00	399.00		
500 x 500	181.00	238.00	280.00	320.00	360.00	399.00	450.00	498.00	
550 x 550		263.00	309.00	355.00	399.00	443.00	500.00	555.00	608.00
600 x 600					439.00	487.00	550.00	611.00	671.00
700 x 700					517.00	575.00	651.00	724.00	797.00

**HOLLOW SECTION - CIRCULAR - HOT FORMED - SEAMLESS**

STAHLBAUHOLPROFILE - WARMGEFERTIGT NAHTLOS RUND

TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD - SANS SOUDURES

**CHS-H-S**

Product Size Diameter O/D mm	Thickness mm					
	16.00	20.00	25.00	32.00	40.00	50.00
	kg/m					
193.70	70.10					
219.10		98.20				
244.50		111.00	135.00			
273.00		125.00	153.00			
323.90		150.00	184.00			
355.60		166.00	204.00			
406.40		191.00	235.00	295.00		
457.00		216.00	266.00	335.00	411.00	
508.00		241.00	298.00	376.00	462.00	565.00
559.00		266.00	329.00	416.00	512.00	628.00
610.00		291.00	361.00	456.00	562.00	691.00
660.00		316.00	392.00	496.00	612.00	752.00

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



**HOLLOW SECTION BS4848 - CIRCULAR - HOT FORMED**

BS4848 STAHLBAUHÖL PROFILE - HOHLPFIL - RUNDER QUERSCHNITT - WARMGEFERTIGT

BS 4848 TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD

**CHS-H**

Product Size Diameter O/D mm	Thickness mm									
	2.00	2.50	2.60	3.00	3.20	3.50	3.60	4.00	5.00	6.00
	kg/m									
21.3				1.35	1.43					
26.9	1.23	1.50		1.77	1.87					
33.7	1.56	1.92	1.99	2.27	2.41			2.93		
42.4		2.47	2.55	2.92	3.09			3.79		
48.3	2.29	2.82		3.35	3.56			4.37	5.34	
60.3				4.24	4.51	4.90		5.55	6.82	
76.1		4.54		5.41	5.75			7.11	8.77	
88.9				6.36	6.76			8.38	10.35	
114.3				8.23		9.56	9.83		13.50	16.03
139.7				10.10		11.80			16.60	19.80
168.3								16.20	20.10	24.02
193.7									23.30	
219.1									26.40	
244.5										
273.0										
323.9										
355.6										
406.4										
457.0										
508.0										



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# HOLLOW SECTION BS4848 - CIRCULAR - HOT FORMED

BS4848 STAHLBAUHOL PROFILE - HOHLPFROFILE - RUNDER QUERSCHNITT - WARMGEFERTIGT

BS 4848 TUBE DE STRUCTURE - ROND - FORMÉS À CHAUD

CHS-H



Product Size Diameter O/D mm	Thickness mm									
	6.30	8.00	10.00	12.50	16.00	20.00	25.00	32.00	40.00	50.00
	kg/m									
21.3										
26.9										
33.7										
42.4										
48.3										
60.3										
76.1										
88.9										
114.3	16.80									
139.7	20.70	26.00	32.00							
168.3	25.20	31.60	39.00							
193.7	29.10	36.60	45.30	55.90	70.10					
219.1	33.10	41.60	51.60	63.70	80.10	98.20				
244.5	37.00	46.70	57.80	71.50	90.20	111.00				
273.0	41.40	52.30	64.90	80.30	101.00	125.00	153.00			
323.9	49.30	62.30	77.40	96.00	121.00	150.00	184.00			
355.6		68.60	85.20	106.00	134.00	166.00	204.00			
406.4			97.80	121.00	154.00	191.00	235.00	295.00		
457.0			110.00	137.00	174.00	216.00	266.00	335.00	411.00	
508.0			123.00	153.00	194.00	241.00	298.00	376.00	462.00	565.00



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION BS4848 - SQUARE - HOT FORMED**

BS4848 STAHLBAUHÖLPROFILE - HOHLPROFILE - QUADRATISCHER QUERSCHNITT - WARMGEFERTIGT

BS 4848 TUBE DE STRUCTURE - CARRÉ - FORMÉS À CHAUD

**SHS-H**

Product Size mm	Thickness mm														
	2.00	2.50	3.00	3.20	3.50	3.60	4.00	5.00	6.00	6.30	8.00	10.00	12.50	16.00	20.00
	kg/m														
20x20	1.12	1.35													
25x25	1.43	1.74	2.04	2.15											
30x30	1.75	2.14	2.51	2.65											
40x40	2.37	2.92	3.45	3.66			4.46	5.40							
50x50	3.00	3.71	4.39	4.66			5.72	6.97		8.49					
60x60	3.65	4.49	5.34	5.67			6.97	8.54	9.87	10.50	12.80				
70x70		6.28		7.26	7.46	8.23	10.10	11.95	12.50	15.30					
75x75		6.75													
80x80		7.22		8.36	8.59	9.48	11.70	13.80	14.40	17.80					
90x90		8.16		9.46	9.72	10.47	13.30	15.70	16.40	20.40					
100x100		9.10				12.00	14.80	17.61	18.40	22.90	27.90				
120x120							18.00	21.31	22.30	27.90	34.20	41.60			
140x140							21.00	24.90		32.61	39.97	48.72			
150x150							22.70	27.00	28.30	35.40	43.60	53.40	66.40		
180x180						21.97		32.60	34.20	43.00	53.00	65.20	81.40		
200x200							30.40	36.50	38.20	48.00	59.30	73.00	91.50		
250x250								45.66	48.10	60.50	75.00	92.60	117.00		
300x300										73.10	90.70	112.00	142.00		
350x350										85.70	106.00	132.00	167.00		
400x400											122.00	152.00	192.00	237.00	

**HOLLOW SECTION BS4848 - RECTANGULAR - HOT FORMED**

BS4848 STAHLBAUHÖLPROFILE - HOHLPROFILE - RECHTECKIGER QUERSCHNITT - WARMGEFERTIGT

BS 4848 TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À CHAUD

**RHS-H**

Product Size mm	Thickness mm														
	2.00	2.50	3.00	3.20	3.50	3.60	4.00	5.00	6.00	6.30	8.00	10.00	12.50	16.00	20.00
	kg/m														
50x25	2.21	2.72	3.22	3.41											
50x30	2.37	2.92	3.45	3.66			4.46	5.40							
60x30			3.92												
60x40	3.00	3.71	4.39	4.66			5.72	6.97		8.49					
75x50			5.62					9.02							
80x40	3.63	4.49	5.34	5.67			6.97	8.54		10.50	12.80				
90x50			6.28		7.26	7.46	8.23	10.10		12.50	15.30				
100x50		5.63	6.75	7.18			8.86	10.90	12.90	13.40	16.60				
100x60			7.22		8.36	8.59	9.48	11.70	13.80	14.40	17.80				
120x60			8.16		9.46	9.72		13.30	15.70	16.40	20.40				
120x80			9.10				12.00	14.80	17.60	18.40	22.90	27.90			
150x100		11.30					18.70	22.30	23.30	29.10	35.70	43.60			
160x80							18.00	21.31	22.30	27.90	34.20	41.60			
200x100						18.00	22.70	27.00	28.30	35.40	43.60	53.40	66.40		
250x100							26.47	31.53		41.41	51.00				
250x150							30.40	36.10	38.20	48.00	59.30	73.00	91.50		
300x200								45.24	48.10	60.50	75.00	92.60	117.00		
400x200										73.10	90.70	112.00	142.00		
450x250											106.00	132.00	167.00		
500x300											122.00	152.00	192.00	237.00	

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



**HOLLOW SECTION - CIRCULAR - COLD FORMED**

STAHLBAUHOLPROFILE - RUND - KALTGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À FROID

**CHS-C**

Product Size Diameter O/D mm	Thickness mm							
	1.50	2.00	2.30	2.50	2.90	3.00	3.20	3.60
	kg/m							
17.2	0.581	0.750	0.845	0.906				
21.3	0.732	0.952	1.078	1.159	1.316	1.354	1.428	
25.0	0.869	1.134	1.288	1.387	1.581	1.628		
26.9	0.940	1.228	1.395	1.504	1.716	1.768	1.870	
28.0	0.980	1.282	1.458	1.572	1.795	1.850	1.957	
30.0	1.054	1.381	1.571	1.695	1.938	1.998		
32.0	1.128	1.480	1.685	1.819	2.081	2.416		
33.7	1.191	1.564	1.781	1.924	2.203	2.271	2.407	2.672
35.0	1.239	1.628	1.855	2.004	2.296	2.368	2.510	2.788
37.5	1.332	1.751	1.997	2.158	2.475	2.552	2.707	3.010
38.0	1.350	1.776	2.025	2.189	2.510	2.589	2.746	3.054
39.0	1.387	1.825	2.082	2.250	2.582	2.663	2.825	3.143
40.0	1.424	1.874	2.138	2.312	2.653	2.737	2.904	3.232
41.5	1.480	1.948	2.223	2.404	2.761	2.848	3.023	3.365
42.0	1.498	1.973	2.252	2.435	2.796	2.885	3.062	3.409
42.4	1.513	1.993	2.275	2.460	2.825	2.915	3.094	3.445
44.5	1.591	2.096	2.394	2.589	2.975	3.070	3.259	3.631
45.0	1.609	2.121	2.422	2.620	3.011	3.107	3.299	3.676
48.0	1.720	2.269	2.592	2.805	3.225	3.329	3.535	3.942
48.3	1.731	2.284	2.609	2.824	3.247	3.351	3.559	3.969
48.6	1.742	2.298	2.626	2.842	3.268	3.374	3.583	3.995
49.4	1.772	2.338	2.672	2.892	3.326	3.433	3.646	4.066
50.0	1.794	2.368	2.706	2.929	3.369	3.477	3.693	4.119
51.0	1.831	2.417	2.762	2.990	3.440	3.551	3.772	4.208
52.0	1.868	2.466	2.819	3.052	3.512	3.625	3.851	4.297
55.0	1.979	2.614	2.989	3.237	3.726	3.847	4.088	4.563
57.0	2.053	2.713	3.103	3.360	3.869	3.995	4.246	4.741
58.0		2.762	3.159	3.422	2.941	4.069	4.325	4.830
60.0	2.164	2.861	3.273	3.545	4.084	4.217	4.482	5.007
60.3	2.175	2.876	3.290	3.564	4.105	4.239	4.506	5.034
61.5		2.935	3.358	3.638	4.191	4.328	4.601	5.140
62.0	2.238	2.959	3.386	3.668	4.227	4.365	4.640	5.185
62.2		2.969	3.398	3.681	4.241	4.380	4.656	5.203
63.0	2.275	3.009	3.443	3.730	4.298	4.439	4.719	5.274
63.5	2.294	3.033	3.471	3.761	4.334	4.476	4.759	5.318
66.0		3.157	3.613	3.915	4.513	4.661	4.956	5.540
70.0	2.534	3.354	3.840	4.162	4.799	4.957	5.272	5.895
71.5		3.428	3.925	4.254	4.906	5.068	5.390	6.028
72.0		3.453	3.953	4.285	4.942	5.105	5.429	6.073
75.5		3.625	4.152	4.501	5.192	5.364	5.706	6.383
76.0	2.756	3.650	4.180	4.532	5.228	5.401	5.745	6.428
76.1	2.760	3.655	4.186	4.538	5.235	5.408	5.753	6.437
80.0	2.904	3.847	4.407	4.778	5.514	5.697	6.061	6.783
82.5	2.996	3.971	4.549	4.932	5.693	5.882	6.258	7.005
83.0	3.015	3.995	4.577	4.963	5.729	5.919	6.298	7.049
84.0	3.052	4.044	4.634	5.025	5.800	5.993	6.376	7.138
88.9	3.233	4.286	4.912	5.327	6.151	6.355	6.763	7.573
89.0	3.237	4.291	4.918	5.333	6.158	6.363	6.771	7.582
90.0	3.274	4.340	4.974	5.395	6.229	6.437	6.850	7.671
95.0	3.459	4.587	5.258	5.703	6.587	6.807	7.245	8.115
96.0		4.636	5.315	5.765	6.658	6.881	7.323	8.203
100.0	3.644	4.834	5.542	6.011	6.944	7.176	7.639	8.559
101.6	3.703	4.913	5.632	6.110	7.059	7.295	7.765	8.701
108.0	3.940	5.228	5.995	6.504	7.517	7.768	8.270	9.269
110.0		5.327	6.109	6.628	7.660	7.916	8.428	9.446
113.0	4.125	5.475	6.279	6.813	7.874	8.138	8.665	9.713
114.0	4.162	5.524	6.336	6.874	7.946	8.212	8.744	9.801
114.3	4.173	5.539	6.353	6.893	7.967	8.234	8.768	9.828
120.0	4.384	5.820	6.676	7.244	8.375	8.656	9.217	10.334

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

# HOLLOW SECTION - CIRCULAR - COLD FORMED

STAHLBAUHOLPROFILE - RUND - KALTGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À FROID

**CHS-C**



Product Size Diameter O/D mm	Thickness mm						
	4.00	5.00	6.00	6.30	7.00	8.00	10.00
	kg/m						
17.2							
21.3							
25.0							
26.9							
28.0							
30.0							
32.0							
33.7	2.930						
35.0	3.058						
37.5	3.305						
38.0	3.354	4.069					
39.0	3.453						
40.0	3.551						
41.5	3.699						
42.0	3.749						
42.4	3.788	4.612	5.386	5.609			
44.5	3.995						
45.0	4.044	4.932	5.771	6.013			
48.0	4.340						
48.3	4.370	5.339	6.259	6.525			
48.6	4.400						
49.4	4.479	5.475					
50.0	4.538	5.549	6.511	6.790			
51.0	4.636	5.672	6.659	6.945			
52.0	4.735	5.795	6.807	7.100			
55.0	5.031	6.165	7.250	7.566			
57.0	5.228	6.412	7.546	7.877			
58.0	5.327	6.535	7.694	8.032			
60.0	5.524	6.782	7.990	8.343			
60.3	5.554	6.819	8.035	8.390			
61.5	5.672	6.967	8.212	8.576			
62.0	5.721						
62.2	5.741	7.053	8.316	8.685			
63.0	5.820	7.152	8.434	8.809			
63.5	5.869	7.213	8.508	8.887			
66.0	6.116	7.522	8.878	9.275			
70.0	6.511	8.015	9.470	9.897			
71.5	6.659	8.200	9.692	10.130			
72.0	6.708	8.262	9.766	10.208			
75.5	7.053	8.693	10.284	10.751			
76.0	7.103	8.755	10.358	10.829			
76.1	7.112	8.767	10.373	10.845			
80.0	7.497	9.248	10.950	11.451			
82.5	7.744	9.556	11.320	11.839			
83.0	7.793	9.618	11.394	11.917			
84.0	7.892	9.741	11.542	12.072			
88.9	8.375	10.346	12.267	12.833	14.138	15.961	19.458
89.0	8.385	10.358	12.281	12.849			
90.0	8.484						
95.0	8.977	11.098	13.169	13.781			
96.0	9.075	11.221	13.317	13.936	15.364	17.362	21.209
100.0	9.470	11.714	13.909	14.558	16.055	18.151	
101.6	9.628	11.912	14.146	14.807	16.331	18.467	22.590
108.0	10.259	12.701	15.093	15.801	17.436	19.729	24.168
110.0	10.456						
113.0	10.752	13.317	15.833	16.578	18.299	20.716	
114.0	10.851	13.441	15.981	16.733	18.471	20.913	25.648
114.3	10.881	13.478	16.025	16.780	18.523	20.972	25.722
120.0	11.443	14.180	16.868	17.665			

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - CIRCULAR - COLD FORMED**

STAHLBAUHOL PROFILE - RUND - KALTGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À FROID

**CHS-C**

Product Size Diameter O/D mm	Thickness mm										
	1.50	2.00	2.30	2.50	2.90	3.00	3.20	3.50	3.60	4.00	5.00
	kg/m										
125.0		6.067	6.960	7.553	8.732	9.026	9.612	10.487	10.778	11.936	14.797
127.0		6.165	7.073	7.676	8.875	9.174	9.770	10.660	10.956	12.133	15.044
133.0		6.461	7.413	8.046	9.305	6.618	10.243	11.178	11.488	12.725	15.783
139.7		6.792	7.794	8.459	9.784	10.114	10.772	11.756	12.083	13.386	16.610
152.0		7.398	8.491	9.217	10.663	11.024	11.743		13.175	14.600	18.126
152.4		7.418	8.514	9.242	10.692	11.053	11.774		13.211	14.639	18.176
159.0	5.826	7.744	8.888	9.649	11.164	11.542	12.295		13.797	15.290	18.989
164.0		7.990	9.172	9.957	11.522	11.912	12.690		14.241	15.783	19.606
165.1						11.993	12.777		14.338	15.892	19.742
168.0				10.204	11.808	12.207	13.005		14.596	16.178	20.099
168.1				10.210	11.815	12.215	13.013		14.605	16.188	20.111
168.3				10.222	11.829	12.230	13.029		14.622	16.208	20.136
177.8						12.932	13.779		15.466	17.145	21.308
193.7						14.109	15.034		16.877	18.713	23.268
200.0						14.575	15.531		17.437	19.335	24.045
219.1						15.988	17.038		19.132	21.219	26.400
244.5										23.724	29.532
273.0										26.536	33.046
273.1											33.059
323.9										31.557	39.323
339.7											41.271
355.6											43.232
406.4											49.496
457.0											
508.0											
610.0											
711.0											
762.0											
813.0											
914.0											
1016.0											
1067.0											
1168.0											
1219.0											

Product Size Diameter O/D mm	Intermediate Sizes				
	Thickness mm				
	2.00	3.50	4.5	9.00	14.2
kg/m					
35.0		2.719			
48.3		3.867			
56.0	2.663				
60.3		4.903			
61.5		5.006			
62.2		5.067			
68.0	3.255				
88.9		7.371			
96.0			19.310		
114.3		9.564			
120.0		10.056			
125.0		10.487			
127.0		10.660			
133.0		11.178			
139.7		11.756			
193.7			20.997		
219.1			23.816		
323.9				108.455	
355.6				119.556	
406.4				137.346	

# HOLLOW SECTION - CIRCULAR - COLD FORMED

STAHLBAUHOL PROFILE - RUND - KALTGEFERTIGT

TUBE DE STRUCTURE - ROND - FORMÉS À FROID

**CHS-C**



Product Size Diameter O/D mm	Thickness mm									
	6.00	6.30	7.00	8.00	10.00	12.00	12.50	16.00	20.00	25.00
	kg/m									
125.0	17.608	18.442	20.370	23.083	28.361	33.441				
127.0	17.904	18.753	20.716	23.478	28.854					
133.0	18.792	19.685	21.751	24.662	30.334					
139.7	19.783	20.726	22.908	25.983	31.986		39.212			
152.0	21.603	22.637	25.031	28.410	35.019		43.003			
152.4	21.663	22.699	25.100	28.489	35.118		43.127			
159.0	22.639	23.725	26.240	29.791	36.746					
164.0	23.379	24.501								
165.1	23.542	24.672	27.293	30.995						
168.0	23.971	25.123								
168.1	23.986									
168.3	24.015	25.170	27.845	31.626	39.039		48.028			
177.8	25.421	26.646	29.485	33.500	41.382	49.067	50.957			
193.7	27.774	29.116	32.230	36.637	45.303	53.772	55.858			
200.0	28.706	30.095	33.318	37.880						
219.1	31.532	33.062	36.615	41.648	51.567	61.289	63.688	80.140		
244.5	35.291	37.009	41.000	46.660	57.831	68.806	71.518	90.162		
273.0	39.508	41.437	45.920	52.282	64.860	77.240	80.304	101.408		
273.1	39.523	41.452	45.937	52.302	64.884	77.269				
323.9	47.039	49.345	54.707	62.325	77.412	92.303	95.995	121.492		
339.7	49.377	51.800	57.434	65.442	81.309					
355.6	51.730	54.270	60.179	68.579	85.230	101.684	105.767	134.001	165.528	
406.4	59.247	62.163	68.949	78.601	97.758	116.718	121.427	154.046	190.584	235.147
457.0	66.734	70.024	77.684	88.584	110.237	131.692	137.025	174.012	215.542	266.344
508.0	74.280	77.948	86.488	98.646	122.814	146.785	152.747	194.135	240.696	297.788
610.0	89.373	93.795		118.770	147.969	176.971	184.191	234.383	291.006	360.674
711.0	104.318	109.487		138.696	172.877	206.861	215.326	274.236	340.822	422.945
762.0	111.865	117.411		148.758	185.454	221.954	231.047	294.360	365.977	454.388
813.0				158.820	198.032	237.046	246.769	314.483	391.131	485.832
914.0				178.747	222.940	266.936	277.904	354.336	440.948	548.102
1016.0				198.870	248.095	297.122	309.348	394.584	491.257	610.989
1067.0					260.672	312.215	325.069	414.708	516.412	642.432
1168.0					285.580	342.104	356.205	454.561	566.228	704.702
1219.0						357.197	371.926	474.685	591.383	736.146
										879.676



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - SQUARE - COLD FORMED**

STAHLBAUHOLPROFILE - RECHTECKIG - KALTGEFERTIGT

TUBE DE STRUCTURE - CARRÉ - FORMÉS À FROID

**SHS-C**

Product Size mm	Thickness mm																
	1.5	2.00	2.50	3.00	3.50	3.60	4.00	5.00	6.00	6.30	7.00	8.00	10.00	12.00	12.50	14.20	16.00
	kg/m																
20 x 20	0.826	1.050	1.247	1.419													
22 x 22	0.920	2.000															
25 x 25	1.061	1.364	1.640	1.890			2.314										
30 x 30	1.297	1.678	2.032	2.361			2.942										
35 x 35	1.532	1.992	2.425	2.832			3.570										
38 x 38		2.180	2.660	3.115													
40 x 40	1.768	2.306	2.817	3.303			4.198	4.990									
42 x 42				3.492			4.449	5.304									
45 x 45	2.003	2.620	3.210	3.774			7.826	5.775									
48 x 48				4.057													
50 x 50	2.239	2.934	3.602	4.254			5.454	6.560	7.319	7.575							
52 x 52				4.434													
55 x 55				4.716													
60 x 60	2.710	3.562	4.387	5.187			6.710	8.130	9.203	9.553							
64 x 64			4.701	5.564													
65 x 65		3.876	4.780	5.658			7.338										
70 x 70	3.181	4.190	5.172	6.129	7.061	7.244	7.966	9.700	11.087	11.531							
75 x 75				6.600													
80 x 80	3.652	4.818	5.957	7.071	8.160	8.374	9.222	11.270	12.971	13.510	14.725	16.361					
90 x 90	4.123	5.446	6.742	8.013	9.259	9.505	10.478	12.840	14.855	15.488	16.923	18.873					
100 x 100		6.074	7.527	8.955			11.734	14.410	16.739	17.466	19.121	21.385	24.891	28.307	29.079		
101.6 x 101.6							14.661										
110 x 110		6.702	8.312	9.897			12.990	15.980	18.623	19.444	21.319	23.897	28.031	32.075	33.004		
115 x 115							16.765										
120 x 120		7.330	9.097	10.839			14.246	17.550	20.507	21.422	23.517	26.409	31.171	35.843	36.929		
125 x 125		7.644	9.490	11.310			14.874	18.335	21.449	22.411	24.616	27.665	32.741	37.727	38.892		
130 x 130			9.882	11.781			15.502	19.120	22.391	23.401	25.715	28.921	34.311	39.611	40.854		
140 x 140				12.723			16.758	20.690	24.275	25.379	27.913	31.433	37.451	43.379	44.779		
150 x 150				13.665			18.014	22.260	26.159	27.357	30.111	33.945	40.591	47.147	48.704	58.696	
160 x 160				14.607			19.270	23.830	28.043	29.335	32.309	36.457	43.731	50.915	52.629	63.720	
175 x 175				16.020			21.154	26.185	30.869	32.032	35.606	40.225	48.441	56.567	58.517		
180 x 180				16.491			21.782	26.970	31.811	33.292	36.705	41.481	50.011	58.451	60.479	73.768	
200 x 200							24.294	30.110	35.579	37.248	41.101	46.505	56.291	65.987	68.329	76.051	83.816
220 x 220							26.806	33.250	39.347	41.204	45.497	51.529	62.571	73.523	76.179	84.968	93.864
250 x 250							30.574	37.960	44.999	47.139	52.091	59.065	71.991	84.827	87.954	98.345	108.936
260 x 260							31.830	39.530	46.883	49.117	54.289	61.577	75.131	88.595	91.879	102.804	113.960
300 x 300								45.810	54.419	57.030	63.081	71.625	87.691	103.667	107.579	120.639	134.055
325 x 325								49.735	59.129	61.975	68.576	77.905	95.541				
350 x 350									63.839	66.921	74.071	84.185	103.391	122.507	127.204	142.933	159.176
400 x 400									73.259	76.812	85.061	96.745	119.091	141.374	146.829	165.227	184.296

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.



**HOLLOW SECTION - RECTANGULAR - COLD FORMED**

STAHLBAUHOLPROFILE - QUADRATISCH - KALTGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À FROID

**RHS-C**

Product Size mm	Intermediate Sizes Thickness mm								
	1.5	2.0	3.0	3.5	3.6	4.0	5.0	6.0	9.0
	kg/m								
45 x 10	1.179								
50 x 25				3.489					
50 x 48	2.192								
52 x 40						4.952			
60 x 48		3.185							
65 x 55		3.562							
75 x 50			5.423						
90 x 50				7.061	7.244				
100 x 60				8.160	8.374				
110 x 20		3.876							
110 x 60							13.913		
120 x 60				9.259	9.505				
120 x 100									26.359
160 x 40			8.955						
160 x 50			9.426						
185 x 65							18.335		
250 x 180						26.178			

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - RECTANGULAR - COLD FORMED**

STAHLBAUHOLPROFILE - QUADRATISCH - KALTGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À FROID

**RHS-C**

Product Size mm	Thickness mm								
	1.50	2.00	2.50	3.00	4.00	5.00	6.00	6.30	7.00
	kg/m								
25 x 15	0.826	1.050	1.247	1.419					
25 x 20	0.944	1.207	1.444	1.655					
30 x 10	0.826	1.050							
30 x 15	0.944	1.207	1.444	1.655					
30 x 20	1.061	1.364	1.640	1.890	2.314				
30 x 25	1.179	1.521	1.836	2.126	2.628				
35 x 10	0.944	1.207							
35 x 15	1.061	1.364							
35 x 20	1.179	1.521	1.836	2.126	2.628				
35 x 25	1.297	1.678	2.032	2.361	2.942				
35 x 27				2.456	3.068				
35 x 30	1.415	1.835	2.229	2.597	3.256				
40 x 10	1.061	1.364							
40 x 15	1.179	1.521	1.836	2.126	2.628				
40 x 20	1.297	1.678	2.032	2.361	2.942				
40 x 25	1.415	1.835	2.229	2.597					
40 x 27	1.462	1.897	2.307	2.691	3.382				
40 x 30	1.532	1.992	2.425	2.832	3.570				
40 x 35	1.650	2.149	2.621	3.068					
45 x 15	1.297	1.678	2.032	2.361					
45 x 20	1.415	1.835	2.229	2.597					
45 x 25	1.532	1.992	2.425	2.832					
45 x 30	1.650	2.149	2.621	3.068	3.884				
45 x 35	1.768	2.306	2.817	3.303	4.198				
45 x 40		2.463	3.014	3.539	4.512				
48 x 25	1.603	2.086							
50 x 10	1.297	1.678	2.032	2.361					
50 x 15	1.415	1.835							
50 x 20	1.532	1.992	2.425	2.832					
50 x 25	1.650	2.149	2.621	3.068	3.884				
50 x 27		2.211	2.700	3.162	4.010				
50 x 30	1.768	2.306	2.817	3.303	4.198	4.990			
50 x 35	1.886	2.463	3.014	3.539					
50 x 40	2.003	2.620	3.210	3.774	4.826				
50 x 45		2.777	3.406	4.010	5.140				
60 x 10	1.532	1.992							
60 x 15	1.650	2.149	2.621	3.068					
60 x 20	1.768	2.306	2.817	3.303	4.198				
60 x 25	1.886	2.463	3.014	3.539					
60 x 27		2.525	3.092	3.633	4.638				
60 x 30	2.003	2.620	3.210	3.774	4.826				
60 x 34		2.745	3.367	3.963	5.077				
60 x 35	2.121	2.777	3.406	4.010					
60 x 40	2.239	2.934	3.602	4.245	5.454	6.560	7.319	7.575	8.131
60 x 45	2.357	3.091	3.799	4.481					
60 x 50	2.474	3.248	3.995	4.716	6.082	7.345	8.261		
65 x 25	2.003	2.620	3.210	3.774					
65 x 35	2.239	2.934	3.602	4.245	5.454				
70 x 20	2.003	2.620	3.210	3.774					
70 x 25	2.121	2.777	3.406	4.010					
70 x 27		2.839	3.485	4.104					
70 x 30	2.239	2.934	3.602	4.245	5.454	6.560	7.319		
70 x 35	2.357	3.091	3.799	4.481					
70 x 40	2.474	3.248	3.995	4.716	6.082	7.345	8.261	8.564	
70 x 50	2.710	3.562	4.387	5.187	6.710	8.130	9.203	9.553	
80 x 15	2.121	2.777	3.406	4.010					
80 x 20	2.239	2.934	3.602	4.245	5.454	6.560	7.319	7.575	
80 x 22	2.286	2.996	3.681	4.340					
80 x 30	2.474	3.248	3.995	4.716	6.082	7.345	8.261	8.564	
80 x 40	2.710	3.562	4.387	5.187	6.710	8.130	9.203	9.553	
80 x 45	2.828	3.719	4.584	5.423	7.024	8.522	9.674	10.048	
80 x 50	2.945	3.876	4.780	5.658	7.338	8.915	10.145	10.542	
80 x 60	3.181	4.190	5.172	6.129	7.966	9.700	11.087	11.531	
90 x 20	2.474	3.248	3.995	4.716					
90 x 30	2.710	3.562	4.387	5.187	6.710	8.130	9.203		
90 x 40	2.945	3.876	4.780	5.658	7.338	8.915	10.145	10.542	
90 x 50	3.181	4.190	5.172	6.129	7.966	9.700	11.087	11.531	
90 x 60		4.504	5.565	6.600	8.594	10.485	12.029		
90 x 70		4.818	5.957	7.071					
100 x 20	2.710	3.562	4.387	5.187	6.710	8.130	9.203		
100 x 30	2.945	3.876	4.780	5.658	7.338				
100 x 40	3.181	4.190	5.172	6.129	7.966	9.700	11.087	11.531	
100 x 50	3.416	4.504	5.565	6.600	8.594	10.485	12.029	12.520	

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - RECTANGULAR - COLD FORMED**

STAHLBAUHOLPROFILE - QUADRATISCH - KALTGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À FROID

**RHS-C**

Product Size mm	Thickness mm							
	1.50	2.00	2.50	3.00	4.00	5.00	6.00	6.30
	kg/m							
100 x 60	3.652	4.818	5.957	7.071	9.222	11.270	12.971	13.510
100 x 70		5.132	6.350	7.542	9.850	12.055	13.913	
100 x 80	4.123	5.446	6.742	8.013	10.478	12.840	14.855	15.488
110 x 30	3.181	4.190	5.172	6.129	7.966	9.700	11.087	
110 x 50		4.818	5.957	7.071	9.222	11.270	12.971	14.725
110 x 70	4.123	5.446	6.742	8.013	10.478	12.840	14.855	15.488
110 x 100				9.426	12.362	15.195	17.681	18.455
120 x 30	3.416	4.504	5.565	6.600	8.594	10.485	12.029	
120 x 40	3.652	4.818	5.957	7.071	9.222	11.270	12.971	13.510
120 x 50	3.887	5.132	6.350	7.542	9.850	11.886	13.913	14.499
120 x 55	4.005	5.289	6.546	7.778	10.164			
120 x 60	4.123	5.446	6.742	8.013	10.478	12.840	14.855	15.488
120 x 80		6.074	7.527	8.955	11.734	14.410	16.739	17.466
120 x 100		6.702	8.312	9.897	12.990	15.980	18.623	19.444
130 x 50		5.446	6.742	8.013	10.478	12.840	14.855	
140 x 40		5.446	6.742	8.013	10.478	12.840		
140 x 60		6.074	7.527	8.955	11.734	14.410	16.739	17.466
140 x 70				9.426	12.362	15.195	17.681	18.455
140 x 80		6.702	8.312	9.897	12.990	15.980	18.623	19.444
140 x 100		7.330	9.097	10.839	14.246	17.550	20.507	21.422
140 x 120				11.781	15.502	19.120	22.391	23.401
150 x 30		5.446	6.742	8.013	10.478			
150 x 50	4.594	6.074	7.524	8.955	11.734	14.410	16.739	17.466
150 x 70				9.897	12.990	15.980	18.623	
150 x 75						16.204	19.094	
150 x 90		7.330	9.097	10.839	14.246	17.550	20.507	21.422
150 x 100		7.644	9.490	11.310	14.874	18.335	21.449	22.411
150 x 130				12.723	16.758	20.690	24.275	25.379
160 x 60				9.897	12.990	15.980	18.623	19.444
160 x 80		7.330	9.097	10.839	14.246	17.550	20.507	21.422
160 x 90		7.644	9.490	11.310	14.874	18.335	21.449	22.411
160 x 100				9.882	11.781	15.502	19.120	22.391
160 x 120				12.723	16.758	20.690	24.275	25.379
160 x 140				13.665	18.014	22.260	26.159	27.357
180 x 40				9.897	12.990	15.980	18.623	
180 x 60		7.330	9.097	10.839	14.246	17.550	20.507	21.422
180 x 70				11.310	14.874	18.335	21.449	22.411
180 x 80			9.882	11.781	15.502	19.120	22.391	23.401
180 x 100				12.723	16.758	20.690	24.275	25.379
180 x 120				13.665	18.010	22.260	26.159	27.357
180 x 140				14.607	19.270	23.830	28.043	29.335
200 x 80				12.723	16.758	20.690	24.275	25.379
200 x 100				13.665	18.014	22.260	26.159	27.357
200 x 120				14.607	19.270	23.830	28.043	29.335
200 x 150				16.020	21.154	26.185	30.869	32.302
200 x 160				16.491	21.781	26.970	31.811	33.292
220 x 100				14.607	19.270	23.830	28.043	29.335
220 x 120					20.526	25.400	29.927	31.313
220 x 130				16.020	21.154	26.185	30.869	32.302
220 x 140				16.491	21.782	26.970	31.811	33.292
220 x 180					24.294	30.110	35.579	37.248
240 x 80				14.607	19.270	23.830	28.043	29.335
250 x 50					18.014	22.260	26.159	27.357
250 x 100				16.020	21.154	26.185	30.869	32.302
250 x 150					24.294	30.110	35.579	37.248
250 x 200					27.434	34.035	40.289	42.193
260 x 100				16.491	21.782	26.970	31.811	33.292
260 x 140					24.294	30.110	35.579	37.248
260 x 180					26.806	33.250	39.347	41.204
300 x 50						26.185	30.869	32.302
300 x 100					24.294	30.110	35.579	37.248
300 x 150					27.434	34.035	40.289	42.193
300 x 200					30.574	37.960	44.999	47.139
300 x 220					31.830	39.530	46.883	49.117
350 x 150						37.960	44.999	47.139
350 x 250							54.419	57.030
400 x 100						37.960	44.999	47.139
400 x 150								
400 x 200						45.810	54.419	57.030
400 x 250						49.735	59.129	61.975
400 x 300							63.839	66.921
450 x 250							63.839	66.921
500 x 200							63.839	66.921
500 x 300								

Other and intermediate sizes available upon request.

# HOLLOW SECTION - RECTANGULAR - COLD FORMED

STAHLBAUHOLPROFILE - QUADRATISCH - KALTGEFERTIGT

TUBE DE STRUCTURE - RECTANGULAIRE - FORMÉS À FROID

RHS-C

Product Size mm	Thickness mm							
	7.00	8.00	10.00	12.00	12.50	14.20	16.00	20.00
	kg/m							
100 x 60	14.725	16.361						
100 x 70								
100 x 80	16.923	18.873						
110 x 30								
110 x 50								
110 x 70								
110 x 100	20.220							
120 x 30								
120 x 40								
120 x 50								
120 x 55								
120 x 60	16.923	18.873						
120 x 80	19.121	21.385	24.891	28.307	29.079			
120 x 100	21.319	23.897	28.031	32.075	33.004			
130 x 50								
140 x 40								
140 x 60	19.121	21.385						
140 x 70	20.220	22.641						
140 x 80	21.319	23.897	28.031	32.075	33.004			
140 x 100	23.517	26.409	31.171	35.843	36.929			
140 x 120	25.715	28.921	34.311	39.611	40.854			
150 x 30								
150 x 50								
150 x 70								
150 x 75								
150 x 90	23.517	26.409	31.171	35.843	36.929			
150 x 100	24.616	27.665	32.741	37.727	38.892			
150 x 130	27.903	31.433	37.451	43.379	44.779			
160 x 60	21.319	23.897						
160 x 80	23.517	26.409	31.171	35.843	36.929			
160 x 90	24.616	27.665	32.741	37.727	38.892			
160 x 100	25.715	28.921	34.311	39.611	40.854			
160 x 120	27.913	31.433	37.451	43.379	44.779			
160 x 140	30.111	33.945	40.591	47.147	48.704			
180 x 40								
180 x 60	23.517	26.409	31.171	35.843	36.929			
180 x 70	24.616	27.665						
180 x 80	25.715	28.921	34.311	39.611	40.854			
180 x 100	27.913	31.433	37.451	43.379	44.779			
180 x 120	30.111	33.945	40.591	47.147	48.704			
180 x 140	32.309	36.457	43.731	50.915	52.629			
200 x 80	27.913	31.433	37.451	43.379	44.779			
200 x 100	30.111	33.945	40.591	47.147	48.704			
200 x 120	32.309	36.457	43.731	50.915	52.629	58.216		
200 x 150	35.606	40.225	48.441	56.567	58.517	64.904		
200 x 160	36.705	41.481	50.011	58.451	60.479			
220 x 100	32.309	36.457	43.731	50.915	52.629			
220 x 120	34.507	38.969	46.871	54.683	56.554	62.674		
220 x 130	35.606	40.225	48.441	56.567	58.517			
220 x 140	36.705	41.481	50.011	58.451	60.479			
220 x 180	41.101	46.505	56.291	65.987	68.329			
240 x 80	32.309	36.457	43.731	50.915	52.629			
250 x 50	30.111	33.945						
250 x 100	35.606	40.225	48.441	56.567	58.517			
250 x 150	41.101	46.505	56.291	65.987	68.329	83.816		
250 x 200	46.596	52.785	64.141	75.407	78.142	87.198		
260 x 100	36.705	41.481	50.011	58.451	60.479			
260 x 140	41.101	46.505	56.291	65.987	68.329	76.051		
260 x 180	45.497	51.529	62.571	73.523	76.179	84.968	93.864	
300 x 50	35.606	40.225						
300 x 100	41.101	46.505	56.291	65.987	68.329	83.816		
300 x 150	46.596	52.785	64.141	75.407	78.142	87.198	96.376	
300 x 200	52.091	59.065	71.991	84.827	87.954	98.345	108.936	
300 x 220	54.289	61.577	75.131	88.595	91.879			
350 x 150	52.091	59.065	71.991	84.827	87.954	98.345		
350 x 250	63.081	71.625	87.691	103.667	107.579	120.639	134.056	
400 x 100	52.091	59.065	71.991	84.827	87.954			
400 x 150					102.000			
400 x 200	63.081	71.625	87.692	103.667	107.579	120.639	134.056	
400 x 250	68.576	77.905						
400 x 300	74.071	84.185	103.391	122.507	127.204	142.933	159.176	
450 x 250	74.071	84.185	103.391	122.507	127.204	142.933	159.176	
500 x 200	74.071	84.185	103.391	122.507	127.204	142.933	193.763	
500 x 300		96.745	119.091	141.347	149.829	165.227	184.296	225.163

Weitere Größen sowie Zwischengrößen auf Anfrage.  
D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**HOLLOW SECTION - ERW - CIRCULAR**

GESCHWEISSTE ROHRE - RUND

TUBES Soudés - Rond

**CHS-ERW**

Product Size Diameter O/D mm	Product Size Diameter O/D Inches	Produced from CR Strip Thickness mm						
		0.61	0.71	0.81	0.91	1.02	1.22	1.42
		kg/m						
12.00	1/2	0.171	0.198	0.224	0.249	0.276	0.324	0.371
12.70		0.182	0.210	0.238	0.265	0.294	0.345	0.395
13.00		0.186	0.215	0.243	0.271	0.301	0.354	0.406
13.20		0.189	0.219	0.248	0.276	0.306	0.360	0.413
14.00		0.201	0.233	0.264	0.294	0.326	0.384	0.441
14.80		0.213	0.247	0.279	0.312	0.347	0.409	0.469
15.00	5/8	0.216	0.250	0.283	0.316	0.352	0.415	0.476
15.88		0.230	0.266	0.301	0.336	0.374	0.441	0.506
16.00		0.232	0.268	0.303	0.339	0.377	0.445	0.510
16.25		0.235	0.272	0.308	0.344	0.383	0.452	0.519
17.20		0.250	0.289	0.327	0.366	0.407	0.481	0.552
18.00		0.262	0.303	0.343	0.384	0.427	0.505	0.581
18.20		0.265	0.306	0.347	0.388	0.432	0.511	0.588
18.40		0.268	0.310	0.351	0.392	0.437	0.517	0.595
18.70		0.272	0.315	0.357	0.399	0.445	0.526	0.605
19.00	3/4	0.277	0.320	0.363	0.406	0.452	0.535	0.616
19.05		0.277	0.321	0.364	0.407	0.454	0.536	0.617
20.00				0.428	0.477	0.565	0.651	
20.30				0.435	0.485	0.574	0.661	
21.30				0.458	0.510	0.604	0.696	
21.50				0.462	0.515	0.611	0.703	
22.00	7/8			0.473	0.528	0.625	0.720	
22.22				0.478	0.533	0.632	0.728	
23.00				0.496	0.553	0.655	0.750	
24.00				0.518	0.578	0.685	0.791	
24.80				0.536	0.598	0.709	0.819	
25.00				0.541	0.603	0.715	0.826	
25.40	1			0.550	0.613	0.727	0.840	
26.00				0.563	0.629	0.746	0.861	
28.00	1 1/8			0.608	0.679	0.806	0.931	
28.58				0.621	0.693	0.823	0.951	
30.00	1 1/4			0.653	0.729	0.866	1.001	
31.75				0.692	0.773	0.918	1.062	
32.00	1 3/8			0.698	0.779	0.926	1.071	
34.92				0.763	0.853	1.014	1.174	
35.00				0.765	0.855	1.016	1.176	
38.00	1 1/2			0.833	0.930	1.106	1.280	
38.10				0.835	0.933	1.110	1.284	
40.00	1 5/8					1.167	1.351	
41.28						1.205	1.397	
42.00						1.227	1.420	
42.70	1 3/4					1.248	1.445	
44.45						1.300	1.506	
45.00	1 7/8					1.318	1.527	
47.62						1.397	1.225	
48.00						1.408	1.631	
50.00						1.468	1.701	
50.80	2 1/8					1.493	1.730	
53.98						1.587	1.842	
54.00	2 1/4					1.587	1.842	
57.15						1.684	1.953	
60.00	2 3/8					1.770	2.053	
60.33	2 1/2					1.779	2.062	
63.50						1.873	2.174	
66.68						1.969	2.283	
70.00						2.070	2.404	
75.00								
76.20	3							

# HOLLOW SECTION - ERW - CIRCULAR

GESCHWEISSTE ROHRE - RUND

TUBES SOUDÉS - ROND

**CHS-ERW**



Product Size Diameter O/D mm	Product Size Diameter O/D Inches	Produced from HR Strip Thickness mm								
		1.50	1.63	1.83	2.03	2.34	2.64	3.25	3.60	4.06
		kg/m								
12.00	$\frac{1}{2}$									
12.70		0.414	0.445							
13.00		0.425	0.457							
13.20		0.433	0.465							
14.00		0.462	0.497							
14.80		0.492	0.529							
15.00	$\frac{5}{8}$	0.500	0.537							
15.88		0.532	0.573	0.634	0.693					
16.00		0.536	0.578	0.639	0.699					
16.25		0.546	0.588	0.651	0.712					
17.20		0.581	0.626	0.693	0.759					
18.00		0.611	0.658	0.730	0.799					
18.20		0.618	0.666	0.739	0.810					
18.40		0.625	0.674	0.748	0.820					
18.70		0.636	0.686	0.762	0.835					
19.00	$\frac{3}{4}$	0.647	0.698	0.775	0.850	0.962	1.065			
19.05		0.649	0.700	0.777	0.852	0.964	1.068			
20.00		0.684	0.739	0.820	0.899	1.019	1.130			
20.30		0.695	0.751	0.833	0.915	1.036	1.149			
21.30		0.733	0.791	0.879	0.964	1.094	1.215			
21.50		0.740	0.799	0.888	0.975	1.106	1.229			
22.00	$\frac{7}{8}$	0.758	0.819	0.910	1.000	1.135	1.261			
22.22		0.766	0.828	0.920	1.011	1.147	1.244			
23.00		0.796	0.859	0.955	1.049	1.192	1.326			
24.00		0.833	0.899	1.001	1.100	1.250	1.391			
24.80		0.862	0.931	1.036	1.140	1.295	1.443			
25.00		0.870	0.940	1.046	1.149	1.307	1.456	1.742		
25.40	1	0.884	0.955	1.064	1.170	1.332	1.481	1.715		
26.00		0.907	0.979	1.091	1.200	1.366	1.520	1.825		
28.00	$1\frac{1}{8}$	0.980	1.060	1.181	1.300	1.481	1.650	1.984		
28.58		1.002	1.083	1.208	1.330	1.515	1.689	2.028		
30.00	$1\frac{1}{4}$	1.054	1.140	1.271	1.401	1.597	1.783	2.146		
31.75		1.244	1.211	1.350	1.488	1.698	1.894	2.283		
32.00	$1\frac{3}{8}$	1.129	1.221	1.362	1.499	1.712	1.912	2.304		
34.92		1.236	1.339	1.493	1.647	1.880	2.101	2.538		
35.00		1.239	1.342	1.497	1.650	1.883	2.105	2.545		
38.00	$1\frac{1}{2}$	1.350	1.462	1.631	1.802	2.058	2.304	2.786		
38.10		1.353	1.466	1.637	1.805	2.062	2.309	2.793	3.067	3.413
40.00	$1\frac{5}{8}$	1.425	1.543	1.721	1.901	2.174	2.433	2.941		
41.28		1.471	1.595	1.779	1.965	2.247	2.513	3.049	3.344	3.731
42.00		1.499	1.623	1.812	2.000	2.288	2.564	3.106		
42.70	$1\frac{3}{4}$	1.524	1.650	1.845	2.037	2.331	2.611	3.165		
44.45		1.590	1.721	1.923	2.123	2.427	2.725	3.300	3.623	4.049
45.00	$1\frac{7}{8}$	1.610	1.742	1.949	2.151	2.463	2.755	3.344		
47.62		1.706	1.848	2.066	2.283	2.611	2.933	3.559	3.906	4.367
48.00		1.721	1.866	2.083	2.299	2.632	2.950	3.584		
50.00		1.795	1.946	2.174	2.404	2.747	3.086	3.745		
50.80	$2\frac{1}{8}$	1.825	1.976	2.212	2.439	2.793	3.135	3.817	4.184	4.673
53.98		1.942	2.105	2.353	2.597	2.976	3.344	4.065		
54.00	$2\frac{1}{4}$	1.942	2.105	2.353	2.597	2.985	3.344	4.065		
57.15		2.058	2.232	2.494	2.762	3.165	3.546	4.329	4.762	5.319
60.00	$2\frac{3}{8}$	2.165	2.347	2.625	2.899	3.322	3.731	4.545	5.000	5.587
60.33	$2\frac{1}{2}$	2.174	2.358	2.639	2.915	3.344	3.759	4.566	5.025	5.650
63.50		2.294	2.488	2.786	3.077	3.534	3.968	4.831	5.319	5.952
66.68		2.410	2.618	2.924	3.236	3.717	4.167	5.076		
70.00		2.532	2.747	3.077	3.401	3.906	4.386	5.348	5.882	6.623
75.00		2.717	2.950	3.300	3.650	4.202	4.717	5.747		
76.20	3	2.762	2.994	3.356	3.717	4.255	4.785	5.848	6.452	7.246
										8.547

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## HOLLOW SECTION - ERW - SQUARE

**HOHLPROFILE - GE SCHWEISSTE ROHRE - QUADRATISCH**

## TUBES Soudés - Carré

**SHS-ERW**

## HOLLOW SECTION - ERW - RECTANGULAR

## **HOHLPORFILE - GESCHWEISSTE ROHRE - RECHTECKIG**

## TUBES SONDÉS - RECTANGULAIRE

RHS-ERW

Product Size mm	Product Size Inches	Thickness mm											
		Produced from CR Strip				Produced from HR Strip							
		0.910	1.020	1.220	1.420	1.500	1.630	1.830	2.030	2.340	2.640	3.250	
		kg/m											
25.40 x 12.70	I $\times \frac{1}{2}$	0.518	0.577	0.683	0.786	0.826	0.891						
25.00 x 15.00		0.545	0.607	0.719	0.828	0.871	0.939						
25.00 x 20.00		0.616	0.687	0.814	0.939	0.989	1.004	1.187	1.303				
30.00 x 15.00		0.616	0.687	0.814	0.939	0.989	1.004	1.187	1.303				
30.00 x 20.00		0.688	0.768	0.910	1.051	1.106	1.196	1.331	1.464				
31.75 x 15.88	I $\frac{1}{4} \times \frac{5}{8}$	0.654	0.729	0.865	0.998	1.050	1.135	1.262	1.388				
31.75 x 19.05	I $\frac{1}{4} \times \frac{3}{4}$	0.699	0.780	0.925	1.069	1.124	1.216	1.355	1.490				
34.92 x 15.88	I $\frac{3}{8} \times \frac{5}{8}$	0.699	0.780	0.925	1.069	1.124	1.216	1.355	1.490				
35.00 x 15.00		0.688	0.768	0.910	1.051	1.106	1.196	1.331	1.464				
35.00 x 20.00		0.759	0.848	1.006	1.162	1.223	1.324	1.474	1.623				
38.10 x 12.70	I $\frac{1}{2} \times \frac{1}{2}$	0.699	0.780	0.925	1.069	1.124	1.216	1.355	1.490				
38.10 x 19.05	I $\frac{1}{2} \times \frac{3}{4}$	0.790	0.882	1.048	1.210	1.275	1.379	1.536	1.692				
38.10 x 25.40	I $\frac{2}{4} \times 1$			1.169	1.351	1.424	1.540	1.718	1.893				
40.00 x 20.00				1.102	1.273	1.342	1.451	1.618	1.781				
40.00 x 25.00					1.197	1.382	1.459	1.579	1.760	1.941			
44.45 x 15.88	I $\frac{3}{4} \times \frac{5}{8}$				1.108	1.282	1.349	1.459	1.628	1.792			
47.62 x 23.81	I $\frac{7}{8} \times \frac{15}{16}$				1.321	1.529	1.610	1.745	1.945	2.145			
50.00 x 25.00					1.388	1.607	1.694	1.834	2.049	2.262	2.583	2.890	3.496
50.00 x 30.00					1.485	1.721	1.811	1.964	2.192	2.421	2.770	3.095	3.745
50.80 x 25.40	2 x 1				1.412	1.633	1.724	1.865	2.083	2.298	2.624	2.941	3.558
57.15 x 31.75	2 $\frac{1}{4}$ x I $\frac{1}{4}$				1.655	1.919	2.024	2.192	2.450	2.702			
60.00 x 20.00								1.964	2.192	2.421	2.770	3.095	3.745
60.00 x 30.00								2.217	2.481	2.739	3.314	3.508	4.255
63.50 x 25.00								2.178	2.439	2.688	3.076	3.448	4.184
63.50 x 25.40	2 $\frac{1}{2}$ x 1							2.192	2.450	2.702	3.086	3.460	4.201
63.50 x 31.75	2 $\frac{1}{2}$ x I $\frac{1}{4}$							2.352	2.631	2.906	3.322	3.731	4.524
63.50 x 38.10	2 $\frac{1}{2}$ x I $\frac{1}{2}$							2.518	1.816	3.105	3.558	3.984	4.854
75.00 x 20.00							2.164	2.347	2.624	2.898	3.322	3.717	
80.00 x 35.00								2.857	3.194	3.533	4.048	4.545	5.524

## HOLLOW SECTION - ERW - OVAL

HOHLPORFILE - GESCHWEISSTE ROHRE - OVAL

TUBES SOUDÉS - À FORME OVALE

OHS-ERW

Product Size mm	Product Size Inches	Thickness mm					
		Produced from CR Strip		Produced from HR Strip			
		1.220	1.420	1.500	1.630	1.830	2.030
kg/m							
22.22 x 12.70	$\frac{7}{8} \times \frac{1}{2}$	0.501	0.577	0.606	0.653	0.725	0.794
23.50 x 13.33		0.530	0.610	0.642	0.694	0.768	0.842
26.29 x 16.21		0.616	0.710	0.747	0.806	0.896	0.984
31.98 x 17.50		0.726	0.838	0.883	0.955	1.062	1.169
38.10 x 25.40	$1\frac{1}{2} \times 1$	0.935	1.082	1.140	1.233	1.375	1.515

## HOLLOW SECTION - GAS LIST TUBE - PLAIN ENDS

PRÄZISIONSRÖHRE GERADE ENDEN

TUBE DE CONDUITE

GAS

Product Size Diameter Bore (O/D) mm	Self Coloured or Varnished Light kg/m	Galvanised Light kg/m	Self Coloured or Varnished Medium kg/m	Galvanised Medium kg/m	Self Coloured or Varnished Heavy kg/m	Galvanised Heavy kg/m
8 (13.6)	0.515	0.547	0.641	0.672	0.765	0.794
10 (17.1)	0.670	0.711	0.839	0.879	1.020	1.060
15 (21.4)	0.947	0.999	1.210	1.260	1.440	1.490
20 (26.9)	1.380	1.450	1.560	1.630	1.870	1.930
25 (33.8)	1.980	2.060	2.410	2.490	2.940	3.020
32 (42.5)	2.540	2.650	3.100	3.210	3.800	3.900
40 (48.4)	3.230	3.350	3.570	3.690	4.380	4.500
50 (60.2)	4.080	4.240	5.030	5.180	6.190	6.340
65 (76.2)	5.710	5.910	6.430	6.630	7.930	8.120
80 (88.7)	6.720	6.950	8.370	8.600	10.300	10.500
100 (113.9)	9.750	10.000	12.200	12.500	14.500	14.800
125 (140.6)			16.600	17.000	17.900	18.300
150 (166.1)			19.700	20.200	21.300	21.700

Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**STRIP MILL - HOT ROLLED - SHEET AND PLATE**

BANDSTAHL - WARMGEWALZT - STAHLBLECHE UND BANDSTAHL

LA TÔLE D'ACIER - LAMINÉES À CHAUD

**HR/PL**

Product Thickness mm	Length x Width mm					
	1000 x 2000	1250 x 2500	1500 x 3000	1830 x 3660	2000 x 4000	2000 x 6000
	kg/plate					
1.6	25.120	39.250	56.520			
2.0	31.400	49.063	70.650			
2.5	39.250	61.328	88.313			
3.0	47.100	73.594	105.975	157.733	188.400	
4.0	62.800	98.125	141.300	210.311	251.200	
5.0	78.500	122.656	176.625	262.889	314.000	
6.0	94.200	147.188	211.950	315.466	376.800	
8.0	125.600	196.250	282.600	420.622	502.400	
10.0	157.000	245.313	353.250	525.777	628.000	942.000
12.0	188.400	294.375	423.900	630.933	753.600	1130.400
12.5	196.250	306.641	441.563	657.222	785.000	1177.500
15.0	235.500	367.969	529.875		942.000	
20.0	314.000	490.625	706.500		1256.000	
25.0	392.500	613.281	883.125		1570.000	
30.0	471.000	735.938	1059.750		1884.000	
35.0	549.500	858.594	1236.375		2198.000	
40.0	628.000	981.250	1413.000		2512.000	
45.0	706.500	1103.906	1589.625		2826.000	
50.0	785.000	1226.563	1766.250		3140.000	
60.0	942.000	1471.875	2119.500		3768.000	
70.0	1099.000	1717.188	2472.750		4396.000	
75.0	1177.500	1839.844	2649.375		4710.000	
80.0	1256.000	1962.500	2826.000		5024.000	
90.0	1413.000	2207.813	3179.250		5652.000	
100.0	1570.000	2453.125	3532.500		6280.000	
130.0	2041.000	3189.063				
150.0	2355.000	3679.688				



## STRIP MILL - COLD ROLLED AND GALVANISED - SHEET AND PLATE

BANDSTAHL - KALTGEWALZT UND VERZINKT - STAHLBLECHE UND BANDSTAHL

LA TÔLE D'ACIER - FORMÉS À FROID - D'UN FEUILLARD GALVANISÉ

CR

Product Thickness mm	Length x Width mm		
	2000 x 1000	2500 x 1250	3000 x 1500
	kg/plate		
0.6	9.420	14.719	
0.8	12.560	19.625	
1.0	15.700	24.531	
1.2	18.840	29.438	
1.6	25.120	39.250	56.520
2.0	31.400	49.063	70.650
2.5	39.250	61.328	88.313
3.0	47.100	73.594	105.975

## STRIP MILL - FLOOR PLATE - TEAR DROP PATTERN

TRÄNENBLECHE

LA TÔLE D'ACIER - TÔLE DE PLANCHER - LARME MOTIF GOUTTE

DUR

Product Thickness mm	Length x Width mm			
	2000 x 1000	2000 x 1250	2500 x 1250	3000 x 1500
	kg/plate			
3.0	51.000	63.750	79.688	114.750
4.5	76.500	95.625	119.531	172.125
6.0	102.000	127.500	159.375	229.500
8.0	136.000	170.000	212.500	306.000
10.0	170.000	212.500	265.625	382.500
12.5	212.500	265.625	332.031	



Other and intermediate sizes available upon request.  
Weitere Größen sowie Zwischengrößen auf Anfrage.  
D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

**SPECIALS - REINFORCING BARS - MILD AND HIGH YIELD**

BETONSTAHL MIT NORMAL ODER ERHÖHTER STRECKGRENZE

SPECIAL - BARRES DE RENFORCEMENT - MOYENNE ET HAUTE LIMITÉ ÉLASTIQUE

RE

Product Size Diameter mm	kg/m	m/t
6	0.222	4504
8	0.395	2531
10	0.616	1623
12	0.888	1126
14	1.208	827
16	1.579	633
18	1.998	500
20	2.466	405
22	2.984	335
24	3.552	281
25	3.854	259
26	4.168	239
28	4.834	206
30	5.549	180
32	6.313	158
40	9.894	101



Other and intermediate sizes available upon request.

Weitere Größen sowie Zwischengrößen auf Anfrage.

D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## SPECIALS - REINFORCING MESH

BETONSTAHL MATTEN

SPECIAL - MAILLE DE RENFORCEMENT

**REM**



Product Reference	Mesh Size mm	Main Wire mm	Cross Wire mm	kg/m	kg/sheet
A Mesh					
A393	200 x 200	10.00	10.00	6.160	70.960
A252	200 x 200	8.00	8.00	3.950	45.500
A193	200 x 200	7.00	7.00	3.020	34.790
A142	200 x 200	6.00	6.00	2.220	25.570
A98	200 x 200	5.00	5.00	1.540	17.740
B Mesh					
B1131	100 x 200	12.00	8.00	10.900	125.570
B785	100 x 200	10.00	8.00	8.140	93.770
B503	100 x 200	8.00	8.00	5.930	68.310
B385	100 x 200	7.00	7.00	4.530	52.190
B283	100 x 200	6.00	7.00	3.730	42.970
B196	100 x 200	5.00	7.00	3.050	35.140
C Mesh					
C785	100 x 400	10.00	6.00	6.720	77.410
C636	100 x 400	9.00	6.00	5.550	63.940
C503	100 x 400	8.00	6.00	4.510	51.960
C385	100 x 400	7.00	6.00	3.580	41.240
C283	100 x 400	6.00	6.00	2.780	32.030
Wrapping Mesh Fabric					
D49	100 x 100	2.50	2.50	0.770	8.870



Other and intermediate sizes available upon request.  
Weitere Größen sowie Zwischengrößen auf Anfrage.  
D'autres dimensions ainsi que des dimensions intermédiaires sont disponibles sur demande.

## SPECIALS - SHAPES

SONDERPROFILE - FORMEN

SPECIAL - FORMES

### Special Sections

As a general guide, the following range of profile weights/sizes can be manufactured on our sister company's rolling mill.

<b>WEIGHT:</b>	<b>0.25 TO 4 KG/M</b>
<b>WIDTH:</b>	<b>8 MM TO 50 MM</b>
<b>THICKNESS:</b>	<b>2 MM TO 23 MM</b>
<b>LENGTH:</b>	<b>UP TO 9 M</b>

Working from customers' drawings or samples, we can quickly design and produce the necessary roll profiles to ensure the manufacture of sections to the highest standards.

### Sonderprofile

Zur allgemeinen Orientierung sind hier die Maße und Gewichte angegeben, mit denen im Walzwerk unseres Schwesternunternehmens Spezialprofile hergestellt werden können.

<b>GEWICHT:</b>	<b>0,25 BIS 4 KG/M</b>
<b>BREITE:</b>	<b>8 MM BIS 50 MM</b>
<b>STÄRKE:</b>	<b>2 MM BIS 23 MM</b>
<b>LÄNGE:</b>	<b>BIS ZU 9 M</b>

Mit Hilfe der Zeichnungen oder Muster unserer Kunden können wir schnell die benötigten Profile konstruieren und herstellen, um höchste Standards in der Profilherstellung zu garantieren.

### Sections spéciales

Les gammes de poids / dimensions suivantes donnent une vue d'ensemble des profilés qui peuvent être usinés dans le laminoir de notre société affiliée.

<b>POLDS:</b>	<b>0,25 À 4 KG/M</b>
<b>LARGEUR:</b>	<b>8 MM À 50 MM</b>
<b>ÉPAISSEUR:</b>	<b>2 MM À 23 MM</b>
<b>LONGUEUR:</b>	<b>9 M MAX</b>

À partir des dessins et échantillons remis par nos clients, nous concevons et produisons rapidement les profilés demandés qui permettront de réaliser des sections répondant aux normes de qualité les plus exigeantes.

### EDGE TOOL/TAPER SECTIONS

<b>Sickle</b>	20 x 3.3 x 1 mm 22 x 3.3 x 1 mm 25 x 3.3 x 1 mm 35 x 3.3 x 1 mm 40 x 3.3 x 1 mm 20 x 3.5 x 1.2 mm 22 x 3.5 x 1.2 mm 32 x 6 x 1.6 mm	<b>Bevel</b>
<b>Hacking Knife</b>		<b>Single Bevel</b>
<b>Billhook</b>	35.4 x 2.5 x 4.6 mm 38.0 x 1.6 x 4.5 mm	
<b>Taper Washer Bars</b>	<b>Miscellaneous Taper Bars</b>	
3° 5° 8° 9°	20 x 12 x 10.5 mm 29 x 13.94 x 9 mm 29 x 13.94 x 9 mm 26 x 13 x 7 mm $1\frac{1}{4}'' \times \frac{1}{4}'' \times \frac{1}{16}''$ 29 x 14 x 9 mm	<b>Quadrant</b>
<b>Weld on Strip</b>		<b>Gibson Ring</b>

### LOCKRIM/FENCE RAIL SECTIONS AND CHANNELS

<b>Lockrim</b>	20 x 6.35 x 3.3 mm
<b>Fencing Rail Sections</b>	25 x 8 x 4 mm 30 x 8 x 4 mm 40 x 13 x 5 mm
<b>Channels</b>	25.5 x 9.5 x 3.1 mm 28.5 x 9.5 x 3.1 mm

### SPIRAL MOWER BLADE SECTIONS

003	Toro	MM1
008	022	MM2
056/005	174	MM3

### MISCELLANEOUS SPECIAL SECTIONS

<b>Thimble</b>	<b>Flat Rail</b>	<b>Rock Drill Section</b>
<b>Hinge Sections</b>		
<b>Miniature Rail</b>	<b>Contoured Inserts</b>	
<b>Wood Chisel</b>	<b>Chamfered Flat</b>	<b>Runner Rail</b>
<b>Quadrant</b>	<b>Gibson Ring</b>	

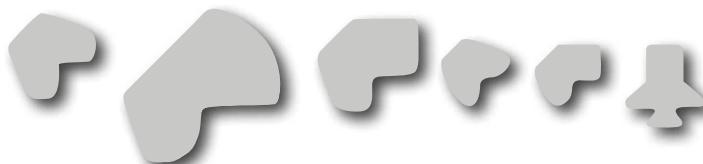
## SPECIALS - SHAPES

SONDERPROFILE - FORMEN

SPECIAL - FORMES

### WHEEL SECTIONS

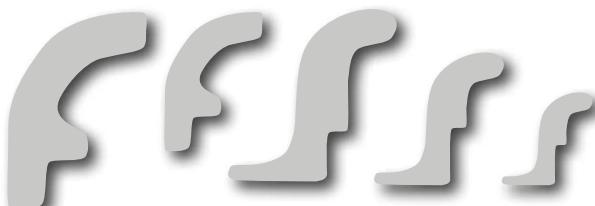
Lockrings



Wide Base Lockrings



Side Rings



Beadseat



### HORSESHOE SECTIONS



Standard Fullered  
Concave

$\frac{1}{2} \times \frac{1}{4}$ "	$\frac{7}{8} \times \frac{3}{8}$ "
$\frac{5}{8} \times \frac{1}{4}$ "	$\frac{7}{8} \times \frac{7}{16}$ "
$\frac{5}{8} \times \frac{5}{16}$ "	$\frac{3}{4} \times \frac{7}{16}$ "
$\frac{5}{8} \times \frac{3}{8}$ "	$\frac{7}{8} \times \frac{1}{2}$ "
$\frac{5}{8} \times \frac{7}{16}$ "	$\frac{7}{8} \times \frac{3}{16}$ "
$\frac{3}{4} \times \frac{5}{16}$ "	$\frac{1}{2} \times \frac{7}{16}$ "
$\frac{3}{4} \times \frac{3}{8}$ "	
$\frac{3}{4} \times \frac{7}{16}$ "	
$\frac{3}{4} \times \frac{1}{2}$ "	



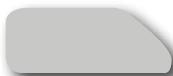
Fullered  
Flats



European  
Concave Sections

17.5 x 9.7 mm
20 x 10 mm
217 x 8.2 mm
25 x 10 mm
25 x 11 mm

Concave Flats



19.5 x 8.6 mm  
23 x 8.6 mm  
23 x 9.5 mm  
25 x 10 mm

Asian Sections



20 mm x 9.5 mm  
23 mm x 9.5 mm  
20 mm x 11 mm

### WINDOW SHUTTERS SECTIONS / GLAZING BAR SECTIONS



F7D



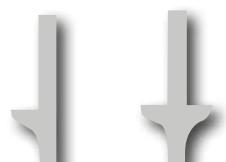
F7G



Tees



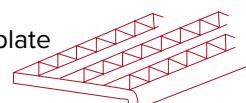
Odd Leg  
Tees



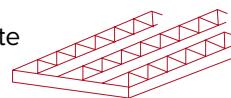
Glazing Bar Sections

### TREADPLATES

35 mm Lipped Treadplate



30 mm Plain Treadplate



### HANDRAIL SECTIONS

European  
40 x 18 mm



Victorian  
50 x 15 mm



### DECORATIVE

Ribbed Flats

25 x 6 mm      20 x 6 mm



Star Sections

31.6 mm      18.8 mm



## GRINDING MEDIA - STEEL BALLS

MAHLKÖRPER - STAHLKUGELN

ÉLÉMÉNTS DE BROYAGE - BILLES EN ACIER

BALLS



Nominal ball diameter (mm) Nenndurchmesser (mm) Diamètre nominal d'une bille (mm)	Approx. Mass per ball (g) Ungefährre Masse pro Kugel (g) Masse approx. D'une bille	Approx. Number of balls per tonne Ungefährre Anzahl Kugeln pro Tonne Nombre approx. De billes par tonne
16	17	59,374
20	33	30,400
22	44	22,840
25	64	15,565
30	111	9,007
40	263	3,800
50	514	1,946
60	888	1,126
65	1,129	886
70	1,410	709
75	1,735	576
80	2,105	475
90	2,998	334
100	4,112	243
120	7,105	141
150	13,878	72



## GRINDING MEDIA - STEEL BALLS

MAHLKÖRPER - STAHLKUGELN

ÉLÉMÉNTS DE BROYAGE - BILLES EN ACIER

BALLS



For grinding media application material is manufactured from a C60 type material with a chromium addition and is inline heat treated with a uniform quenching process, tailored to give even hardness throughout. Hardness levels can be achieved up to 739 Brinell.

For ornamental ironwork applications where balls are typically used as finials the balls are manufactured from S275JR (mild steel) and supplied in the as rolled state this being suitable for drilling and welding.

Für die Verwendung als Mahlkörper wird das Material aus C60-Stahl mit zusätzlichem Chrom gefertigt. Durch die anschließende In-Line-Wärmebehandlung mit einheitlichem Abschreckverfahren wird eine gleichmäßige Härte im gesamten Material erreicht. Es können Härtungen bis zu 739 Brinell erzielt werden.

Für die Verwendung als Eisenverzierung, wo die Kugeln üblicherweise als Abschlusselemente dienen, werden die Kugeln aus S275JR (Weichstahl) gefertigt und im gewalzten Zustand geliefert, was vorteilhaft für das Bohren und Schweißen ist.

Le matériau destiné à la réalisation d'éléments de broyage est fabriqué à partir de l'acier type C60 enrichi de chrome. Il est soumis à un traitement thermique en ligne à l'aide d'un procédé de trempe uniforme, adapté pour obtenir une dureté régulière. Les degrés de dureté peuvent atteindre 739 brinells.

Les billes destinées aux ouvrages métalliques décoratifs, comme les épis faits à partir de billes, sont en S275JR (acier doux) et vendues à l'état brut de laminage pour pouvoir être percées et soudées.



## CURRENT STANDARDS

NORMEN

NORMES

Awarding Body	Reference Number	Part	Current Standard Date	Content
BS	4	1	2005	Structural steel sections
BS	7668	-	2016	Weldable structural steel
BS EN	10024	-	1995	Hot rolled taper flange I section
BS EN	10025	1	2004	Hot rolled products of structural steels
BS EN	10025	2	2004	Hot rolled products of structural steels
BS EN	10025	3	2004	Hot rolled products of structural steels
BS EN	10025	4	2004	Hot rolled products of structural steels
BS EN	10025	5	2004	Hot rolled products of structural steels
BS EN	10025	6	2004	Hot rolled products of structural steels
BS EN	10027	1 / A1	2005 / 2009	Designation system for steels
BS EN	10027	2	2015	Designation system for steels
BS EN	10029	-	2010	Hot rolled steel plates 3 mm thick or above
BS EN	10034	-	1993	Structural steel I and H sections
BS EN	10055	-	1996	Hot rolled steel equal flange tees with radius root and toes
BS EN	10056	1	2017	Structural steel equal and unequal angles
BS EN	10056	2	1993	Specification for structural steel equal and unequal angles
BS EN	10058	-	2018	Hot rolled flat steel bars and steel wide flat bars for general purposes
BS EN	10059	-	2003	Hot rolled square steel bars for general purposes
BS EN	10060	-	2003	Hot rolled round steels bars for general purposes
BS EN	10067	-	1997	Hot rolled bulb flats
BS EN	10079	-	2007	Definition of steel products
BS EN	10210	1	2006	Hot finished structural hollow section of non-alloy and fine grain steels
BS EN	10210	2	2019	Hot finished structural hollow sections
BS EN	10219	1	2006	Cold formed welded structural hollow sections of non alloy and fine grain steels
BS EN	10219	2	2019	Cold formed welded steel structural hollow sections
BS EN	10225	1	2019	Weldable structural steels for fixed offshore structures
	2	2019		Weldable structural steels for fixed offshore structures
	3	2019		Weldable structural steels for fixed offshore structures
	4	2019		Weldable structural steels for fixed offshore structures
BS EN	10279	-	2000	Hot rolled steel channels
Euronorm	91 - 81	-	1981	Hot rolled wide flats
ISO	9034	-	1987	Hot rolled structural steel wide flats
PD CEN/TR	10317	-	2014	European certified reference materials (EURONORMS-CRM) for the determination of the chemical composition of iron and steel products proposed under the auspices of the European Committee for Iron and Steel Standardisation (ECISS)

## OTHER ASSOCIATED STANDARDS

Awarding Body	Reference Number	Part	Current Standard Date	Content
ASTM	A	500	2018	American: Standard specification for cold formed welded and seamless carbon steel structural tubing in rounds and shapes
CSA	G 40 21		2018	Canadian: Standard general requirements for cold rolled or welded structural quality steel/structural quality steel

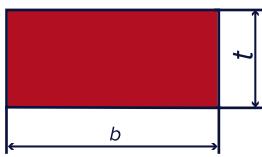
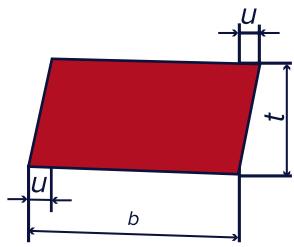
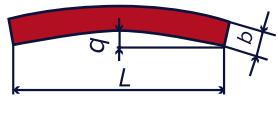
# CURRENT STANDARDS

NORMEN  
NORMES

Example AST Categories	Description	Previous Standard/s or Dates
RSJ, PFC, RSC, UB, UC	Specifications for hot rolled sections	BS-4 1:1993
-	Hot finished structural hollow sections in weather resistant steels	2004
IPN	Tolerances on shape and dimensions	
-	General technical delivery conditions	BS EN 10025-1:1993
-	Technical delivery conditions for non-alloy structural steels	BS EN 10025-1:1993
-	Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels	BS EN 10025-1:1993
-	Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels	BS EN 10025-1:1993
-	Technical delivery conditons for structural steels with improved atmospheric corrosion resistance	BS EN 10025-1:1993
-	Technical delivery conditions for flat products of high yield strength structural steels in the quenched tempered condition	BS EN 10025-1:1993
-	Steel names	BS EN 10027-1: 1992
-	Numerical system	1992
HR, PL	Specification for tolerances on dimensions and shape and mass	1991
IPE, IPEA, HEB, HEA, UB, UC, UBP	Tolerances on shape and dimensions	-
T	Dimensions and tolerances on shape and dimensions	-
AE, AU	Dimensions	1999
AE, AU	Tolerances on shape and dimensions	BS 4848-4: 1972
F	Dimensions and tolerances on shape and dimensions	2003
SQ	Dimensions and tolerances on shape and dimensions	-
R	Dimensions and tolerances on shape and dimensions	-
BF	Dimensions and tolerances on shape, dimensions and mass	BS 4848-5: 1980
-		BS EN 10079: 1993
CHS, RHS, SHS	Technical delivery requirements	BS EN 10210 1994
CHS, RHS, SHS	Tolerances, dimensions and sectional properties	2006
CHS, RHS, SHS	Technical delivery requirements	BS EN 10219-1:1997
CHS, RHS, SHS	Tolerances, dimensions and sectional properties	2006
-	Technical delivery conditions. Plates	2009
-	Technical delivery conditions. Sections	2009
-	Technical delivery conditions. Hot finished hollow sections	2009
-	Technical delivery conditions. Cold formed welded hollow sections	2009
UPN, UPE, U, PFC, CH	Tolerances on shape, dimension and mass	-
F	Tolerances on dimensions and shape and mass	-
F	Tolerances on dimensions and shape and mass	last reviewd 2016
-		-

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date		BS EN 10058 2003	
	Standard Title		Hot Rolled Flat Steel Bars for General Purposes	
	AST Product Abbreviation		F	
	Width Largeur Breite	b (mm)	10 < b ≤ 40	+ / - 0.75
			40 < b ≤ 80	+ / - 1.0
			80 < b ≤ 100	+ / - 1.5
			100 < b ≤ 120	+ / - 2.0
			120 < b ≤ 150	+ / - 2.5
	Thickness Epaisseur Dicke	t (mm)	t ≤ 20	+ / - 0.5
			20 < t ≤ 40	+ / - 1.0
			40 < t ≤ 80	+ / - 1.5
	Out of Square Défaute d'équerrage Flanschunparallelität	u (mm)	10 ≤ u ≤ 25	0.5
			25 < u ≤ 40	1.0
			40 < u ≤ 80	1.5
	Straightness Rectitude Geradheit	q (mm)	Nominal cross-section	Tolerance in the plane of b
			< 1000 mm <sup>2</sup>	q ≤ 0.4% of L
			≥ 1000 mm <sup>2</sup>	q ≤ 0.25% of L
	Length Longeur Länge	L (mm)	+/-100	

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date		ISO 9034 1987			
	Standard Title		Hot Rolled Steel Wide Flats			
	AST Product Abbreviation		F (Class A)			
	Width Largeur Breite	b (mm)	$+/- 2.0\%$ of the nominal width but not exceeding 10mm			
	Thickness Epaisseur Dicke	e (mm)	<b>Nominal thickness</b>	<b>Permissible deviation on nominal thickness</b>		
			$4 \leq e < 8$	- 0.4 / + 0.6		
			$8 \leq e < 15$	- 0.5 / + 0.7		
			$15 \leq e < 25$	- 0.6 / + 0.8		
			$25 \leq e < 40$	- 0.8 / + 0.9		
			$40 \leq e < 80$	- 1.0 / + 1.4		
			$80 \leq e \leq 100$	- 1.0 / + 2.2		
			Max. difference in thickness in a transverse cross-section			
			<b>Nominal width b</b>	<b>Difference in thickness max.</b>		
			$150 < b \leq 500$	0.5		
			$500 < b \leq 1000$	0.6		
			$1000 < b \leq 1250$	0.7		
	Angular Accuracy Précision angulaire Winkelgenauigkeit	e (mm)	<b>Nominal thickness</b>	<b>Tolerance w max.</b>		
			$e < 13$	2.0		
			$13 \leq e \leq 18$	3.0		
			$18 < e$	3.5		
	Out of Square Défaute d'équerrage Flanschunparallelität	u (mm)	$b < 500$	$+/- 5.0$		
			$b > 500$	$+/- 0.01$		
	Straightness Rectitude Geradheit	q (mm)	$q = 0.25\%$			
			or			
			$0.125\% \text{ of } L$			
	Flatness Planéité Ebenheit	$k_1, k_2, k_3$ (mm)	$0.3\% \text{ of } b$	Perpendicular to rolling direction		
			$7 \text{ or } 3\text{mm}$	Rolling direction over a 1000mm length		
			$0.7\% \text{ of } L \text{ with a max. of } 20 \text{ mm or } 0.3\% \text{ of } L \text{ with a max. of } 10 \text{ mm}$	Entire longitudinal length		
	Length Longueur Länge	L (mm)	$+ 50 / - 0$			
	Mass Masse Masse	G %	<b>Nominal thickness e mm</b>	<b>Excess mass % for delivered mass in tonnes</b>		
			$< 5$	$\geq 5 < 15$	$\geq 15 \leq 50$	
			$4 \leq e < 8$	8.0	7.0	6.5
			$8 \leq e < 15$	7.0	6.5	6.0
			$15 \leq e < 25$	5.0	4.5	4.0
			$25 \leq e < 40$	4.0	4.0	3.5
			$40 \leq e < 80$	3.5	3.5	3.0
			$80 \leq e < 100$	3.5	3.5	3.0

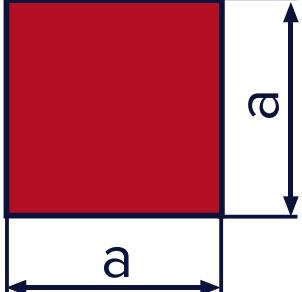
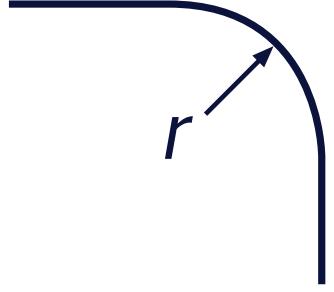
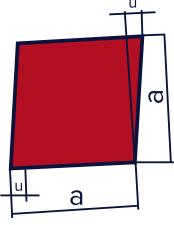
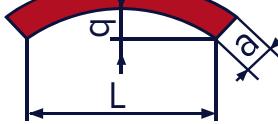
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date		BS EN 10067 1997	
	Standard Title		Hot Rolled Bulb Flats	
	AST Product Abbreviation		BF	
	Flange Width Largeur Flanschbreite	b (mm)	$b \leq 120$	1.5
			$> 120 \leq 180$	2.0
			$> 180 \leq 300$	3.0
			$> 300 \leq 430$	4.0
	Web Thickness Epaisseur Stegdicke	t (mm)	$\geq 5 \leq 8$	+0.7 / -0.3
			$\geq 7 \leq 11$	+1.0 / -0.3
			$\geq 9 \leq 13$	+1.0 / -0.4
			$\geq 12 \leq 20$	+1.2 / -0.4
	Corner Radius Rayon d'angle Eckenradius	$r_1$ (mm)	$t$	$r_1$ max
			$\leq 5$	1.5
			$> 5 \leq 9$	2.0
			$> 9 \leq 13$	3.0
			$> 13 \leq 20$	4.0
	Out of Square Défaute d'équerrage Flanschunparallelität	(mm)	The angle by which the weld edge deviates from the vertical $\Theta$ shall not exceed 4°	
	Straightness Rectitude Geradheit	q (mm)	$q = 0.0035L$	
	Length Longeur Länge	L (mm)	$+ 100 / - 0$	
	Mass Masse Masse	G %	tonnes < 5	+ 6 / - 2
			tonnes > 5	+ 8 / - 2.7

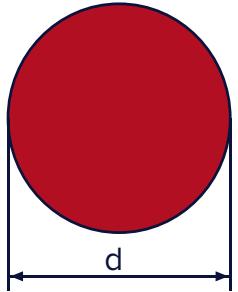
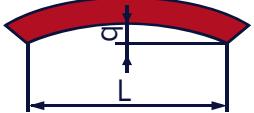
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10059 2003	
	Standard Title	Hot Rolled Square Steel Bars for General Purposes	
	AST Product Abbreviation	SQ	
	Width / Height Largeur / Hauter Breite / Höhe	h (mm)	8 < a ≤ 15      +/-0.4
			15 < a ≤ 25      +/-0.5
			25 < a ≤ 35      +/-0.6
			35 < a ≤ 50      +/-0.8
			50 < a ≤ 100      +/-1.0
			100 < a ≤ 110      +/-1.3
			110 < a ≤ 120      +/-1.5
			120 < a ≤ 150      +/-1.8
	Corner Radius Rayon d'angle Eckenradius	r (mm)	8 ≤ a ≤ 12      r ≤ 1
			12 < a ≤ 20      r ≤ 1.5
			20 < a ≤ 30      r ≤ 2
			30 < a ≤ 50      r ≤ 2.5
			50 < a ≤ 100      r ≤ 3
			100 < a ≤ 150      r ≤ 4
	Out of Square Défaute d'équerrage Flanschunparallelität	u (mm)	a ≤ 50      1.50
			50 < a ≤ 75      2.25
			75 < a ≤ 100      3.00
			100 < a ≤ 150      4.50
	Straightness Rectitude Geradheit	qyy/qzz (mm)	a ≤ 25      Not fixed
			25 < a ≤ 80      q ≤ 0.4 % of L
			80 < a      q ≤ 0.25 % of L
	Twist Torsion Verdrehung		8 ≤ a ≤ 14      4°/m with a max of 24°
			14 < a ≤ 50      3°/m with a max of 18°
			50 < a      3°/m with a max of 15°
	Length Longeur Länge	L (mm)	< 6000      +/-25mm
			≥ 6000 to      +/-50mm
			< 13000

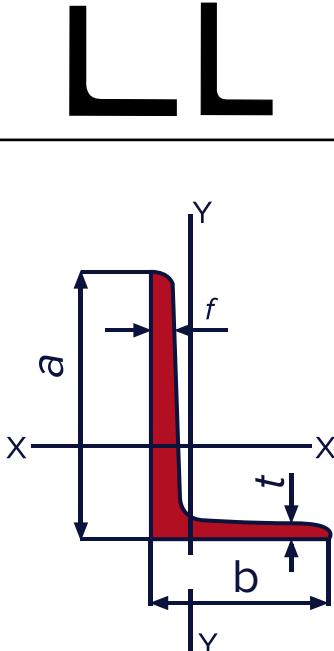
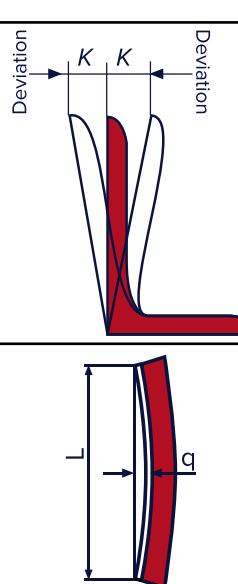
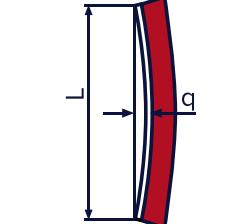
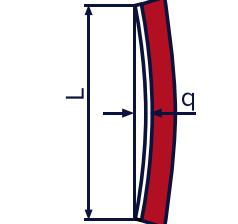
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10060 2003		
	Standard Title	Hot Rolled Round Steels Bars for General Purposes		
	AST Product Abbreviation	R		
	Width (Diameter) Diamétere Durchmesser	d (mm)	10 < d ≤ 15	+/-0.4
			15 < d ≤ 25	+/-0.5
			25 < a ≤ 35	+/-0.6
			35 < a ≤ 50	+/-0.8
			50 < a ≤ 80	+/-1.0
			80 < a ≤ 100	+/-1.3
			100 < a ≤ 120	+/-1.5
			120 < a ≤ 160	+/-2.0
			160 < a ≤ 200	+/-2.5
			200 < a ≤ 220	+/-3.0
	Straightness Rectitude Geradheit	b (mm)	d ≤ 25	Not Fixed
			25 < d ≤ 80	q ≤ 0.4 % of L
			80 < d ≤ 250	q ≤ 0.25 % of L
	Length Longeur Länge	L (mm)	< 6000	+/-25mm
			≥ 6000 to	+/-50mm
			≤ 13000	

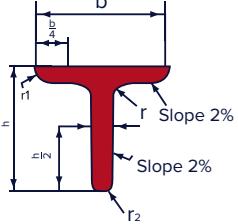
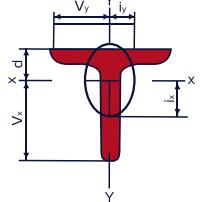
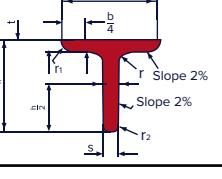
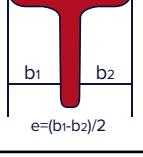
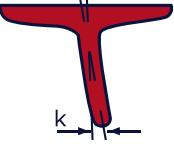
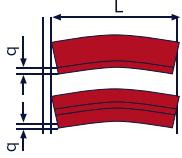
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10056 : 2 1993	
	Standard Title	Structural Steel Equal and Unequal Angles	
	AST Product Abbreviation	AE, AU	
	Leg Width Largeur D'aile Schenkelbreite	a / b (mm)	$a \leq 50$ $+/-1.00$
			$50 < a \leq 100$ $+/-2.00$
			$100 < a \leq 150$ $+/-3.00$
			$150 < a \leq 200$ $+/-4.00$
			$200 < a$ $+6.0 / -4.0$
	Leg Thickness Epaisseur D'aile Schenkeldicke	t (mm)	$t \leq 5$ $+/-0.50$
			$5 < t \leq 10$ $+/-0.75$
			$10 < t \leq 15$ $+/-1.00$
			$t \leq 15$ $+/-1.20$
	Out of Square Défaute d'équerrage Rechtwinkligkeit		<b>Leg length (a)</b> <b>Tolerance (k)</b>
		k (mm)	$a \leq 100$ 1.00
			$100 < a \leq 150$ 1.50
			$150 < a \leq 200$ 2.00
			$200 < a$ 3.00
	Straightness Rectitude Geradheit		<b>Leg length (a)</b> <b>Tolerance (q)</b>
		q (mm)	$a \leq 150$ $0.4 \% L$
			$150 < a \leq 200$ $0.2 \% L$
			$200 < a$ $0.1 \% L$
	Length Longeur Länge		<b>Normal</b> <b>Minimum lengths</b>
	Mass Masse Masse	G %	<b>Thickness (mm)</b> <b>Not exceeding</b>
			$t \leq 4$ $+/-6\%$
			$t > 4$ $+/-4\%$

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10055 : 1996					
	Standard Title	Hot Rolled Equal Flange Tees with Radius Root and Toes					
	AST Product Abbreviation	T					
	Depth Hauteur Höhe	(mm)	h/b	s/t	r/r <sup>1</sup> /r <sup>2</sup>		
			30	4	4/2/1		
			35	4.5	4.5/2/1		
	Flange Width / Width Largeur d'aile Flanschbreite	(mm)	40	5	5/2.5/1		
			50	6	6/3/1.5		
			60	7	7/3.5/2		
			70	8	8/4/2		
	Web / Flange Thickness Epaisseur d'âme / d'aile Stegdicke / Flanschdicke	(mm)	80	9	9/4.5/2		
			100	11	11/5.5/3		
			120	13	13/6.5/3		
			140	15	15/7.5/4		
	Cross Section	b (mm)	b < 50		b, h +/- 1 s, t +/- 0.5		
			50 < b < 100		+/- 1.5    +/- 0.75		
			100 < b, h		+/- 2.0    +/- 1.0		
	Symmetry Symétrie Symmetrie	e $e = b_1 - b_2 / 2$	b ≤ 60		e ≤ 1		
			60 < b		e ≤ 1.5		
	Out of Square Défaute d'équerrage Flanschunparallelität	k (k <sup>1</sup> ) (mm)	b, h ≤ 100		k < 1		
			100 < b, h		k < 1.5		
	Straightness Rectitude Geradheit	q (mm)	50 ≤ b, h ≤ 100		q ≤ 0.4% of L		
	Length Longeur Länge	L (mm)	Normal tolerances +/-100				
	Mass Masse Masse	G %	4 ≤ s, t ≤ 7		-8%		
			7 < s, t		-6%		

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

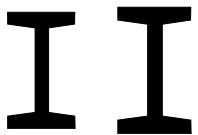
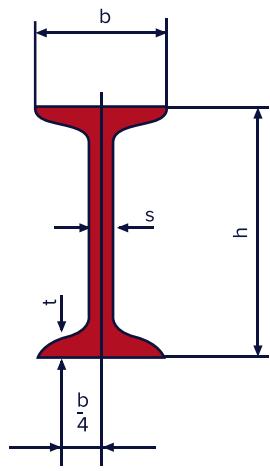
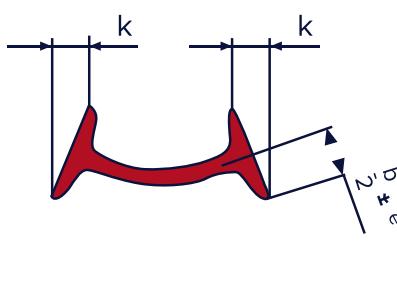
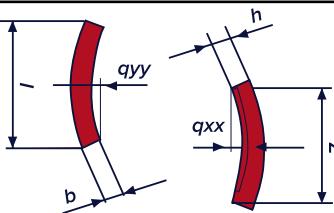
<b>H</b>	Standard No: Date	BS EN 10034 1993		
	Standard Title	Hot Rolled Structural Steel H and I Sections		
	AST Product Abbreviation	IPE, IPEA, HEB, UB, UC, UBP		
	Depth Hauteur Höhe	h (mm)	h<180 180<h≤400 400<h≤700 h>700	+3/-2 +4/-2 +5/-3 +5/-5
	Flange Width / Width Largeur d'aile Flanschbreite	b (mm)	b≤110 110<b≤210 210<b≤325 b>325	+4/-1 +4/-2 +4/-4 +6/-5
	Web Thickness / Thickness Epaisseur d'âme Stegdicke	s (mm)	s<7 7≤s<10 10≤s<20 20≤s<40 40≤s<60 s>60	+/-7 +/-1 +/-1.5 +/-2 +/-2.5 +/-3
	Flange Thickness Epaisseur d'aile Flanschdicke $t=b/4$	t (mm)	t<6.5 6.5≤t<10 10≤t<20 20≤t<30 30≤t<40 40≤t<60 $t \geq 60$	+1.5/-0.5 +2/-1 +2.5/-1.5 +2.5/-2 +/-2.5 +/-3 +/-4
	Out of Square Défaute d'équerrage Flanschunparallelität	k+k <sup>1</sup> (mm)	b≤110 b>110 $(\max 6.5)$	1.5 2% of b
	Web off Centre Défaute de symétrie Stegaussermittigkeit $e=(b_1-b_2)/2$	e (mm)	<b>t&lt;40:</b>	
			b≤110 110<b≤325 b>325	2.5 3.5 5
			<b>t&gt;40:</b>	
			110<b≤325 b>325	5 8
	Straightness Rectitude Geradheit	q <sub>yy</sub> /q <sub>zz</sub> (mm)	80<h<180 180<h≤360 h>360	0.30L 0.15L 0.10L
	Length Longeur Länge	L (mm)	-0/+100 (1) +/-50 (2)	
	Mass Masse	G %	+/-4	

1) When a minimum length is specified.

2) Usual tolerances.

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

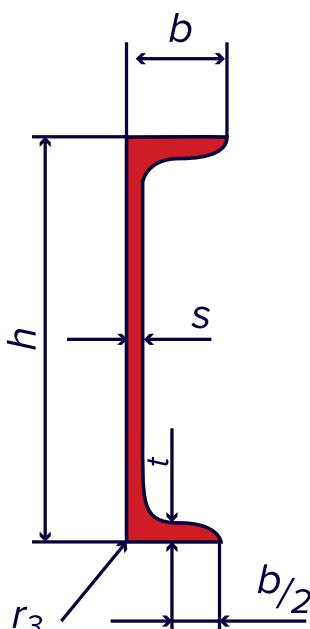
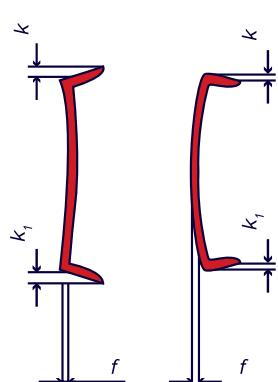
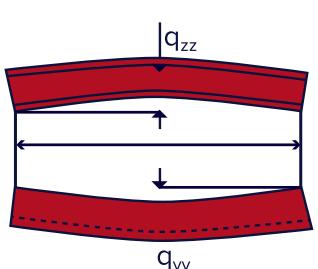
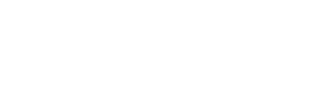
	Standard No: Date	BS EN 10024 1995		
	Standard Title	Hot Rolled Taper Flange I Sections:		
	AST Product Abbreviation	IPN, RSJ		
	Depth	h (mm)	$h \leq 200$	+/-2.0
	Hauteur		$200 > h \geq 400$	+/-3.0
	Höhe		$h > 400$	+/-4.0
	Flange Width	b (mm)	$b \leq 75$	+/-1.5
	Largeur d'aile		$75 < b \leq 100$	+/-2.0
	Flanschbreite		$100 < b \leq 125$	+/-2.5
			$b > 125$	+/-3.0
	Web Thickness	s (mm)	$s < 7$	+0.5 / -1.0
	Epaisseur d'âme		$7 < s \leq 10$	+0.7 / -1.5
	Stegdicke		$10 < s$	+1.0 / -2.0
	Flange Thickness	t (mm)	$t < 7$	+1.5 / -0.5
	Epaisseur d'aile		$7 < t \leq 10$	+2.0 / -1.0
	Flanschdicke		$10 < t \leq 20$	+2.5 / -1.5
			$20 < t$	+2.5 / -2.0
	Out of Square	k+k' (mm)	$b \leq 100$	2.0
	Défaute d'équerrage		$100 < b$	2 % of b
	Flanschunparallelität			
	Web off Centre	e (mm)	$b \leq 100$	2.0
	Défaute de symétrie		$100 < b$	3.0
	Stegaussermittigkeit			
	Straightness	qyy/qzz (mm)	$80 < h \leq 180$	0.30% of L
	Rectitude		$180 < h \leq 360$	0.15% of L
	Geradheit		$h > 360$	0.10% of L
	Length	L (mm)	+/-50 (1)	
	Longeur		-0/+100 (2)	
	Länge			
	Mass	G %		
	Masse		+/-4	

1) Usual tolerances.

2) When a minimum length is specified.

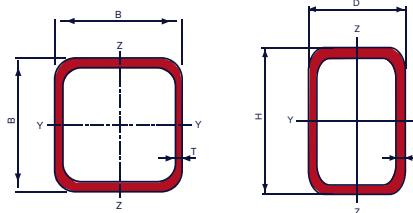
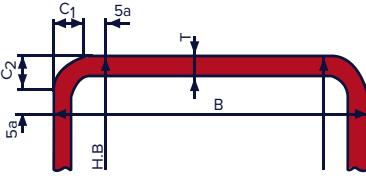
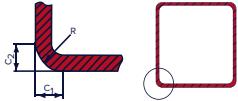
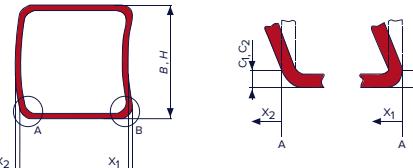
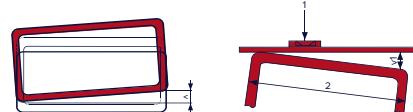
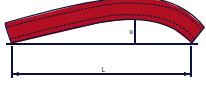
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10279 2000		
	Standard Title	Hot Rolled Steel Channels		
	AST Product Abbreviation	UPN, UPE, U, PFC, CH		
	Depth Hauteur Höhe	h (mm)	$h \leq 65$	+ / - 1.5
			$65 < h \leq 200$	+ / - 2.0
			$200 < h \leq 400$	+ / - 3.0
			$400 < h$	+ / - 4.0
	Flange Width Largeur d'aile Flanschbreite	b (mm)	$b \leq 50$	+ / - 1.5
			$50 < b \leq 100$	+ / - 2.0
			$100 < b \leq 125$	+ / - 2.5
			$125 < b$	+ / - 3.0
	Web Thickness / Thickness Epaisseur d'âme Stegdicke	s (mm)	$s \leq 10$	+ / - 0.5
			$10 < s \leq 15$	+ / - 0.7
			$15 < s$	
	Flange Thickness Epaisseur d'aile Flanschdicke	t (mm)	$t < 10$	- 0.5 (1)
			$10 < t \leq 15$	- 1.0 (1)
			$15 < t$	- 1.5 (1)
	Heel Radius Rayon d'arrondi Kantenradius	r <sub>3</sub> (mm)	all sizes $\leq 0.3t$	
	Out of Square Défaute d'équerrage Flanschunparallelität	k + k <sub>1</sub> (mm)	$b < 100$	2.0
			$100 < b$	2.5% of b
	Web Deformation Incurvation de l'âme Stegausbiegung	f (mm)	$h \leq 100$	+ / - 0.5
			$100 < h \leq 200$	+ / - 1.0
			$200 < h \leq 400$	+ / - 1.5
			$400 < h$	
	Straightness Rectitude Geradheit	q <sub>xx</sub> (mm)	$h \leq 150$	+ / - 0.30 % of l
			$150 < h \leq 300$	+ / - 0.20 % of l
			$300 < h$	+ / - 0.15 % of l
			$h \leq 150$	+ / - 0.50 % of l
			$150 < h \leq 300$	+ / - 0.30 % of l
			$300 < h$	+ / - 0.20 % of l
	Length Longeur Länge	L (mm)	all - 0 / + 100	
	Mass Masse Massee	G % G	$h < 125$	+ / - 6 %
			$125 < h$	+ / - 4 %

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10210 2006	
	Standard Title	HOT Finished Structural Hollow Section of Non-Alloy and Fine Grain Steels	
	AST Product Abbreviation	SHS / RHS	
	Outside Dimensions	d	
	Dimensions Extérieures	b	+ / - 1 % <sup>a</sup> with a minimum of + / - 0.5 mm
	Außenabmessungen	h	
	Thickness	T	
	Epaisseur	(mm)	Thickness -10% <sup>b,c</sup>
	Dicke		
	Squareness of Side	Θ	90°
	Équerrage des Côtes		+/-1°
	Rechtwinkligkeit der Seite		
	External Corner Profile	(C <sub>1</sub> , C <sub>2</sub> or R) <sup>f</sup>	
	Cornières Externes		3T maximum at each corner
	Außeneck des Profils		
	Concavity / Convexity	(X <sub>1</sub> , X <sub>2</sub> ) <sup>e</sup>	
	Concavité / Convexité		1%
	Konkavität / Konvexität		
	Twist	V	
	Torsion		2mm <sup>a</sup> plus 0.5mm/m length <sup>a</sup>
	Verdrehung		
	Straightness	e	
	Rectitude		0.2 <sup>a</sup> % of total length and 3 mm over any 1 m length
	Geradheit		
	Mass	M	+ / - 6 % on individual delivered lengths g
	Length a	L (mm)	<b>Randon length:</b>
	Longeur		4000 ≤ L ≤ 16000 with a range of 2000 per order item
	Länge		10% of sections may be below the min. for the ordered range but not shorter than the 75% of the min. range length
			<b>Approximate length:</b>
			4000 ≤ L ≤ 16000      +/-500 mm <sup>b</sup>
			<b>Exact length:</b>
			2000 ≤ L ≤ 6000      +10/-0mm
			> 6000 <sup>c</sup> +15/-0mm

a) The positive deviation is limited by the tolerance on mass.

b) For seamless section thickness of less than 10% but not less than 12.5% of the nominal thickness may occur in smooth transition areas over not more than 25% of the circumference.

c) Where the diameter to thickness exceeds 100, the tolerance on out-of-roundness shall be agreed.

d) The tolerance on convexity and concavity is independent of the tolerance of outside dimensions.

e) The sides need not be tangential to the corner area.

f) The positive tolerance on the mass of seamless hollow section is 8%.

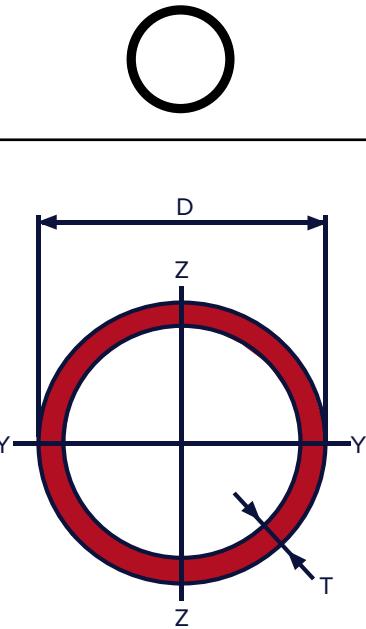
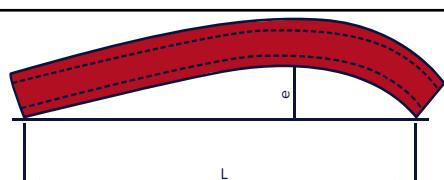
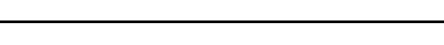
a) The manufacturer shall establish at the time of enquiry and order the type of length required and the length range or length.

b) Option 2.1 the tolerance on approximate length is +150 - 0 mm.

c) Common lengths available are 6m and 12m.

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date		BS EN 10210 2006	
	Standard Title		HOT Finished Structural Hollow Section of Non-Alloy and Fine Grain Steels	
	AST Product Abbreviation		CHS	
	Outside Dimensions Dimensions Extérieures Außenabmessungen	d b h	+ / - 1 % with a minimum of + / - 0.5 mm and a maximum of +/-10.0	
	Thickness Epaisseur Dicke	T (mm)	+/-1 % with a minimum of +/-0.5 mm and a maximum of +/-10 mm	
	Out of Roundness Faux-rond Unrundheit	O	2% for hollow sections having a diameter to thickness ratio not exceeding 100 <sup>d</sup>	
	Straightness Rectitude Geradheit	e	0.2 % <sup>a</sup> of total length and 3mm over any 1 m length	+1.5/-0.5
				+2/-1
				+2.5/-1.5
	Mass Masse Masse	M	+/- 6 % on delivered lengths <sup>g</sup>	
	Length a Longeur Länge	L (mm)	<b>Randon length:</b> $4000 \leq L \leq 16000$ with a range of 2000 per order item	10% of sections may be below the min. for the ordered range but not shorter than the 75% of the min. range length
			<b>Approximate length:</b> $4000 \leq L \leq 16000$ +/-500 mm <sup>b</sup>	
			<b>Exact length:</b> $2000 \leq L \leq 6000$ +/-0mm	
			$> 6000$ +/-15/-0mm	

a) The positive deviation is limited by the tolerance on mass.

b) For seamless section thickness of less than 10% but not less than 12.5% of the nominal thickness may occur in smooth transition areas over not more than 25% of the circumference.

c) Where the diameter to thickness exceeds 100, the tolerance on out-of-roundness shall be agreed.

d) The tolerance on convexity and concavity is independent of the tolerance of outside dimensions.

e) The sides need not be tangential to the corner area.

f) The positive tolerance on the mass of seamless hollow section is 8%.

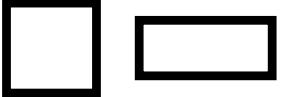
a) The manufacturer shall establish at the time of enquiry and order the type of length required and the length range or length.

b) Option 2.1 the tolerance on approximate length is +/-150 - 0 mm.

c) Common lengths available are 6m and 12m.

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10219 2006	
	Standard Title	COLD Finished Structural Hollow Section of Non-Alloy and Fine Grain Steels	
	AST Product Abbreviation	SHS / RHS	
	Outside Dimensions	d b h	Side length mm
	Dimensions Extérieures		H, B < 100 + / - 1% with a min tolerance of + / - 0.5 mm
	Außenabmessungen		100 ≤ H, B ≤ 200 +/- 8.0 max
	H, B > 200 +/- 6.0 max		
	Thickness	T (mm)	T ≤ 5mm + / - 10%
	Epaisseur		T > 5mm + / - 0.5mm
	Dicke		
	Squareness of Side	θ	90° + / - 1°
	Équarrage des Côtes		
	Rechtwinkligkeit der Seite		
	External Corner Profile	(C1, C2 or Rf)	Thickness T
	Cornières Externes		T ≤ 6 1.6T to 2.4T
	Außenecelle des Profils		6 < T ≤ 10 2.0T to 3.0T
	10 < T 2.4T to 3.6T		
	Concavity / Convexity	(x1, x2)°	Maximum of 0.8% with a minimum of 0.5mm
	Concavité / Convexité		
	Konkavität / Konvexität		
	Twist	V	2 mm plus 0.5mm/m length
	Torsion		
	Verdrehung		
	Straightness	e	0.15% of total length and 3mm over any 1m length
	Rectitude		
	Geradheit		
	Mass	M	+/- 6% on individual delivered lengths
	Masse		
	Masse		
	Length <sup>a</sup>	L (mm)	Random: 4000 < L ≤ 16000 with a range of 2000 per order item
	Longeur		10% of sections supplied may be below the minimum for the ordered range but not shorter than 75% of the minimum range length
	Länge		Approximate length: ≥ 4000 + 50 / -0 mm
			Exact length: < 6000 + 5 / - 0 mm 6000 ≤ L ≤ 10000 + 15 / - 0 mm > 10000 <sup>d</sup> + 5 / - 0 mm + 1mm/m

a) For elliptical hollow sections of sizes H < 250mm the permitted tolerance is twice the value given.

b) The positive deviation is limited by the tolerance on mass.

c) For seamless section thickness of less than 10% but not less than 12.5% of the nominal thickness may occur in smooth transition areas over not more than 25% of the circumference.

d) Where the diameter to thickness exceeds 100, the tolerance on out-of-roundness shall be agreed.

e) The tolerance on convexity and concavity is independent of the tolerance of outside dimensions.

f) The sides need not be tangential to the corner area.

g) The positive tolerance on the mass of seamless hollow section is 8.5%.

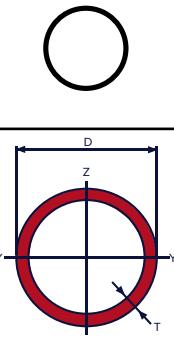
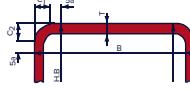
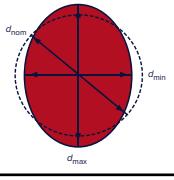
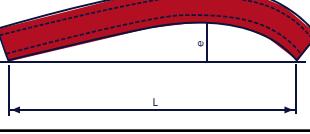
a) The manufacturer shall establish at the time of enquiry and order the type of length required and the length range or length.

b) Option 2.1 the tolerance on approximate length is +150 - 0mm.

c) Common lengths available are 6m and 12m.

# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10219 2006		
	Standard Title	COLD Finished Structural Hollow Section of Non-Alloy and Fine Grain Steels		
	AST Product Abbreviation	CHS		
	Outside Dimensions Dimensions Extérieures Außenabmessungen	d b h	+ / - 1 % with a minimum of + / - 0.5 mm and a maximum of +/-10.0	
	Thickness Epaisseur Dicke	T (mm)	For $D \leq 406.4\text{mm}$ $T < 5\text{mm}$ +/- 10% $T > 5\text{mm}$ +/- 0.5mm For $D < 406.4\text{mm}$ +/-10.0% with a max of +/- 2mm	
	Out of Roundness Faux-rond Unrundheit	O	2% for hollow sections having a diameter to thickness ratio not exceeding 100 <sup>a</sup>	
	Straightness Rectitude Geradheit	e	0.20% of total length and 3mm over any 1m length	
	Mass Masse Massee	M (mm)	+ / - 6% on individual delivered lengths <sup>b</sup>	
	Length <sup>a</sup> Longeur Länge	L (mm)	Random: $4000 < L \leq 16000$ with a range of 2000 per order item Approximate length: $\geq 4000$ Exact length: $< 6000$ $6000 \leq L \leq 10000$ $> 10000$ <sup>d</sup>	10% of sections supplied may be below the minimum for the ordered range but not shorter than 75% of the minimum range length + 50 / -0 mm + 5 / - 0 mm + 15 / - 0 mm + 5 / - 0 mm + 1mm/m

a) Where the diameter to thickness ratio exceeds 100 the tolerance on out-of-roundness shall be agreed.

b) The positive tolerance on the mass of seamless hollow section is 8.5%.

c) The manufacturer shall establish at the time of enquiry and order the type of length required and the length range or length.

d) Common lengths available are 6m and 12m.

a) For elliptical hollow sections of sizes  $H < 250\text{mm}$  the permitted tolerance is twice the value given.

b) The positive deviation is limited by the tolerance on mass.

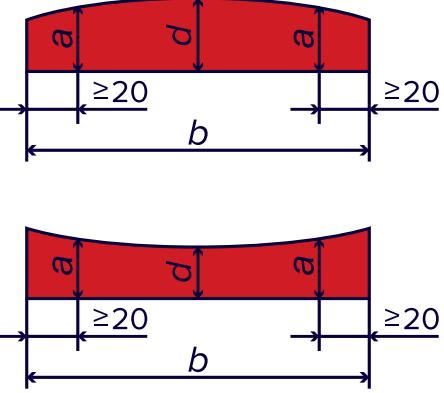
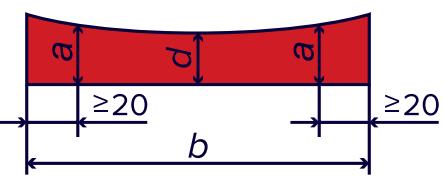
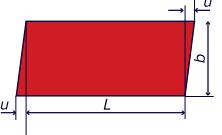
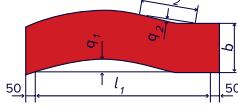
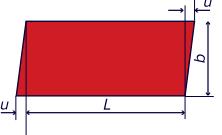
c) For seamless section thickness of less than 10% but not less than 12.5% of the nominal thickness may occur in smooth transition areas over not more than 25% of the circumference.

d) The tolerance on convexity and concavity is independent of the tolerance of outside dimensions.

e) The positive tolerance on the mass of seamless hollow section is 8.5%.

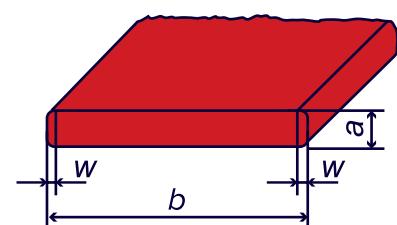
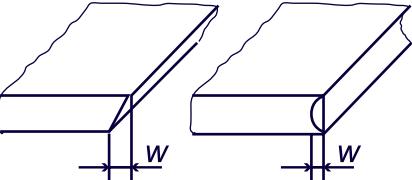
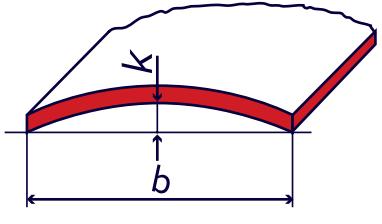
# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	Euronorm 1981 91 - 81		
	Standard Title	Hot Rolled Wide Flats		
	AST Product Abbreviation	HR, PL		
 	Web Thickness / Thickness Epaisseur Dicke	a (mm)	Class 1	
			Nominal thickness	Lower
			$\geq 4 < 10$	-0.4
			$\geq 10 < 20$	-0.4
			$\geq 20 < 25$	-0.5
			$\geq 25 < 30$	-0.6
			$\geq 30 < 40$	-0.7
			$\geq 40 < 50$	-0.9
			$\geq 50 < 60$	-1.0
			$\geq 60 < 80$	-1.0
			$\geq 80$	+3.0
	Thickness in Transverse Cross Section L'épaisseur et / ou la section transversale Wanddicker bzw. Tranversaler Querschnitt	b (mm)	Class 2	
			Nominal thickness	Lower
			$\geq 4 < 10$	-0.5
			$\geq 10 < 20$	-0.6
			$\geq 20 < 25$	-0.7
			$\geq 25 < 30$	-0.8
			$\geq 30 < 40$	-0.9
			$\geq 40 < 50$	-1.0
			$\geq 50 < 60$	-1.1
			$\geq 60 < 80$	-1.3
	Squareness of Side Équerrage des Côtes Rechtwinkligkeit der Seite	(mm)	Difference in thickness (a-d max)	
			$>150 \leq 500$	0.5
			$>500 \leq 1000$	0.6
			$>1000 \leq 1250$	0.7
	Straightness Rectitude Geradheit	q (mm)	Normal Straightness 0.25% of l	

# CURRENT STANDARDS

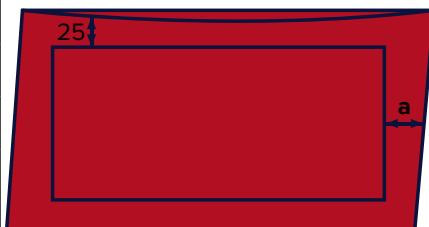
## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	Euronorm 1981 91 - 81			
	Standard Title	Hot Rolled Wide Flats			
	AST Product Abbreviation	HR, PL			
 	Angular Accuracy Précision angulaire Winkelgenauigkeit	a (mm)	Nominal thickness a ≤13 13 < ≤18 >18	w Max. 2.0 3.0 3.5	
	Flatness Planéité Ebenheit	k l (mm)	Up to 50mm thick Along 1000 mm length Along 500-999mm length Along whole length	0.30% of b 7mm 1% 0.70%	Nominal thickness Normal flatness Normal flatness Max 20mm for normal flatness
	Length Longeur Länge	L (mm)	-0/+200		
	Mass Masse Massee	G %	Class 1 < 5 ≥5 ≤15 > 15 Class 2 < 5 ≥5 ≤15 > 15	Lower % -4 -2 -2 -6 -5 -4	Upper % +8 +8 +6 +6 +5 +4

# CURRENT STANDARDS

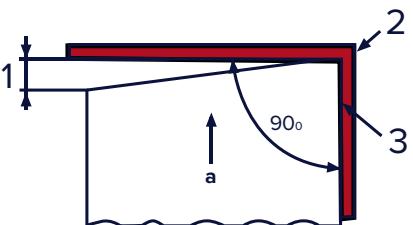
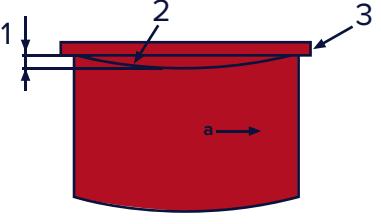
## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10029 2010			
	Standard Title	Hot Rolled Steel Plate 3mm Thick or above:			
	AST Product Abbreviation	HR, PL (Class A)			
	Flange Width / Width Largeur d'aile Flanschbreite / Breite	t (mm)	Nominal thickness	Upper	Lower
			t <40	0	+ 20
			40≤t<150	0	+ 25
			150≤t≤400	0	+ 30
	Web Thickness / Thickness Epaisseur Stegdicke / Dicke	t (mm)	Nominal thickness	Upper	Lower
			3≤t<5	-0.3	+ 0.7
			5≤t<8	-0.4	+ 0.8
			8≤t<15	-0.5	+ 0.9
			15≤t<25	-0.6	+ 1.0
			25≤t<40	-0.7	+ 1.3
			40≤t<80	-0.9	+ 1.7
			80≤t<150	-1.1	+ 2.1
			150≤t<250	-1.2	+ 2.4
			250≤t≤400	-1.3	+ 3.5
	Flatness Planéité Ebenheit  a = 200mm  For normal flatness tolerances	a (mm)	Nominal thickness	1000	2000
			Type L	Measuring length <sup>b</sup>	
			3≤t<5	9	14
			5≤t<8	8	12
			8≤t<15	7	11
			15≤t<25	7	10
			25≤t<40	6	9
			40≤t<250	5	8
			250≤t≤400	6	9
			Type H	Measuring length <sup>b</sup>	
			3≤t<5	12	17
			5≤t<8	11	15
			8≤t<15	10	14
			15≤t<25	10	13
			25≤t<40	9	12
			40≤t<250	8	12
			250≤t≤400	9	13



# CURRENT STANDARDS

## ROLLING TOLERANCES ON SHAPE, DIMENSIONS AND MASS

	Standard No: Date	BS EN 10029 2010		
	Standard Title	Hot Rolled Steel Plate 3mm Thick or above:		
	AST Product Abbreviation	HR, PL (Class A)		
 <p><b>Key</b></p> <ul style="list-style-type: none"> <li>1 Out-of-squareness <math>u</math></li> <li>2 Square</li> <li>3 Side edge</li> <li>a Rolling direction</li> </ul>	Out of Square	$u$ (mm)	u is the orthogonal projection of one transverse edge on one longitudinal edge	
	Défaute d'équerrage		a = rolling direction	
	Rechtwinkligkeit			
 <p><b>Key</b></p> <ul style="list-style-type: none"> <li>1 Edge camber <math>q</math></li> <li>2 Slide edge (concave side)</li> <li>3 Straight edge</li> <li>a Rolling direction</li> </ul>	Edge Camber	$q$ (mm)	q is the max deviation between longitudinal edge and the straight line joining the two ends of this length.	
	Cambrure de Bord		Measured along concave edge. a = rolling direction	
	Kantenwölbung			
	Length	l (mm)	Nominal thickness	Upper
	Longeur		$l < 4000$	0
	Länge		$4000 \leq l < 6000$	0
			$6000 \leq l < 8000$	+40
			$8000 \leq l < 10000$	+50
			$10000 \leq l < 15000$	+75
			$15000 \leq l \leq 20000$	+100

## STEEL GRADES AND QUALITIES

STAHLORTEN UND SONDERGÜTE

NUANCES ET QUALITÉS D'ACIER

BS EN 10025-2	2004	S	355	J2	+	C	+	Z35	+	M
---------------	------	---	-----	----	---	---	---	-----	---	---

S	=	Structural Steel
E	=	Engineering Steel

C	Cold Flanging Suitable
GC	Cold Flanging Unsuitable
H	Hollow Section

235	=	Min. Yield Strength in MPa	
275	=	Min. Yield Strength in MPa	(Mild Steel)
355	=	Min. Yield Strength in MPa	
420	=	Min. Yield Strength in MPa	
460	=	Min. Yield Strength in MPa	

Z15	Min. 15% Reduction of Area
Z25	Min. 25% Reduction of Area
Z35	Min. 35% Reduction of Area

Min 27J	Min 40J	Temp °C
JR	KR	20
J0	K0	0
J2	K2	-20

L	For Low Temperatures
M	Thermomechanical Rolling
N	Normalised Rolling
W	Weathering
G	Impact Properties 1-3
AR	As Rolled



## STEEL GRADES AND QUALITIES

STAHLORTEN UND SONDERGÜTE

NUANCES ET QUALITÉS D'ACIER

### Mild Steel

Mild steel is the most common form of steel because its price is relatively low whilst it provides material properties that are acceptable for many applications. This steel usually contains less than 0.25% of carbon and insignificant amounts of alloying elements. The material exhibits good weldability properties and is used in most general fabrication and structural steel applications.

### Weichstahl

Weichstahl ist die am häufigsten hergestellte Stahlsorte, da sie relativ preiswert ist und dennoch Materialeigenschaften besitzt, die sich vielseitig einsetzen lassen. Dieser Stahl besitzt gewöhnlich weniger als 0,25% Kohlenstoff und geringe Mengen an Legierungselementen. Das Material lässt sich leicht schweißen und wird in der allgemeinen Fabrikation und als Konstruktionsmaterial eingesetzt.

### Aciers doux

L'acier doux est la forme la plus courante car son prix est relativement faible, et le matériau présente des propriétés compatibles avec de nombreuses applications. Cet acier contient généralement moins de 0,25% de carbone et une quantité négligeable d'éléments d'alliage. Le matériau présente une bonne soudabilité, et il est utilisé dans la plupart des applications de fabrication générale et structurelles en acier.

### Structural Steels

S235JR  
S235JO  
S235J2  
S275JR  
S275JO  
S275J2  
S355JR  
S355JO

S355J2  
S355K2  
S450JO

### Fine Grain Structural Steels

S275M  
S355M  
S355ML  
S460M  
S460ML

### High Yield Steels

High yield steel is another low carbon steel also typically containing less than 0.25% of carbon but the steel strength is increased through the addition of manganese and/or vanadium. This type of steel can also be further enhanced through small additions of molybdenum, niobium and titanium. This material again exhibits good weldability properties and is used in more demanding structural applications.

### Hochfeststahl

Hochfeststahl ist eine weitere kohlenstoffarme Stahlsorte mit einem Kohlenstoffanteil von weniger als 0,25%, wobei die Stahlhärte durch die Beigabe von Mangan und /oder Vanadium erhöht wird. Diese Stahlart kann durch geringe Beigaben von Molybdän, Niobium oder Titan verbessert werden. Auch dieses Material besitzt gute Schweißbarkeitseigenschaften und wird bei anspruchsvoller Konstruktionen eingesetzt.

### Aciers à haut limite d'élasticité

L'acier à haute limite d'élasticité est un autre type d'acier à faible teneur en carbone qui, comme l'acier doux, contient généralement moins de 0,25% de carbone, mais dont la résistance est accrue par l'addition de manganèse et/ou de vanadium. Ce type d'acier peut encore être amélioré en ajoutant de petites quantités de molybdène, de niobium et de titane. Ce matériau présente, lui aussi, une bonne soudabilité et il est utilisé dans les applications structurelles plus exigeantes.

### Carbon Steels

Carbon steels which can successfully undergo heat-treatment have a carbon content in the range of 0.30-1.70%. This type of material is generally very strong with high levels of wear resistance. The material is often used for hot forging/pressing components such as hand tools. Material in the higher band of carbon is also used for making high strength wires for applications such as spring steel.

### Baustahl

Diese unlegierte Stahlsorte kann Wärmebehandlungen problemlos standhalten und besitzt einen Kohlenstoffanteil von 0,3 - 1,7%. Diese Stahlsorte mit einem hohen Grad an Verschleißfestigkeit ist gewöhnlich sehr hart. Das Material wird oft für das Warmeschmieden / Warmpressen von Komponenten wie Handwerkzeug eingesetzt. Stahlsorten mit höherem Kohlenstoffanteil werden zudem für die Herstellung von hochfesten Drähten, wie etwa für Federstahl, verwendet.

### Aciers au carbone

Les aciers au carbone, aptes à supporter un traitement thermique, ont une teneur en carbone comprise entre 0,30 et 1,70%. Pour ce type de matériau, généralement très robuste, les niveaux de résistance à l'usure sont très élevés. Il est souvent utilisé pour le forgeage/estampage à chaud de pièces comme les outils à main. L'acier dont la teneur en carbone se situe dans la tranche supérieure est également utilisé pour la fabrication de fils à haute résistance utilisés dans des applications telles que les ressorts.

### Structural Steels for Low Temperature Applications

S355G1  
S355G4+M  
S355G11+M  
S355G12+M  
S460G3+M  
S460G4+M

### Boron Steels

Boron steel is a grade of steel that can be processed at high temperatures by heating in a furnace and pressing whilst still hot, using a cooled tool. The rapid cooling rate transforms the microstructure to form a very hard, tough and durable steel. This type of material is used to form wear parts and for other applications where exceptional strength and wearability properties are required.

### Borstahl

Borstahl ist eine Stahlsorte, die sich im Hochofen bei höheren Temperaturen verarbeiten lässt, wo sie noch heiß mit einem kalten Werkzeug gepresst wird. Durch die schnelle Kühlung wird die Mikrostruktur verändert und es entsteht ein sehr harter, fester und haltbarer Stahl. Das Material wird zur Herstellung von Verschleißteilen und in anderen Einsatzbereichen verwendet, die außerordentliche Härte und Abnutzbarkeit erfordern.

### Aciers au bore

L'acier au bore est une catégorie d'acier qui peut être chauffée à haute température dans un four et subir un estampage à chaud, à l'aide d'un outil refroidi. Le refroidissement rapide transforme la microstructure pour former un acier très dur, résistant et durable. Ce type de matériau est utilisé pour fabriquer des pièces d'usure et pour d'autres applications qui exigent une solidité et une résistance à l'usure exceptionnelles.

### Case Hardening Steels

C10E

C10R  
C15E  
C15R

### Medium to High Carbon Steels

C35

C45

C55

C60

C35E

C35R

C45E

C45R

C55E

C55R

C60E

C60R

### Engineering Steels

Engineering Steels, also known as Special Bar Quality steels, represents a wide variety of higher-quality carbon, alloy and free cutting bars that are used in the forging, machining and cold-drawing industries for the production of automotive parts, hand tools, electric motor shafts and valves. These materials generally contain higher alloy content than the commodity grades and are produced with more precise dimensions and chemistry.

### Maschinenbaustahl

Maschinenbaustahl, auch Stabstahl oder Special Bar Qualities, stellt eine breite Auswahl an hochwertig legierten, kohlenstoffhaltigen und Automatenstahlbalken dar, die in der Schmiede-, Maschinenbearbeitungs- und Kaltstreckenindustrie zur Herstellung von Kraftfahrzeugteilen, Handwerkzeugen sowie Wellen und Ventilen von Elektromotoren verwendet werden. Das Material enthält im Allgemeinen höhere Legierungsanteile als gewöhnliche Stahlsorten und wird mit präziseren Abmessungen und nach genauen chemischen Vorgängen hergestellt.

### Aciers mécaniques

L'acier mécanique, également connu sous le nom de barres de qualité spéciale, correspond à une grande variété de tréfilés en acier au carbone et alliés de qualité supérieure utilisés dans la fabrication par étirage à froid, par forgeage et par usinage de pièces automobiles, d'outils à main, d'arbres de moteur électrique et de vannes. Généralement, ces matériaux ont une teneur en alliages plus élevée et sont produites dans des dimensions plus précises et par une chimie plus fine.

**STEEL GRADE COMPARISON TABLE**

VERGLEICHSTABELLEN DER STAHLGÜTE

TABLEAUX DE COMPARAISON DES NUANCES D'ACIER

Current Standard Die Aktuellen Normen Norme actuelle	Previous Standards Die Vorherigen Normen Norme précédente					
EN 10025-2 2004	EN 10025 1990 +A1:1993	EN 10025 1990	NF A 35-501	DIN 17100	BS 4360	UNE 36 080 NBN A21-101
	S235JR	Fe360B	E24-2	St37-2		AE235B
	S235JRG1	Fe360BFU		Ust37-2		AE235B-FU
S235JR	S235JRG2	Fe360BFN		RSt37-2	40B	AE235B-FN
S235JO	S235JO	Fe360C	E24-3	St37-3U	40C	AE235C
	S235J2G3	Fe360D1	E24-4	St24-4	40D	AE235D
S235J2	S235J2G4	Fe360D2				
S275JR	S275JR	Fe430B	E28-2	St44-2	43B	AE255B
S275JO	S275JO	Fe430C	E28-3	St44-3U	43C	AE255C
	S275J2G3	Fe430D1	E28-4	ST33-3N	43D	AE255D
S275J2	S275J2G4	Fe430D2				
S355JR	S355JR	Fe510B	E36-2		50B	AE355B
S355JO	S355JO	Fe510C	E36-3	St52-3U	50C	AE355C
	S355J2G3	Fe510D1		St52-3N	50D	AE355D
S355J2	S355J2G4	Fe510D2				
	S355K2G3	Fe510DD1	E36-4		50DD	AE355-DD
S355K2	S355K2G4	Fe510DD2				
S450JO					55C	
E295	E295	Fe490-2	A50-2	St50-2		A490-2
E335	E335	Fe590-2	A60-2	St60-2		A590-2
E360	E360	Fe690-2	A70-2	St70-2		A690-2

# STEEL GRADE COMPARISON TABLE

VERGLEICHSTABELLEN DER STAHLGÜTE

TABLEAUX DE COMPARAISON DES NUANCES D'ACIER

Previous Standards Die Vorherigen Normen Norme actuelle				American	Canadian	Japanese	Current Standard Die Aktuel- len Normen Norme actuelle
UNI 7070	Ss 14	NS 12 101	ONORM M1316	ASTM	CSA G 40-21	JIS G 3101 JIS G 3106	EN 10025-2 2004
Fe360B	1311-00	NS12120					
		NS12122	Ust360B				
	1312-00	NS12123	RSt360B				S235JR
Fe360C		NS12123	St360C				S235JO
			St360CE				
Fe360 D		NS12124	St360D				
				A36	260W	SS400	
						SM400	
						A/B/C	
Fe430B	1412-00	NS12142	St430B			SS400	S275JR
Fe430C		N12143	St430C				S275JO
			St430CE				
Fe430D	1414-00	NS12143	St430D				
	1414-01						S275J2
					300W		
Fe510B				A572	350W	SS490	S355JR
				Gr50			
				A992			
				Gr50			
Fe510C	2132-01	NS12153	St510C				S355JO
Fe510D		NS12153	St510D				
	2134-01						S355J2
							S355K2
							S450JO
Fe490	1550-00/-01		St490				E295
Fe590	1650-00/01		St590				E335
Fe690	1655-00/01		St690				E360

# SERVICES

## SERVICE

## SERVICES

### ADVICE

For any advice about steel, please do not hesitate to call on our extensive knowledge of contacts within the industry. If we are unable to supply or advise we will always try to put you in touch with the right people.

### CREDIT FACILITIES

Subject to some simple credit information, we will be able to open an account in your name making it easier for you to buy your steel requirements from us on open terms.

### PRICES

We seek to give all our customers the best value for money in the steel industry. We are continually working to reduce prices through a world search for new creditable suppliers and we are constantly making improvements to our own operating systems to maximise efficiency.

### QUALITY

All our steel is bought from mills that hold the appropriate accreditation and certification standards and all material is thoroughly inspected at the time each vessel discharges. All our systems are also geared to ensure that you get the right quality at the right time.

### DELIVERIES

Most of our haulage is contracted out to Groveport Logistics Ltd, which provides perfect integration as this company also manages our stock. By working with our sister companies we can also fall back on the support of our own fleet of wagons ensuring steel deliveries to your door when you want it.

All Steels Trading Ltd has the benefit of linking up with sister companies from where it can offer a multitude of downstream processing services including the following:

### CUTTING TO LENGTH

Our sister company has invested heavily in new cutting facilities providing access to several semi-automatic saws capable of straight, mitre and bundle cutting all sizes up to 1016 mm wide. From this facility we can also offer individual marking and identification as well as bundling into kit form to enable you to process the steel more efficiently.

### DECOILING

We buy wire rod and flat rolled steel in coil form that can be cut to your exact length requirements. Please ask our sales team for more information.

### PICKLE AND OILING

Material is normally supplied in the dry as rolled state. However for applications where a clean lubricated steel is required we can offer material that is pickled in an acid bath and then protected with an oil coating.



In March 2017 the company was awarded the prestigious certification of BSI ISO 9001:2015.



**SERVICES**

SERVICE

SERVICES

**SHOTBLASTING AND PAINTING**

Through our association with a sister company we have access to a new Gietart shotblasting and preservation line enabling us to supply primer painted products that are ready for fabrication. EEC regulations now insist on the use of water based paints and this machine is one of the first in the UK to offer this important environmentally friendly feature.

**STRAIGHTENING**

Many applications demand a perfect level of straightness. Through trade partners All Steels Trading can arrange for material to be either bump straightened or roller straightened to a tolerance of 1.25 mm/m.

**WRAPPING AND CONTAINER STUFFING**

We can export mark material and wrap the goods for added protection whilst in transit. We also have the ability to stuff containers in our own warehouse and this will always ensure that our material meets our clients in an excellent condition.

We are proud of our friendly, cheerful approach and our reputation for making the customer's job as easy as possible. You can depend on us to provide the service you need.

## BERATUNG

Sollten Sie Rat rund um das Thema Stahl benötigen, können Sie gerne auf unser weitreichendes Fachwissen und unsere zahlreichen Branchenkontakte zurückgreifen. Sollten wir das gewünschte Produkt nicht selbst liefern oder die gesuchte Antwort nicht kennen, setzen wir Sie gerne mit den richtigen Stellen in Verbindung.

## KREDITGEWÄHRUNG

Nach Überprüfung einiger simpler Kreditangaben können wir ein Konto in Ihrem Namen öffnen, damit Sie Ihre Einkäufe durch flexible Bedingungen noch bequemer tätigen können.

## PREISE

Wir bemühen uns, unseren Kunden das beste Preis-Leistungsverhältnis der Stahlindustrie zu bieten. So sind wir stets darauf bedacht, unsere Preise zu reduzieren, indem wir weltweit Ausschau nach neuen seriösen Zulieferern halten und unsere eigenen Betriebssysteme kontinuierlich verbessern, um eine optimale Effizienz zu erzielen.

## QUALITÄT

Unser Stahl stammt fast ausschließlich aus Stahlwerken mit den notwendigen Qualitätssiegeln und Zertifizierungsstandards. Alle Materialien durchlaufen nach Entladen der Schiffe eine gründliche Qualitätskontrolle. Sämtliche Kontrollsysteme unseres Unternehmens zielen darauf ab, Ihnen die richtige Qualität zur richtigen Zeit zu gewährleisten.

## LIEFERUNG

Da die meisten unserer Transporte von der Groveport Logistics Ltd übernommen werden, die auch unsere Lager verwaltet, ist eine optimale Vernetzung beider Bereiche garantiert. Durch die Zusammenarbeit mit unseren Schwesterunternehmen können wir auch auf unseren eigenen Fuhrpark zurückgreifen, um Ihnen Ihre Stahlerzeugnisse bis vor die Werktoore zu liefern, wann immer Sie sie benötigen.

---

Dank der Zusammenarbeit mit unseren Schwesterunternehmen kann All Steels Trading Ltd eine Vielzahl an Weiterverarbeitungsdiensten anbieten, wie zum Beispiel:

## ZUSCHNEIDEN

Unser Schwesterunternehmen hat umfangreiche Investitionen in neue Schneidevorrichtungen unternommen und verfügt über mehrere halbautomatische Sägen für gerade, Gehrungs- oder Bündelschnitte von Teilen bis zu einer Breite von 1016 mm. Hierdurch können wir auch individuelle Markierungen und Kennzeichnungen sowie das Bündeln in Bausatzform anbieten, um Ihnen eine effizientere Weiterverarbeitung zu ermöglichen.

## WALZENABWICKLUNG

Wir kaufen spiralförmig aufgerollten Walzdraht und Flachstahl ein, der exakt auf die von Ihnen gewünschte Länge zugeschnitten werden kann. Unser Verkaufsteam informiert Sie gern.

## BEIZEN UND ÖLEN

Die meisten Materialien werden im trockenen Walzzustand geliefert. Für Anwendungen, die zur Weiterverarbeitung sauberen, geölten Stahl benötigen, können wir jedoch auch Materialien anbieten, die in einem Säurebad abgebeizt und anschließend mit einem Ölfilm geschützt wurden.

## STRAHLPUTZ UND ANSTRICH

Dank der Zusammenarbeit mit einem unserer Schwesterunternehmen haben wir Zugang zu einer neuen Gietart Strahl - und Konservierungsanlage, mit der wir vorangestrichene, produktionsbereite Erzeugnisse liefern können. Aktuelle EGW-Richtlinien erfordern die Benutzung von wasserbasierten Farben und diese Maschine ist eine der ersten im Vereinigten Königreich, die diese wichtige umweltfreundliche Funktion anbietet.

## RICHTEN

Zahlreiche Anwendungen erfordern perfekte Geradheit. Über seine Handelspartner kann All Steels Trading veranlassen, dass das Material durch Stöße oder Rollen bis zu einer Toleranz von 1,25 mm pro Meter gerichtet wird.

## VERPACKEN UND LADEN VON CONTAINERN

Wir können für den Export vorgesehenes Material entsprechend kennzeichnen und die Waren so verpacken, dass sie während des Transports optimal geschützt sind. Außerdem haben wir die Möglichkeit, Container in unserem eigenen Lager zu beladen, sodass stets gewährleistet ist, dass unsere Waren den Kunden in einwandfreiem Zustand erreichen.

Wir sind stolz darauf, freundlich und gut gelaunt auf unsere Kunden und Geschäftspartner zuzugehen, und dafür bekannt zu sein, es dem Kunden so einfach wie möglich zu machen. Bei uns können Sie sich darauf ver

Im März 2017 wurde dem Unternehmen die angesehene Akkreditierung des BSI ISO 9001:2015 zuerkannt.



## SERVICES

SERVICE

SERVICES

### CONSEILS

Pour tout conseil sur nos aciers, n'hésitez pas à faire appel aux connaissances très poussées de nos contacts du secteur. Si nous ne sommes pas en mesure de vous livrer ou de vous conseiller, nous nous efforcerons de vous mettre en contact avec les bons interlocuteurs.

### FACILITÉS DE CRÉDIT

Sous réserve de quelques informations de base relatives au crédit, nous serons en mesure de mettre en place un compte client ouvert qui vous permettra de vous approvisionner chez nous au fur et à mesure de vos besoins en acier.

### PRIX

Nous cherchons à offrir à tous nos clients le meilleur rapport qualité-prix sur le marché sidérurgique. Nous nous efforçons continuellement de réduire les prix en recherchant de nouveaux fournisseurs fiables et en apportant des améliorations constantes à nos propres systèmes d'exploitation pour optimiser l'efficacité.

### QUALITÉ

La quasi-totalité de nos aciers proviennent d'aciéries homologuées et certifiées aux normes appropriées et tous les matériaux sont soigneusement inspectés au déchargement de chaque navire. De plus, tous nos systèmes sont adaptés pour que vous receviez la bonne qualité au bon moment.

### LIVRAISONS

La plupart de nos transports sont confiés à l'entreprise Groveport Logistics Ltd, ce qui permet une intégration parfaite des services car cette société gère également notre stock.

En collaboration avec nos sociétés sœurs, nous pouvons également compter sur notre propre parc de wagons pour assurer la livraison des aciers à votre porte au moment qui vous convient.

### COUPE À LA LONGUEUR

Notre société sœur a réalisé des investissements importants dans une nouvelle installation de coupe, nous permettant d'accéder à plusieurs scies semi-automatiques capables de coupes droites, d'onglets et de fardeaux dans toutes les tailles et jusqu'à 1016 mm de largeur. Depuis cette facilité, nous sommes également en mesure de proposer un marquage et une identification individuels, ainsi que le bottelage sous forme de kit vous permettant de transformer l'acier plus efficacement.

### DÉROULAGE

Nous achetons du fil machine et de l'acier laminé plat sous forme de rouleau qui peuvent être coupés selon vos besoins exacts. Veuillez contacter notre équipe de ventes pour de plus amples renseignements.

### DÉCAPAGE ET HUILAGE

Le matériau est normalement fourni sec en laminé. Toutefois pour les applications nécessitant un acier lubrifié propre, nous pouvons procurer un matériau décapé dans un bain acide, puis protégé par un revêtement d'huile.

### GRENAILLAGE ET PEINTURE

Grâce à notre partenariat avec une société sœur, nous avons accès à une nouvelle ligne Gietart de grenaillage et de conservation, nous permettant de fournir des produits revêtus d'un vernissage primaire, prêts à la fabrication. Les réglementations de la CEE insistent désormais sur l'utilisation de peintures à base d'eau et cette machine est l'une des premières du Royaume-Uni à proposer cette fonction importante, respectueuse de l'environnement.

### REDRESSAGE

De nombreuses applications exigent un niveau parfait de rectification. Par le biais de ses partenaires commerciaux, All Steels Trading peut arranger le redressage par presse ou le redressement par rouleau selon une tolérance de 1,25 mm par mètre.

### EMBALLAGE ET EMPOTAGE DE CONTENEUR

Nous sommes capables d'exporter les matériaux marqués et d'envelopper les produits pour plus de protection lors du transit. Nous pouvons également empoter les conteneurs dans notre propre entrepôt, ce qui assure que nos matériaux arrivent toujours en excellente condition chez nos clients.

Nous sommes fiers de notre approche amicale et réjouie et de la réputation qui nous dépeint comme facilitant le plus possible le travail du client. Vous pouvez compter sur nous pour vous fournir le service dont vous avez besoin.



En mars 2017, la société a obtenu la prestigieuse certification BSI ISO 9001:2015.

## LOGISTICS AND MAP

All Steels Trading offers a wide range of stock for direct delivery to customers from the dockside point of arrival, which minimises the typical double handling of steel through large inland warehouses.

Outsourced logistical services are fully utilised to facilitate a low risk rapid expansion strategy, which includes the management of shipping, discharge to docks, inspection, warehousing, stock management, transport and delivery documentation.

For deliveries to the UK market All Steels Trading uses a combination of contract haulage and its own vehicles. This approach provides a very cost effective solution and the ability to respond to both fluctuations in demand and emergency situations where we have full control of our own vehicle movements.

Storage in the UK also offers a distinct logistical advantage for servicing the mainland European market as vessel discharge and storage costs are much cheaper when compared to other European countries. Moreover imported goods delivered into the UK on trailers far outweighs the return of goods to mainland Europe so All Steels can benefit from very competitively priced backloads for servicing most mainland European countries.

Stock deliveries to UK customers are normally achieved within 48 hours from time of order and by using a combination of the Channel Tunnel and frequent roll-on roll-off ferry services most mainland European deliveries can be achieved in 3-4 days from date of order.

## LOGISTIK UND KARTE

All Steels Trading verfügt über weitreichende, nach Ankunft im Hafen direkt an Kunden lieferbare Warenbestände und ist so in der Lage, die typische doppelte Bearbeitung des Stahls in großen Inlandwarenhäusern zu minimieren.

Wir nutzen ausgelagerte Logistikdienste zur Förderung einer risikoarmen, schnellen Expansionsstrategie, die Versandmanagement, Entladen am Hafen, Prüfung, Lagerhaltung, Lagerverwaltung, Transport und Liefernachweise umfasst.

Für die Belieferung des britischen Marktes setzt All Steels Trading eine Kombination aus Auftragstransport und eigenen Fahrzeugen ein. Diese Methode stellt eine äußerst kostengünstige Lösung dar, mit der wir durch vollständige Kontrolle unserer Fahrzeuge sowohl auf Nachfragefluktuationen als auch Notfallsituationen reagieren können.

Zudem bietet die Lagerung im Vereinigten Königreich eindeutige Logistikvorteile bei der Belieferung des europäischen Binnenmarktes, da Schiffsentladungs- und Lagerkosten im Vergleich zu anderen europäischen Ländern wesentlich geringer sind. Zudem übertrifft der Warenimport auf LKW-Anhängern nach Großbritannien den Warenexport in das europäische Binnenland bei weitem; auf diese Weise ist All Steels Trading in der Lage, Rückladungen zu wettbewerbsfähigen Preisen zur Belieferung der meisten europäischen Länder zu nutzen.

Warenlieferungen an britische Kunden erfolgen gewöhnlich innerhalb von 48 Stunden nach Auftragsvergabe; durch Nutzung des Eurotunnels sowie häufig verkehrende Roll-on/Roll-off-Fährendienste können die meisten Lieferungen in das europäische Binnenland innerhalb von drei bis vier Tagen nach Auftragsvergabe erreicht werden.

## LOGISTIQUE ET PLAN

All Steels Trading vous propose une large gamme de produits en stock livrés en direct à partir du point d'arrivée à quai, ce qui réduit au minimum le nombre des doubles manutentions habituelles que subissent les aciers lorsqu'ils transitent par les principaux entrepôts de l'hinterland.

Les services logistiques sont entièrement externalisés afin de servir notre stratégie d'expansion rapide à risque réduit, notamment pour la gestion des expéditions maritimes, les déchargements à quai, les inspections, l'entreposage, la gestion des stocks, le transport et la documentation relative aux livraisons.

Pour les livraisons au Royaume-Uni, All Steels Trading utilise ses propres véhicules ou si nécessaire, des transporteurs affrétés. Cette approche offre une solution très rentable et la capacité de répondre à la fois aux fluctuations de la demande et aux situations d'urgence tout en continuant de bien contrôler les mouvements de nos propres véhicules.

Le fait de stocker au Royaume-Uni présente également un net avantage logistique au niveau du marché continental européen étant donné que les frais de déchargement des navires et du stockage sont bien inférieurs à ceux qui sont pratiqués dans les autres pays européens. De plus, la quantité des marchandises diverses importées par camion au Royaume-Uni dépassant les quantités expédiées à destination de l'Europe continentale, All Steels peut bénéficier des retours à des prix très compétitifs pour ses chargements vers la plupart des pays européens situés sur le continent.

Pour les marchandises en stock, les livraisons au Royaume-Uni sont effectuées dans les 24 heures qui suivent la commande et pour les livraisons vers les principales destinations européennes via le tunnel sous la Manche ou par les nombreux services Ro-Ro utilisant les ferries, il faut compter environ 3 à 4 jours à partir de la date de commande.





## NOTES

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