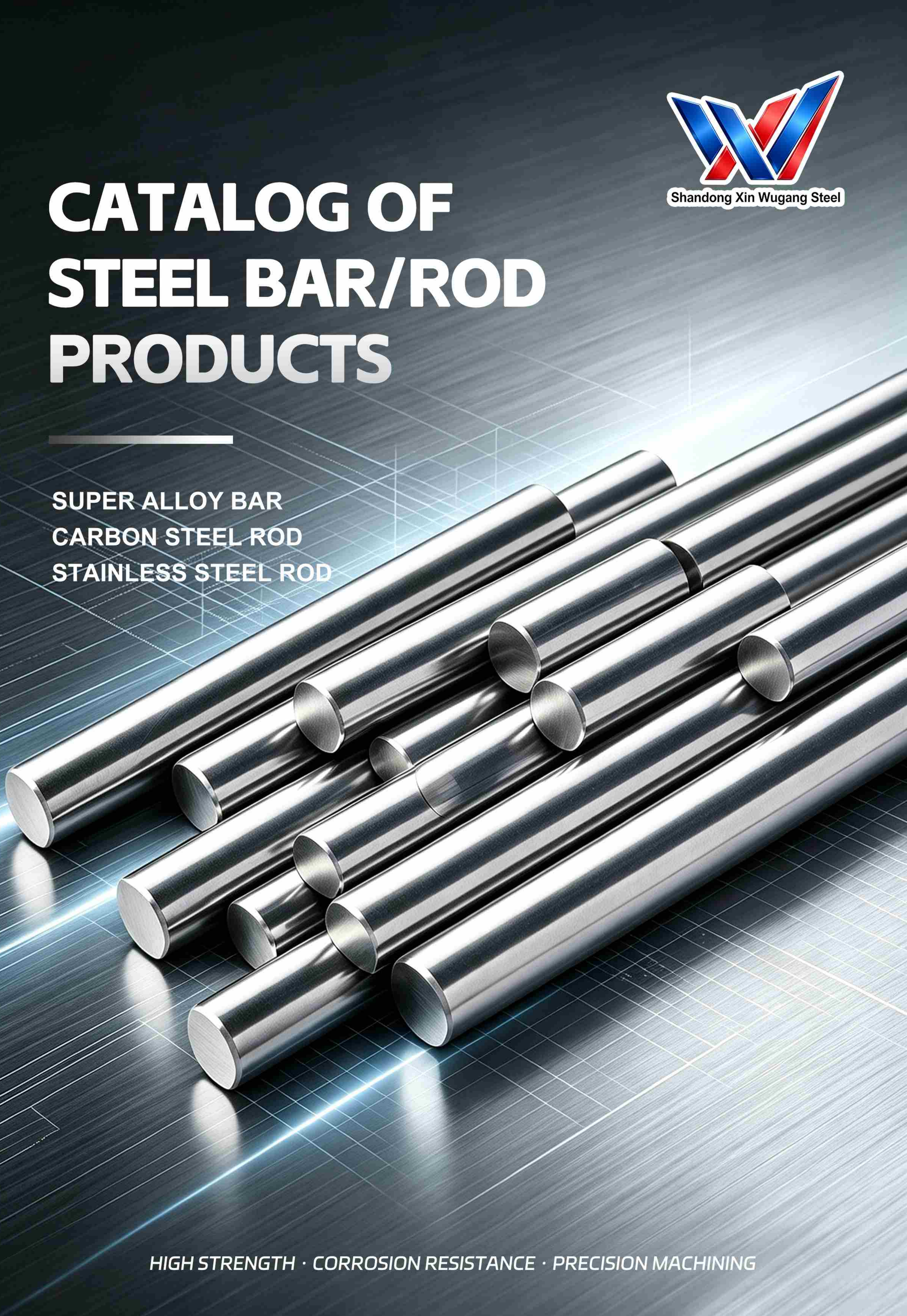
Shandong Xin Wugang Steel

CATALOG OF STEEL BAR/ROD PRODUCTS

SUPER ALLOY BAR
CARBON STEEL ROD
STAINLESS STEEL ROD



HIGH STRENGTH · CORROSION RESISTANCE · PRECISION MACHINING

About us.

山东鑫武钢铁有限公司是一家综合性钢铁企业，深耕钢铁行业多年，依托完善的产业链布局、先进的生产装备、严苛的质量体系和贴心的全域服务，稳步发展为具有竞争力与口碑的标杆型钢铁企业，广泛服务于基建工程、机械制造、汽车工业、钢结构等多个核心领域。公司秉持客户至上、诚信为本、服务为先的经营宗旨，打造一站式全周期贴心服务体系。持续为客户提供高品质钢铁产品与一站式优质服务，致力于打造国内一流的现代化钢铁综合服务商与各界合作伙伴携手共赢、共创未来!

Shandong Xinwugang Steel Co., Ltd. is a comprehensive iron and steel enterprise with years of profound experience in the steel industry. Backed by a complete industrial chain layout, advanced production equipment, stringent quality management systems and thoughtful all-round services, we have steadily grown into a benchmark steel enterprise with strong competitiveness and a solid reputation. Our products widely serve a host of core sectors including infrastructure engineering, machinery manufacturing, automobile industry and steel structure construction.

Adhering to the business tenets of "customer supremacy, integrity-based operation and service first", the company has built a one-stop full-cycle considerate service system. We consistently supply high-quality steel products and all-in-one premium services to clients, and strive to become a first-class modern comprehensive steel service provider nationwide. We look forward to win-win cooperation and a shared bright future with all partners from all walks of life!

The most dynamic enterprise
and leader in the steel trading industry.

最具活力企业，钢铁贸易行业的领导者。



CONSTRUCTION BAR

Product Description

♦ STEEL REBAR







Description- Steel Rebar :

Standard: GB 1499.2-2018、ASTM A615/A706、EN 10080、BS 4449、JIS G3112、ISO 6935

Grade:

① Chinese National Standard GB 1499.2

HRB400、HRB400E、HRB500、HRB500E、HPB300

② ASTM A615/A706

Grade 40、Grade 60、Grade 75、A706

③ European standard EN 10080

B450C、B500A、B500B、B500C

④ British Standard BS 4449

Grade 460、Grade 500

⑤ Japanese Standard JIS G3112

SD295、SD345、SD390、SD490

⑥ Australian Standard AS/NZS 4671

300N、500N

Standard Size:

Rebar (ribbed) threaded steel bar

Nominal diameter mm: 6, 8, 10, 12, 14, 16, 18, 20, 22, 25, 28, 32, 36, 40, 50

Fixed length: 9m, 12m (global engineering standard fixed length); It can be cut into non-standard lengths of 3-18m as needed.

Round HPB300 straight bar/disc: Φ 6~Φ 22mm.

Packaging: Straight bundling; Fine specifications can be delivered in hot-rolled coils.

Surface : Hot rolled raw material with oxide scale; Rust removal and epoxy coated rebars can be used for coastal high corrosion infrastructure as needed.

Application:

Civilian residential buildings, commercial office buildings, bridges and tunnels, highway subgrade and bridge piers, high-speed rail infrastructure, airport venues, port terminals, reservoir dams, under-

Product Description

WIRE ROD



Description- Wire Rod :

Standard: GB/T 14981、ASTM A510、EN 10263、JIS G3505、JIS G3506

Grade:

① Ordinary low-carbon brushed grade

National standards: Q195, Q235, SAE1008, SAE1010;

European standards: SWRM6, SWRM8;

Japanese standard SWRCH6A, SWRCH8A.

②Medium carbon quenched and tempered grade

SAE1018、1022、1035、1045； SWRCH35K、SWRCH45K。

Special for cold heading fasteners

ML08Al、ML35、ML40Cr； SWRCH18A、SWRCH22A、SWRCH45K。

③High carbon steel wire tire cord grade

65#、70#、82B

Standard Size:

Nominal diameter of wire rod: 5.5mm, 6.0mm, 6.5mm, 8.0mm, 10mm, 12mm, 14mm, 16mm

Single roll weight: 1.5~2.5 tons/roll; Inner diameter 850mm/1100mm; Large volumes can be divided into small volumes.

Application:

①Low carbon Q195/Q235: galvanized iron wire, packing wire, welding electrode core wire, nail making, wire mesh, building binding wire;

②Medium carbon SWRCH series: bolts and nuts, rivets, cold heading fasteners, metal stamping parts;

③82B high carbon: prestressed steel strand, bridge steel cable, steel wire rope, spring steel wire, tire cord, piano steel wire

PRODUCIBLE STANDARDS

Chinese Standards

REBAR

	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)		
Grade	C	Si	Mn	P	S	N	CEV (1)	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio
HPB300	0.25	0.55	1.50	0.045	0.045	—	—	300	420	—
HRB400	0.25	0.80	1.60	0.045	0.045	—	0.54	400	540	—
HRB400E	0.25	0.80	1.60	0.045	0.045	—	0.54	400	540	1.25
HRB500	0.25	0.80	1.60	0.045	0.045	—	0.55	500	630	—
HRB500E	0.25	0.80	1.60	0.045	0.045	—	0.55	500	630	1.25
HRB600	0.28	0.80	1.60	0.045	0.045	—	0.60	600	730	—

GB/T 1499.1 – 2017, GB/T 1499.2 – 2018

Standard ES: 262 – 2/2015, ISO: 6935 – 2:2007

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
B300A-R										1.02		2
B300B-R										1.08		5
B300C-R	–	–	–	0.06	0.06	–	–	300	–	1.15	16	7
B300D-R	–	–	–	0.05	0.05	–	–	300				
B300DWR	0.27	0.55	1.5	0.04	0.04	0.012	0.49	300–390	–	1.25	17	8
B350DWR	0.27	0.55	1.6	0.04	0.04	0.012	0.51	350–455	–	1.25	17	8
B400A-R										1.02		2
B400B-R										1.08		5
B400C-R	–	–	–	0.06	0.06	–	–	400	–	1.15	14	7
B400AWR										1.02		2
B400BWR										1.08		5
B400CWR	0.22	0.6	1.6	0.05	0.05	0.012	0.5	400	–	1.15	14	7
B400DWR	0.29	0.55	1.8	0.04	0.04	0.012	0.56	400–520	–	1.25	17	8
B420DWR	0.3	0.55	1.5	0.04	0.04	0.012	0.56	420–546	–	1.25	16	8
B500A-R										1.02		2
B500B-R										1.08		5
B500C-R	–	–	–	0.06	0.06	–	–	500	–	1.15	14	7
B500AWR										1.02		2
B500BWR										1.08		5
B500CWR	0.22	0.6	1.6	0.05	0.05	0.012	0.5	500	–	1.15	14	7
B500DWR	0.32	0.55	1.8	0.04	0.04	0.012	0.61	500–650	–	1.25	13(2)	8

PRODUCIBLE STANDARDS

International Standards: ISO 6935-1:2007

REBAR

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
B240A-P										1.02		2
B240B-P										1.08		5
B240C-P	–	–	–	0.06	0.06	–	–	240	–	1.15	20	7
B240D-P	–	–	–	0.05	0.05	–	–	240	520 max.	1.25	22	8
B300A-P										1.02		2
B300B-P										1.08		5
B300C-P	–	–	–	0.06	0.06	–	–	300	–	1.15	16	7
B300D-P	–	–	–	0.05	0.05	–	–	300	600 max.	1.25	19	8
B420D-P	0.3	0.55	1.5	0.04	0.04	0.012	0.56	420–540	–	1.25	16	8

International Standards: ISO 6935-2:2019

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
B300A-R										1.02		2
B300B-R										1.08		5
B300C-R	–	–	–	0.06	0.06	–	–	300	–	1.15	16	7
B300D-R	–	–	–	0.05	0.05	–	–	300				
B300DWR	0.27	0.55	1.5	0.04	0.04	0.012	0.49	300–390	–	1.25	17	8
B350DWR	0.27	0.55	1.6	0.04	0.04	0.012	0.51	350–455	–	1.25	17	8
B400A-R										1.02		2
B400B-R										1.08		5
B400C-R	–	–	–	0.06	0.06	–	–	400	–	1.15	14	7
B400D-R	0.29	0.55	1.6	0.04	0.04	–	0.55	400–520	–	1.25	17	8
B400AWR										1.02		2
B400BWR										1.08		5
B400CWR	0.22	0.6	1.6	0.05	0.05	0.012	0.5	400	–	1.15	14	7
B400DWR	0.29	0.55	1.8	0.04	0.04	0.012	0.56	400–520	–	1.25	17	8
B420DWR	0.3	0.55	1.5	0.04	0.04	0.012	0.56	420–546	–	1.25	16	8
B450AWR										1.05		2.5
B450CWR	0.22	–	–	0.05	0.05	0.012	0.5	450-562	–	1.15	–	7.5
B500A-R										1.02		2
B500B-R										1.08		5
B500C-R	–	–	–	0.06	0.06	–	–	500	–	1.15	14	7
B500D-R	0.32	0.55	1.8	0.04	0.04	–	0.6	500–625	–	1.25	13	8
B500AWR										1.02		2
B500BWR										1.08		5
B500CWR	0.22	0.6	1.6	0.05	0.05	0.012	0.5	500	–	1.15	14	7
B500DWR	0.32	0.55	1.8	0.04	0.04	0.012	0.61	500–650	–	1.25	13 [2]	8

American Standards: ASTM A706M -16

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
Grade 60								420–540	550		10–14	
Grade 80	0.3	0.5	1.5	0.035	0.045	–	0.55	550–675	690	1.25	10–12	–

PRODUCIBLE STANDARDS

American Standards: ASTMA615M-16

REBAR

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
Grade 40								280	420		11–12	
Grade 60								420	620		7–9	
Grade 75								520	690			
Grade 80	–	–	–	0.06	–	–	–	550	725	–		–
Grade 100								690	790		6–7	

American Standards: ASTMA615M-18ε1

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
Grade 40								280	420		11–12	
Grade 60								420	620		7–9	
Grade 80	–	–	–	0.06	–	–	–	550	725	–		–
Grade 100								690	790		6–7	

American Standards: ASTMA510M-18

Grade	Chemical Composition (Maximum %)				
	C	Si	Mn	P MAX	S MAX
AISI 1006	0.08 max.		0.25–0.45	0.04	0.05
AISI 1008	0.10 max.		0.30–0.50	0.04	0.05
AISI 1010	0.08–0.13		0.30–0.60	0.04	0.05
AISI 1012	0.10–0.15		0.30–0.60	0.04	0.05
AISI 1013	0.11–0.16		0.50–0.80	0.04	0.05
AISI 1015	0.13–0.18		0.30–0.60	0.04	0.05
AISI 1018	0.15–0.20		0.60–0.90	0.04	0.05
AISI 1022	0.18–0.23		0.70–1.00	0.04	0.05
AISI 1023	0.20–0.25		0.30–0.60	0.04	0.05
AISI 1025	0.22–0.28		0.30–0.60	0.04	0.05
AISI 1030	0.28–0.34		0.60–0.90	0.04	0.05
AISI 1037	0.32–0.38		0.70–1.00	0.04	0.05
AISI 1042	0.40–0.47		0.60–0.90	0.04	0.05
AISI 1045	0.43–0.50		0.60–0.90	0.04	0.05
AISI 1050	0.48–0.55		0.60–0.90	0.04	0.05
AISI 1055	0.50–0.60		0.60–0.90	0.04	0.05
AISI 1059	0.55–0.65		0.50–0.80	0.04	0.05
AISI 1060	0.55–0.65		0.60–0.90	0.04	0.05
AISI 1064	0.60–0.70		0.50–0.80	0.04	0.05
AISI 1065	0.60–0.70		0.60–0.90	0.04	0.05
AISI 1070	0.65–0.75		0.60–0.90	0.04	0.05

(1) If required, copper can be specified as 0.20% minimum.
(2) Where silicon is required, one of the following ranges and limits are commonly specified: (max 0.10%), (0.10–0.20%), (0.15–0.35%), (0.15–0.40%), or (0.20–0.40%).

PRODUCIBLE STANDARDS

REBAR

British Standard: BS: 4449/2005 + A3:2016

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
B500A										1.05(2)	–	2.5(3)
B500B										1.08	–	5
B500C	0.22	–	–	0.05	0.05	0.012	0.5	500–650	–	≥ 1.15, < 1.35	–	7.5

(1) Maximum copper content = 0.80%.
(2) For sizes below 8 mm, the tensile strength to yield strength ratio is 1.02.
(3) For sizes below 8 mm, Agt is 1.0%.

French Standard: NF A 35-016: 1996

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
FeE500-2										1.03	–	2.5
FeE500-3	0.22	–	–	0.05	0.05	0.012	0.5	500	–	1.08	–	5

French Standard: NF A 35-080-1: 2013

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
B500A										1.05		2.5
B500B								500–650	–	1.08	–	5
B450B	0.22	–	–	0.05	0.05	0.012	0.5	450–585	–	1.08	–	5
B450C								450–562	–	1.15–1.35	–	7.5

(1) Maximum copper content = 0.80%.

Canadian Standard: CSA G30.18-09 (R2019)

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
400R	–	–	–	0.05	–	–	–	400	540	1.15	7–10	–
500R								500	675	1.15	6–9	–
400W	0.3	0.5	1.6	0.035	0.045	–	0.55	400–525	540	1.15	12–13	–
500W								500–625	625	1.15	10–12	–

(1) Minimum elongation values depend on produced size.

Ukrainian Standard: DSTU 3760:2006

Grade	Chemical Composition (Maximum %)							Mechanical Properties (Minimum)				
	C	Si	Mn	P	S	N	CEV	Yield Strength (MPa)	Tensile Strength (MPa)	Tensile to Yield Ratio	El.(%)	Agt (%)
A400S							0.25–0.52	400	500	1.05	16	5
A500S	0.25	–	–	0.045	0.05	0.012	0.30–0.52	500	600	1.05	14	5

(1) Maximum arsenic content = 0.08%.

PRODUCIBLE STANDARDS

American Standard: ASTM A510M - 18

WIRE ROD

Grade	Chemical Composition (Maximum %)				
	C	Si	Mn	P MAX	S MAX
AISI 1006	0.08 max.		0.25–0.45	0.04	0.05
AISI 1008	0.10 max.		0.30–0.50	0.04	0.05
AISI 1010	0.08–0.13		0.30–0.60	0.04	0.05
AISI 1012	0.10–0.15		0.30–0.60	0.04	0.05
AISI 1013	0.11–0.16		0.50–0.80	0.04	0.05
AISI 1015	0.13–0.18		0.30–0.60	0.04	0.05
AISI 1018	0.15–0.20		0.60–0.90	0.04	0.05
AISI 1022	0.18–0.23		0.70–1.00	0.04	0.05
AISI 1023	0.20–0.25		0.30–0.60	0.04	0.05
AISI 1025	0.22–0.28		0.30–0.60	0.04	0.05
AISI 1030	0.28–0.34		0.60–0.90	0.04	0.05
AISI 1037	0.32–0.38		0.70–1.00	0.04	0.05
AISI 1042	0.40–0.47		0.60–0.90	0.04	0.05
AISI 1045	0.43–0.50		0.60–0.90	0.04	0.05
AISI 1050	0.48–0.55		0.60–0.90	0.04	0.05
AISI 1055	0.50–0.60		0.60–0.90	0.04	0.05
AISI 1059	0.55–0.65		0.50–0.80	0.04	0.05
AISI 1060	0.55–0.65		0.60–0.90	0.04	0.05
AISI 1064	0.60–0.70		0.50–0.80	0.04	0.05
AISI 1065	0.60–0.70		0.60–0.90	0.04	0.05
AISI 1070	0.65–0.75		0.60–0.90	0.04	0.05

(1) AISI steel grades are used for industrial applications. Mechanical properties are to be agreed upon with the customer.
(2) Wire rod for producing welding electrodes can be produced according to DIN 8557 S2 or AISI 1008 with special silicon and manganese levels.
(3) If required, copper can be specified as 0.20% minimum.
(4) The chemical composition can be modified according to customers' needs.
(5) Where silicon is required, one of the following ranges and limits are commonly specified: (max 0.10%), (0.10–0.20%), (0.15–0.35%), (0.15–0.40%) or (0.20–0.40%).

International/European Standard: EN ISO 16120-2:2017

Grade	European Material No.	Chemical Composition (Maximum %)							
		C	Si	Mn	P MAX	S MAX	Cr MAX	Ni MAX	Cu MAX
C4D	1.03	≤ 0.06	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C7D	1.0313	0.05–0.09	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C9D	1.0304	≤ 0.10	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C10D	1.031	0.08–0.13	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C12D	1.0311	0.10–0.15	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C15D	1.0413	0.12–0.17	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C18D	1.0416	0.15–0.20	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C20D	1.0414	0.18–0.23	≤ 0.30	0.30–0.60	0.035	0.035	0.2	0.25	0.3
C26D	1.0415	0.24–0.29	0.10–0.30	0.50–0.80	0.03	0.03	0.2	0.25	0.3
C32D	1.053	0.30–0.35	0.10–0.30	0.50–0.80	0.03	0.03	0.2	0.25	0.3
C38D	1.0516	0.35–0.40	0.10–0.30	0.50–0.80	0.03	0.03	0.2	0.25	0.3
C42D	1.0541	0.40–0.45	0.10–0.30	0.50–0.80	0.03	0.03	0.2	0.25	0.3
C48D	1.0517	0.45–0.50	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C50D	1.0586	0.48–0.53	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C52D	1.0588	0.50–0.55	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C56D	1.0518	0.53–0.58	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C58D	1.0609	0.55–0.60	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C60D	1.061	0.58–0.63	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C62D	1.0611	0.60–0.65	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C66D	1.0612	0.63–0.68	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C68D	1.0613	0.65–0.70	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C70D	1.0615	0.68–0.73	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25
C72D	1.0617	0.70–0.75	0.10–0.30	0.50–0.80	0.03	0.03	0.15	0.2	0.25

(1) Elements not included in this table may not be added intentionally to the steel without the agreement of the purchaser, except those intended for finishing the heat. By agreement at the time of ordering, the grades can contain additions (commonly termed micro-alloying additions) of Cr and V. The content of Cr is up to 0.30% and the content of V is 0.05% to 0.10%.
(2) %Mo (max.) = 0.05
(3) %Al (max.) = 0.01. By agreement at the time of ordering, the value for aluminium can be fixed at 0.01% to 0.06%. In such cases, the value of silicon can be fixed at ≤ 0.10% on request.
(4) For wire rod intended for galvanization, the required lower limit of silicon content should be specified at the time of ordering. By agreement at the time of ordering, the maximum silicon level for grades C4D to C20D may be further restricted.
(5) A maximum copper content of 0.20% may be agreed at the time of ordering. For steel grades C48D to C92D, Cu + Sn shall be ≤ 0.25%.

CARBON STEEL BAR

Product Description

♦ CARBON STEEL ROUND BAR





Description-Carbon Steel Round Bar:

Standard: Hot rolling: GB/T 702, ASTM A675, EN 10060;
Cold drawing: GB/T 905, ASTM A108, EN 10278.

Grade: Hot rolled black skin: Q235B, Q355B, 20 #, 45 #;
Cold drawn fine drawn round: 1018, 1045, 20 #, 45#

Hot rolled round steel diameter: Φ10 ~ Φ300mm,
Conventional Φ 12/14/16/18/20/25/30/40/50/60/80/100/120/150/200/250/300;

Cold drawn round precision diameter: Φ3 ~ Φ80mm, Minimum tolerance ± 0.02~0.05mm;

Standard sizing: 6m / 12m, Zero cutting is possible.

Application: Mechanical shaft parts, gear blanks, pin shafts, flange forging blanks, agricultural machinery parts, engineering machinery structural components, mold pads, anchor bolt blanks, steel structure connectors

♦ CARBON STEEL SQUARE BAR





Description-Carbon Steel Square Bar:

Standard: GB/T 702、EN 10059、ASTM A675

Sectional side length specification: 10×10 ~ 200×200mm;
Commonly used : 12/16/20/25/30/40/50/60/80/100/120/150/200;

Wall thickness/edge length tolerance: Hot rolled ± 0.5~2mm; cold drawn square steel minimum 5 × 5mm.

Application: Mechanical frames, steel structure brackets, mold blanks, machine tool guide rail pads, lifting equipment, metal stamping and cutting, container accessories

Product Description

♦ CARBON STEEL HEXAGONAL BAR





Description- Carbon Steel Hexagonal Bar :

Standard: GB/T 705、EN 10061、ASTM A108

Grade: S45C、45#、1018、1045、S235JR

Edge distance S specification:

S8、S10、S12、S14、S17、S19、S22、S24、S27、S30、S32、S36、S41、S46、S50、S55、S60…… Maximum S 100

Application: Hexagonal bolts, nuts, screws, hydraulic joints, wrench blanks, automotive fasteners, pipeline connectors, non-standard fastener machining materials

♦ CARBON STEEL FLAT BAR





Description- Carbon Steel Flat Bar :

Standard: GB/T 704、EN 10058、ASTM A675

Grade: Q235B、Q355B、20#、45#

Width: 12~300mm

Thickness: 3~60mm

Standard Specifications: 20×3、25×4、30×5、40×5、50×6、60×8、80×10、100×12、120×14、150×16、200×20;

Fixed length: 6m/12m

Application: Grounding lightning protection flat steel, steel structure purlins, curtain wall embedded parts, bridge brackets, equipment bases, stamped steel plate cutting, guardrail flat iron, welded flange blanks

Detailed specifications

Detailed specification parameters

1.Size specification range

产品类型 Type	热轧规格 Hot rolling specifications	冷拉规格 Cold drawn specifications	锻制规格 Forging specifications
圆钢直径 Round steel diameter	φ5.5 ~ φ250mm	φ3 ~ φ80mm	φ80 ~ φ500mm
方钢边长 Square steel side length	5.5 ~ 200mm	3 ~ 80mm	80 ~ 300mm
扁钢厚度 Flat steel thickness	3 ~ 60mm	3 ~ 30mm	按需定制 Customization on demand
六角钢对边距 Hexagonal steel edge distance	8 ~ 70mm	3 ~ 50mm	—

2.Length specifications

交货方式 Delivery method	长度范围 Length range	说明 Instructions
通常长度（不定尺） Typical length (not fixed)	2000 ~ 12000mm	按轧制自然长度交货，适用于一般用途 Delivered according to the natural length of rolling, suitable for general use
定尺长度 Fixed length	3000 / 6000 / 9000 / 12000mm	按客户指定长度精确切割，公差 ±50mm Cut accurately to the length specified by the customer, with a tolerance of ± 50mm
非标定尺 Non calibrated ruler	按需定制 Customization on demand	特殊长度需求，协商确定 Special length requirements, to be determined through negotiation

Common brand chemical composition (melting analysis, wt%)

1.High quality carbon structural steel (GB/T 699-2015)

牌号 Grade	C	Si	Mn	P ⩽	S ⩽	Cr ⩽
10#	0.07~0.14	0.17~0.37	0.35~0.65	0.035	0.035	0.15
20#	0.17~0.24	0.17~0.37	0.35~0.65	0.035	0.035	0.25
35#	0.32~0.40	0.17~0.37	0.50~0.80	0.035	0.035	0.25
45#	0.42~0.50	0.17~0.37	0.50~0.80	0.035	0.035	0.25
65#	0.62~0.70	0.17~0.37	0.50~0.80	0.035	0.035	0.25

2.Ordinary carbon structural steel (GB/T 700)

牌号 Grade	C ≤	Si ≤	Mn	P ≤	S ≤
Q195	0.12	0.30	0.25~0.50	0.045	0.050
Q235A	0.22	0.35	0.30~0.70	0.045	0.050
Q235B	0.20	0.35	0.30~0.70	0.045	0.050
Q275	0.24	0.35	0.50~0.80	0.045	0.050

3.Comparison of commonly used American standard grades (ASTM AISI/SAE)

AISI牌号 AISI	C	Mn	P ≤	S ≤	对应国标 NS
1018	0.15~0.20	0.60~0.90	0.040	0.050	20#
1020	0.18~0.23	0.30~0.60	0.040	0.050	20#
1030	0.28~0.34	0.60~0.90	0.040	0.050	30#
1040	0.37~0.44	0.60~0.90	0.040	0.050	40#
1045	0.43~0.50	0.60~0.90	0.040	0.050	45#
1070	0.65~0.75	0.60~0.90	0.040	0.050	70#

Mechanical properties of commonly used grades

1.Mechanical properties of high-quality carbon structural steel

牌号 Grade	抗拉强度 Rm ≥ MPa Tensile strength	屈服强度 ReL ≥ MPa Yield strength	断后伸长率 A ≥ % Post fracture elongation	断面收缩率 Z ≥ % Sectional shrinkage rate	冲击吸收功 KU2 ≥ J Impact absorption energy
20#	410	245	25	55	—
35#	530	315	20	45	55
45#	600	355	16	40	39
50#	630	375	14	40	31
65#	695	410	10	30	—

2.Mechanical properties of ordinary carbon structural steel (GB/T 700)

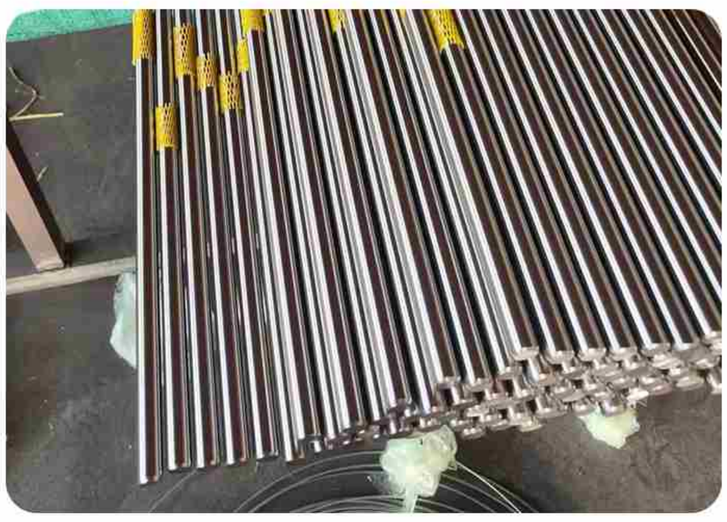
牌号 Grade	抗拉强度 Rm ≥ MPa Tensile strength	屈服强度 ReL ≥ MPa Yield strength	断后伸长率 A ≥ % Post fracture elongation
Q195	315~430	195	33
Q215	335~450	215	31
Q235	370~500	235	26
Q275	490~630	275	20

STAINLESS STEEL BAR

Product Description

♦ STAINLESS STEEL ROUND BAR





Description- Stainless Steel Round Bar :

Standard: GB/T 1220、ASTM A276、EN 10088-3、ASTM A484、GB/T 4226

OD: Hot rolled black skin round steel: Φ 16~Φ 300mm;

Fine grinding/cold drawing bright round rod: Φ 3~Φ 120mm, with a tolerance of up to ± 0.01mm

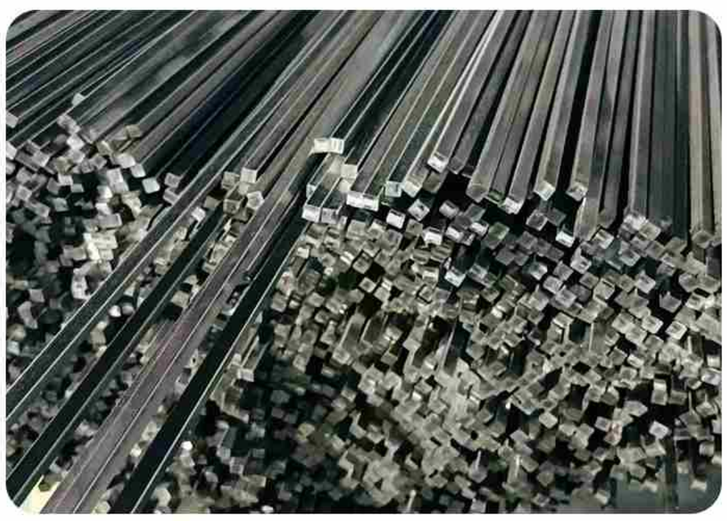
Fixed length: 6m/3m/12m, Can be polished, polished, peeled and refined

Surface: No.1 (hot-rolled pickling), black skin surface (Black)

Application: Chemical corrosion-resistant shaft parts, food equipment machinery parts, seawater environment parts, medical device implants, pump valve cores, aerospace precision parts, high-temperature furnace support parts.

♦ STAINLESS STEEL SQUARE BAR





Description- Stainless Steel Square Bar :

Standard: GB/T3280、ASTM A480

Grade: 304, 316L, 201, 430, 410S, 441, 444, 409L

Thickness:0.3-6.0mm

Conventional sizing: 1219*2438 (4x8ft), 1250*2500, 1500*3000

Application: Kitchen and bathroom appliances, elevator decorations, food machinery, car exhaust systems, hardware products

♦ STAINLESS STEEL HEXAGONAL BAR





Description- Stainless Steel Hexagonal Bar :

Standard: GB/T 4228、ASTM A276、EN 10088

Grade: S8/S10/S12/S14/S17/S19/S22/S24/S27/S30/S32/S36/S41/S46/S50

Across flats: S6 ~ S80mm

Application: Anti corrosion hexagonal bolts, chemical pipeline threaded joints, seawater valve fasteners, pharmaceutical equipment connectors.

♦ STAINLESS STEEL FLAT BAR





Description- Stainless Steel Flat Bar :

Thickness: 2~40mm

Width: 10~250mm

Surface: 1219*2438 (4x8ft), 1250*2500, 1500*3000

Application: Curtain wall decorative strips, grounding anti-corrosion flat steel, equipment box bending parts, pressure vessel flange blanks, water treatment equipment lining strips

♦ Comparison Table of Common Core Brand Names Across the Entire Series

W. Nr European Standard EN Chemical Grade AISI UNS SUS Japanese Standard National Standard GB

1.4301 X5CrNi18-10 304 S30400 SUS304 06Cr19Ni10

1.4307 X2CrNi18-9 304L S30403 SUS304L 022Cr19Ni10

1.4401 X5CrNiMo17-12-2 316 S31600 SUS316 06Cr17Ni12Mo2

1.4404 X2CrNiMo17-12-2 316L S31603 SUS316L 022Cr17Ni12Mo2

1.4541 X6CrNiTi18-10 321 S32100 SUS321 06Cr18Ni11Ti

1.4845 X12CrNi25-21 310S S31008 SUS310S 06Cr25Ni20

1.4016 X6Cr17 430 S43000 SUS430 06Cr17

1.4462 X2CrNiMoN22-5-3 2205 duplex steel S32205-022Cr22Ni5Mo3N

1.4410 X2CrNiMoN25-7-4 2507 Super Dual Phase Steel S32750-022Cr25Ni7Mo4N

1.4539 X1NiCrMoCu25-20-5 904L Super Austenitic N08904-015Cr21Ni26Mo5Cu2

1.4542 X5CrNiCuNb16-4 17-4PH precipitation hardening S17400-0Cr17Ni4Cu4Nb

Detailed specifications

Mainstream brand performance parameters

1.Chemical composition (core element standard values)

材质牌号 Material Grade	国标牌号 National standard grade	碳(C)≤	铬(Cr)	镍(Ni)	钼(Mo)	磷(P)≤	硫S(%)≤
304	06Cr19Ni10	0.08	18.00-20.00	8.00-10.50	—	0.045	0.030
304L	022Cr19Ni10	0.03	18.00-20.00	8.00-12.00	—	0.045	0.030
316L	022Cr17Ni12Mo2	0.03	16.00-18.50	10.00-14.00	2.00-3.00	0.045	0.030
321	06Cr18Ni11Ti	0.08	17.00-19.00	9.00-12.00	—	0.045	0.030
310S	06Cr25Ni20	0.08	24.00-26.00	19.00-22.00	—	0.045	0.030
2205(双相钢)	022Cr23Ni5Mo3	0.03	22.00-23.00	4.50-6.50	2.50-3.50	0.040	0.030
430	10Cr17	0.12	16.00-18.00	≤0.60	—	0.040	0.030
420	20Cr13	0.22	12.00-14.00	≤0.60	—	0.040	0.030
630(17-4PH)	05Cr17Ni4Cu4Nb	0.07	15.50-17.50	3.00-5.00	Cu:3.00-5.00	0.040	0.030

2.Mechanical performance parameters

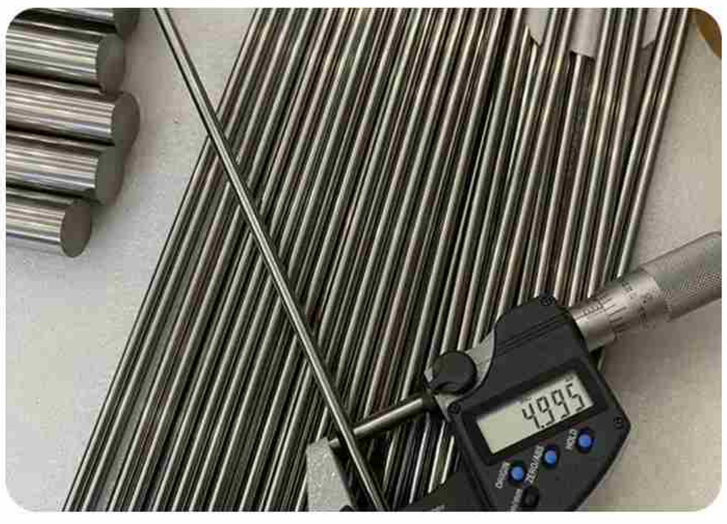
牌号 Grade	屈服强度Rp 0.2(MPa)≥ Yield strength	抗拉强度Rm (MPa)≥ Tensile strength	伸长率%≥ Elongation	硬度 Hardness	核心性能特点 Core performance characteristics
304	205	515	40	201	韧性好、通用性强、易加工焊接 Good toughness, strong versatility, easy to process and weld
304L	170	485	40	201	低碳抗晶间腐蚀，焊接性能优异 Low carbon resistance to intergranular corrosion, excellent welding
316L	170	485	40	201	耐酸碱、抗氯离子、海水环境适配 Acid and alkali resistance, chloride ion resistance, and adaptability to seawater environment
321	205	515	40	201	耐高温稳定、抗晶间腐蚀 High-temperature resistant and stable, resistant to intergranular corrosion
310S	205	520	40	217	耐高温1000℃+，抗氧化性优异 High temperature resistance of 1000 ℃+, excellent oxidation resistance
2205	450	620	25	293	高强度、抗应力腐蚀、耐高压 High strength, stress corrosion resistance, high pressure resistance
430	205	450	22	183	性价比高、抗氧化、易加工 High cost-effectiveness, antioxidant, easy to process
420	345	640	18	235	可淬火硬化、高硬度、高耐磨 Quenchable, hardenable, high hardness, and high wear resistance
630(17-4PH)	≥860	≥1040	≥10	HRC36+	超高强度、耐腐蚀、尺寸稳定 Ultra high strength, corrosion resistance, and dimensional stability

ALLOY STEEL BAR

Product Description

♦ STRUCTURAL ALLOY STEEL BAR





Description- Structural Alloy Steel Bar :

Standard: GB/T 3077、ASTM A322、ASTM A108、EN 10263、DIN EN 10083

Grade:

①National standard GB alloy grades

40Cr、42CrMo、20CrMnTi、20CrMo、15CrMo、12Cr1MoV、35CrMo、27SiMn、45CrNiMoVA

②American standard ASTM A322/A108

4130, 4140, 4340, 8620, 8740, 5140

③European standard EN 10263, DIN grade

42CrMo4 (1.7225)、34CrMo4 (1.7220)、20MnCr5、16CrMo44

Standard Size:

Round steel with a diameter of 10~350mm; Square steel 10-200mm; Hexagonal steel S10~S100;

Flat steel with the same size as carbon flat steel;

Divided into hot-rolled annealed state, cold drawn precision state, quenched and tempered quenched and tempered pre hardened state.

Application:

Automotive gearbox gears, transmission shafts, crankshafts, hydraulic cylinder piston rods for construction machinery, wind turbine spindle blanks, mining wear-resistant parts, downhole tools for petroleum, high-pressure valve body forgings, mold ejector pins, lifting hooks, and heavy-duty machinery pin shafts.

Product Description

SUPER ALLOY BAR





Description- Super Alloy Bar :

Standard: ASTM B408、ASTM B584、ASTM B637、ASME SB-408、GB/T 15007

Grade:

①Inconel

600 (N06600/2.4816), 625 (N06625/2.4856), 718 (N07718/2.4668), X750

②Hastelloy alloy

B2(N10665)、C22(N06022)、C276(N10276/2.4819)、X(N06002)

③Monel Copper Nickel

400 (N04400/2.4360), K500 (N05500)

Pure nickel Ni200/Ni201; Dual phase steel 2205/2507; 904L; 17-4PH

Standard Size:

Hot rolled rod with a diameter of 12~250mm; Cold drawn precision grinding rod with a diameter of 3~100mm; Customizable square/hexagonal/flat profiles;

Fixed length 3m/6m, supporting waterjet cutting, forging and restructuring.

Application:

Fasteners for aircraft engine blades, pressure resistant structural components for deep-sea exploration, core shaft components for seawater desalination equipment, parts for strong corrosion equipment such as flue gas desulfurization (FGD), internal components for nuclear power reactors, stirring shafts for chemical strong acid-base reactors, sulfur resistant wellhead accessories for oil and gas, and structural connectors for aerospace rockets.

Detailed specifications

1.Comparison Table of Mechanical Properties of Mainstream Brands

牌号 Grade	屈服强度Rp 0.2(MPa)≥ Yield strength	抗拉强度Rm (MPa)≥ Tensile strength	伸长率%≥ Elongation	硬度参考 Hardness reference	核心性能特点 Core performance characteristics
40Cr	≥785	≥980	≥9	220-260HB	通用轴类、齿轮、销轴、机械结构 Universal shafts, gears, pin shafts, mechanical structures
35CrMo	≥835	≥1020	≥12	230-270HB	重载轴、连杆、高压配件 Heavy duty shaft, connecting rod, high-pressure accessories performance
42CrMo	≥930	≥1080	≥12	240-280HB	高强度齿轮、主轴、油缸、工程机械 High strength gears, spindles, oil cylinders, construction machinery
20CrMnTi	≥835	≥1080	≥10	Annealing ≤ 210HB	汽车齿轮、花键轴、渗碳耐磨件 Automotive gears, spline shafts, carburizing wear-resistant parts
15CrMo	≥295	≥440	≥22	130-180HB	高温耐热配件、锅炉紧固件 High temperature heat-resistant accessories, boiler fasteners
65Mn	≥785	≥980	≥8	280-320H	弹簧、耐磨杆件、减震构件 Springs, wear-resistant rods, shock-absorbing components

2.Reference for chemical composition of core grades (mass fraction%)

材质牌号 Material Grade	C	Si	Mn	Cr	Mo	S/P
40Cr	0.37~0.44	0.17~0.37	0.50~0.80	0.80~1.10	——	≤0.035
42CrMo	0.38~0.45	0.17~0.37	0.50~0.80	0.90~1.20	0.15~0.25	≤0.035
35CrMo	0.32~0.40	0.17~0.37	0.40~0.70	0.80~1.10	0.15~0.25	≤0.035

Packing and loading







Warehouse >>>> Packaging >>>> Loading

Our Advantages



VERIFICATION OF CONFORMITY

S/N: 022073

No.: **ICR/VC/HM2603311**

Name and address of Applicant	Shandong Xin wugang Steel Co., Ltd. Room 602, No. 9, South Nenjiang Road, Mount Taishan Road East, Jiangguantun Street, Liaocheng Economic and Technological Development Zone, Shandong Province, China
Name and address of manufacturer:	Shandong Xin wugang Steel Co., Ltd. Room 602, No. 9, South Nenjiang Road, Mount Taishan Road East, Jiangguantun Street, Liaocheng Economic and Technological Development Zone, Shandong Province, China
Product name:	Carbon Steel coil, Steel plate, Steel pipe, steel profile, steel wire, Steelbar, stainless steel pipe, Stainless steel coil /plate/profile, Steel Rail, Steel Ball
Product types:	Steel Plate: 0.14mm---500mm, Steel Coil: 0.14mm---25mm, Steel Pipe: 3mm-1020mm*0.3mm----200mm, Steel Wire: 0.15mm--16mm, Round bar: 5mm--600mm, H Beam: 91mm*100mm----1138mm*410mm, I Beam: 76mm*59mm----778mm*269mm, Angle steel: 19mm*19mm---305mm*305mm, Channel: 25*12mm-----457mm*107mm, Steel Ball: 1mm--180mm, Steel Rail: 9---50kg,QU70-120, P65 R65 54E1...
Product trademark:	n/a

Verification was carried within following scope:

Information on the Declaration of Conformity:

Result:	Legislation:	Standard:
✓	CPR [(EU) 305/2011]	EN 10210-1:2006 EN 10210-2:2019 EN 10219-1:2006 EN 10219-2:2019 EN 10025-1:2004 EN 10025-2:2019

The assessment process has been carried out in accordance with individual rules and conditions agreed with the applicant. Evaluation has been carried out in accordance with:

Test report:	MTZ20260318SCPR
Tests conducted by:	Shandong Xin wugang Steel Co., LTD
Issue date:	25.03.2026
Expiration date:	24.03.2031

Remarks:
- VoC was issued on voluntary basis and does not imply meeting all essential requirements listed in Declaration of Conformity.
- For introducing this product on European market may be needed EC/EU-type examination conducted by appropriate Notified Body.

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CEO, ICR Co., Ltd.

Edition: 5.1.1.8 of 06.03.2024

verification проверка verificación verification проверка verificación verification



中泰认证

QUALITY MANAGEMENT SYSTEM CERTIFICATION

Registration NO: 29022Q12696-10R0S

SHANDONG XIN WUGANG STEEL CO., LTD

Unified social credit code:91371500MA94JRBY2K

Registered Address:Room 602, No. 9, South Nenjiang Road, Mount Taishan Road, Liaocheng Economic and Technological Development Zone, Shandong Province

Office Address:Room 602, No. 9, South Nenjiang Road, Mount Taishan Road, Liaocheng Economic and Technological Development Zone, Shandong Province

Business Address:Room 602, No. 9, South Nenjiang Road, Mount Taishan Road, Liaocheng Economic and Technological Development Zone, Shandong Province

Established Quality Management System Accord With

GB/T 19001-2016 idt ISO9001:2015 standard

Through the certification scope is as follows

Sales of steel (including export)

The release date for the first time: 21-10-2022

The issuance date: 21-10-2022

Will be valid until: 20-10-2025

Issuer:

ZhongTai Union Certification Co., LTD.
Tel: +86 028-62521000 www.ztccc.cn

0036650



统一社会信用代码 91371500MA94JRBY2K

营业执照

名 称 山东鑫武钢铁有限公司
类 型 有限责任公司(自然人独资)
法定代表人 邹庆友
经营范围 一般项目：金属材料销售；金属材料制造；金属制品销售；金属结构销售；高性能有色金属及合金材料销售；新兴金属功能材料销售；金属材料及其他金属制品销售；有色金属合金销售；高性能有色金属及合金材料制造；化工产品销售（不含许可类化工产品）；机械设备销售；金属制品研发；安全产品销售；货物进出口；（除依法须经批准的项目外，凭营业执照依法自主开展经营活动）

注册资本 壹仟万元整
成立日期 2021年07月27日
住 所 山东省聊城经济技术开发区洪官屯街道泰山路路东坡江路南9号鲁四东华办公楼602室

登记机关 聊城市经济技术开发区市场监督管理局
2026 年 06月 26 日

国家市场监督管理总局监制



中国制造网 认证供应商

AUDITED SUPPLIER

Presented To

Shandong Xin Wugang Steel Co.,LTD

山东鑫武钢铁有限公司

In Recognition of Your Site Existence & Business Operations

Audited by SGS-CSTC on 2022-09-26

Audit Report Serial No.: GP-A2022071105

Made-in-China.com 中国制造网 SGS

CERTIFICATE

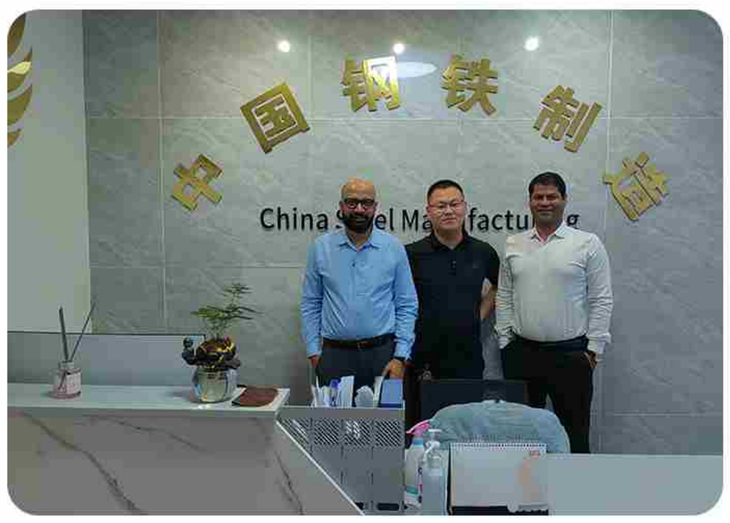






PRODUCTION EQUIPMENT

Our Advantages



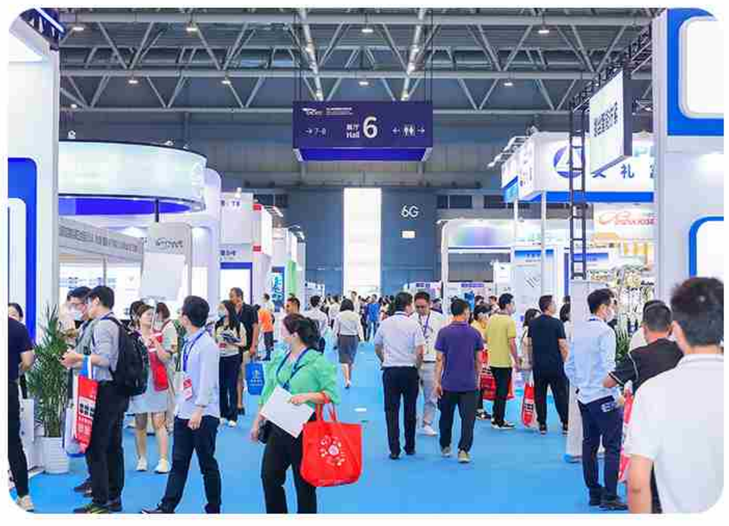




CUSTOMER VISIT







EXHIBITION

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