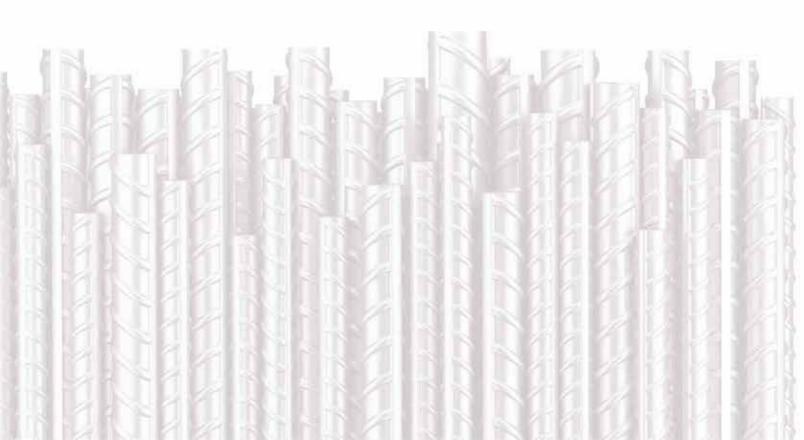


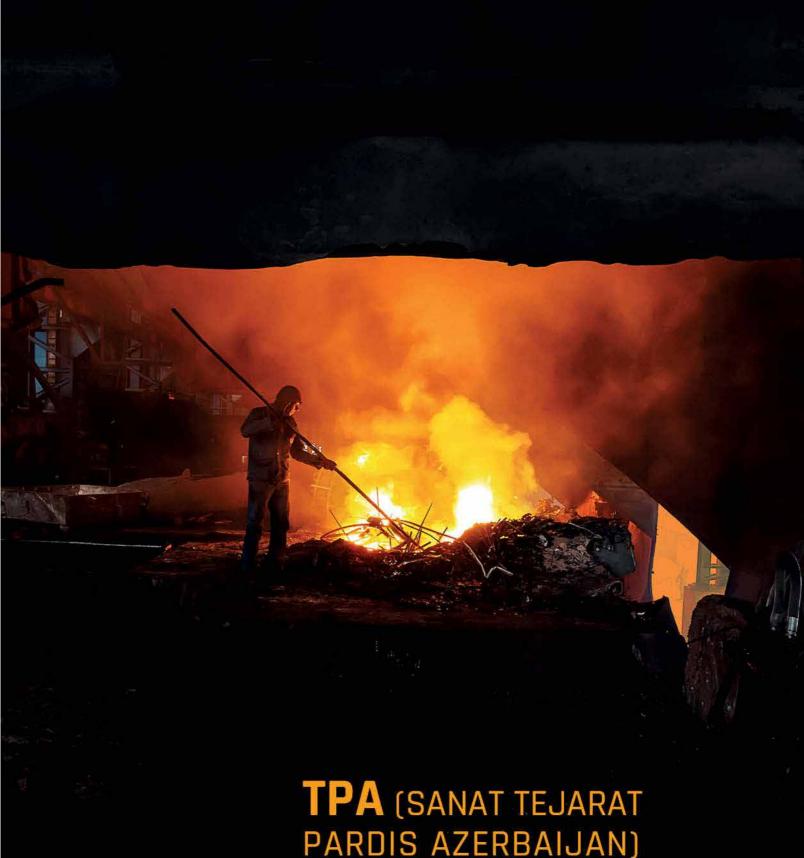
TPA (SANAT TEJARAT PARDIS AZERBAIJAN) MANUFACTURER OF HIGH QUALITY STEEL REBAR & BILLET



PRODUCT CATALOG

OUR MISSION; INTEGRATION OF KNOWLEDGE AND SKILL





PARDIS AZERBAIJAN)

MANUFACTURER OF HIGH QUALITY STEEL REBAR & BILLET



By implementing development plans, using modern technology, knowledge and experience of domestic and foreign experts, and localization of equipment, this company intends to play an effective role in the industrial and economic development of the country by producing steel as a strategic product. In the near future, it will shine forever as a lasting name on the country's steel industry, and by creating hundreds of direct and indirect jobs, it will give a service, however small, to the people of this region.

bars in accordance with National and international standards has a successful presence in the countrys steel industry and trade.

As a result of years of experience in the field of rebar exports to different countries such as Georgia, Pakistan, Qatar, Kuwait, Turkey, Oman, Iraq, Armenia, Uzbekistan, Turkmenistan, Syria and Afghanistan, this group has been able to build trust and pave the road for the export of Iranian steel products to European countries thus playing a key role in the development of rebar exports.

Subsidiary Companies:

- ➤ Atiq Azer Sahand Steel Company: producer of all kinds of steel rebars
- Anzali billet industrial production complex: producer of all kinds of steel billets
- ▶ Aria Foulad Pardis Company: active in the field of steel trading
- ▶Agig Noor Ofag Company: active in the field of steel trading
- Sepehr Salafchegan Recycling Company: active in the field of road transportation



PUBLIC JOINT-STOCK CORPORATION

Sanat Tejarat Pardis Azarbaijan Pardis Azarbaijan Company, with the valuable cooperation of all committed staff and professionals, has achieved important achievements in recent years and has taken firm steps towards the development of its organization The transformation of the company into a public held Co. and entry into the OTC is another golden chapter for the company's honors, and this was not possible except in the shadow of efforts, transparency and self-belief











Low carbon and low alloy hot rolled steel rebarl:

Concrete reinforcing bars make up %90 of the total production of Sanat Tejarat Pardis Azerbaijan Company. The steel rebars of this company are produced through the hot rolling process and have high quality and a surface free of harmful surface defects such as surface cracks, shells, holes, etc. This company is a reliable producer of all kinds of rebars in different sizes with minimum tolerance based on national and international standards such as: INSO 3132 - 1392, EN 10080 - 2005 and GOST 380 - 2005.

PRODUCT

Technical Data Sheet Hot Rolled Carbon and Low Alloy Steel Rebar GRADE A1 (A240)

Shape:



Size: 8-32 mm

Delivery Standard: INSO 3132

These products are in the category of simple and treadles rebars, which can be used in most cases for various industries. These products are in the category of soft bars in terms of hardness. Also, the current and breaking stress of this series of rebars are 2400 and 3600 kg/mm2, respectively. The percentage of dial length in this type of products is defined as at least 25%. The main use of this product is in welding and forging due to its low carbon content.

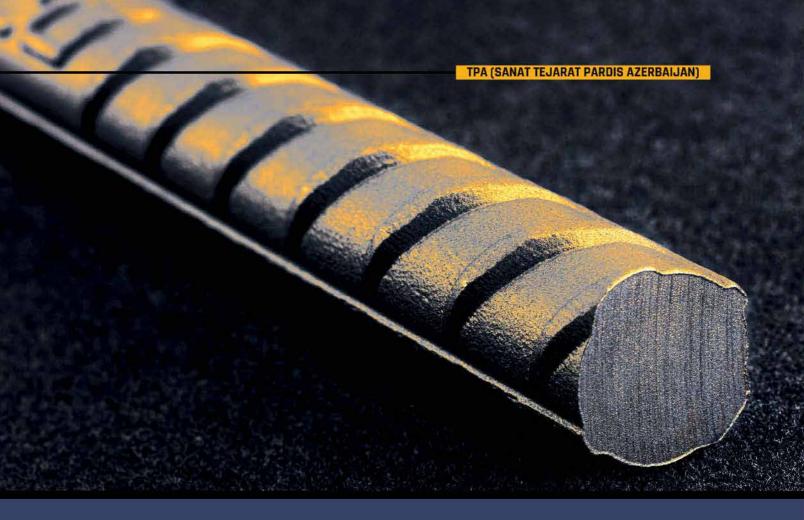
1- Dimensional Properties

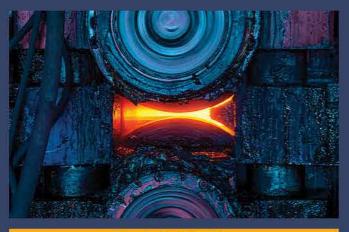
Nominal Diameter	Nominal Cross Area	1m bar weigth	12m bar weigth
d	A _n (mm ²)	(kg/m)	w (kg)
8	50.3	0.36-0.43	4.36-5.12
10	78.5	0.57-0.67	6.80-7.98
12	113	0.83-0.94	10.02-11.30
14	154	1.14-1.28	13.65-15.39
16	201	1.50-1.66	18.01-19.91
18	254	1.90-2.10	22.80-25.20
20	314	2.35-2.59	28.16-31.12
22	380	2.83-3.13	33.97-37.55
25	491	3.70-4.00	44.35-48.05
28	616	4.64-5.02	55.64-60.28
32	804	6.06-6.56	72.69-78.75

2- Chemical Analysis

Grade	Standard	С	Si	Mn	P (max)	S (max)
A1	INSO 3132	0.22	0.55	0.75	0.05	0.05

		Yield Strength	Tensile Strength	1	Elongation (%)		
Grade	Symbol	ReH, N/mm ²	Rm, N/mm ²	A ₅	A ₁₀	Agt	
A1	A240	240	360	25	18		





Grade A2 (A340)

This product has spiral treads; This means that the entire surface of this product is ribbed in a uniform or spindle shape. The national standard of this product is No. 3132, which is introduced with two characteristics: tread 340 and tread 350. A2 rebar is also known as semi-hard rebar; Because it is less hard than other ribbed bars. On the other hand, the resistance of this product is higher than the resistance of simple rebar. Implementation of shear walls and construction of hoops are two important applications of this type of rebar.

GRADE A2 (A340)

Technical Data Sheet Hot Rolled Carbon and Low Alloy Steel Rebar GRADE A2 (A340)

Shape:

Delivery Standard: INSO 3132, GOST 5781

1- Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weigth	12m bar weigth	Transverse width he	e rib (mm) ight (min)		al rib (mm) ight (max)	Rib spacing
d	A _n (mm ²)	(kg/m)	w (kg)	b ₁	h ₁	b ₂	h ₂	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1.3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1.5	1.8	6.1-8.3

2- Chemical Analysis

Grade	Standard	С	Si	Mn	P (max)	S (max)
A2	INSO 3132	≤0.32	≤0.6	≤1.3	0.045	0.045

(All are maximum values)

3- Mechanical Properties

		Yield Strength	Tensile Strength		Elongation (%)
Grade	Symbol	ReH, N/mm ²	Rm, N/mm ²	A ₅	A ₁₀	Agt
A2	A340	340	500	18	10	-

(All are minimum values)





Grade A3 (A400)

This product has cross-shaped treads throughout its surface. A3 rebar is identified by 400 and 420 grades. A3 rebar has a higher percentage of carbon than the previous type; For this reason, the resistance of this product is higher than that of A2 rebar. On the other hand, the same carbon has caused a decrease in its malleability and weldability.



Technical Data Sheet Hot Rolled Carbon and Low Alloy Steel Rebar GRADE A3 (A400)

Shape:



Delivery Standard: DIN 488, BS 4449, ISO 6935,

GOST 5781, INSO 3132

1- Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weigth	12m bar weigth	Transverse width hei	rib (mm) ight (min)	Longitudino width hei	al rib (mm) ight (max)	Rib spacing
d	A _n (mm ²)	(kg/m)	w (kg)	b ₁	h ₁	b ₂	h ₂	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1.3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1.5	1.8	6.1-8.3
14	154	1.15-1.27	13.79-15.25	1.4-2.8	0.91	2	2.1	7.1-9.7
16	201	1.50-1.66	18.01-19.91	1.6-3.2	1.04	2	2.4	8.2-11.0
18	254	1.90-2.10	22.80-25.20	1.8-3.6	1.17	2	2.7	9.2-12.4
20	314	2.35-2.59	28.16-31.12	2.0-4.0	1.30	2	3	10.2-13.8
22	380	2.83-3.13	33.97-37.55	2.2-4.4	1.43	2	3.3	11.2-15.2
25	491	3.70-4.00	44.35-48.05	2.5-5.0	1.63	2	3.8	12.8-17.3
28	616	4.64-5.02	55.64-60.28	2.8-5.6	1.82	2.5	4.2	14.3-19.3
32	804	6.06-6.56	72.69-78.75	3.2-6.4	2.08	3	4.5	16.3-22.1

2- Chemical Analysis

Grade	Standard	C	Si	Mn	р	S
A3	INSO 3132	≤0.37	≤0.6	≤1.6	≤0.045	≤0.045

		Yield Strength Tensile Strength		Elongation (%)		
Grade	Symbol	ReH, N/mm ²	Rm, N/mm ²	A ₅	A ₁₀	Agt
А3	A400	≥400	≥600	≥16	≥12	





Grade A4 (A500)

This product has spindle-shaped transverse treads on its surface. This grade has higher tensile strength respect to other grades. A4 rebar is introduced in standard 3132 with 500 tread and 520 tread.

GRADE A4
(A500)

Technical Data Sheet Hot Rolled Carbon and Low Alloy Steel Rebar GRADE A4 (A500)

Shape:



Delivery Standard: DIN 488, BS 4449, ISO 6935, GOST 5781, INSO 3132

1- Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weigth	12m bar weigth	Transverse rib (mm) width height (min)		Longitudinal rib (mm) width height (min)		Rib spacing
d	A _n (mm ²)	(kg/m)	w (kg)	b ₁	h ₁	b ₂	h ₂	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1,3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1.5	1.8	6.1-8.3
14	154	1.15-1.27	13.79-15.25	1.4-2.8	0.91	2	2.1	7.1-9.7
16	201	1.50-1.66	18.01-19.91	1.6-3.2	1.04	2	2.4	8.2-11.0
18	254	1.90-2.10	22.80-25.20	1.8-3.6	1.17	2	2.7	9.2-12.4
20	314	2.35-2.59	28.16-31.12	2.0-4.0	1.30	2	3	10.2-13.8
22	380	2.83-3.13	33.97-37.55	2.2-4.4	1.43	2	3.3	11.2-15.2
25	491	3.70-4.00	44.35-48.05	2.5-5.0	1.63	2	3.8	12.8-17.3
28	616	4.54-5.02	55.64-60.28	2.8-5.6	1.82	2.5	4.2	14.3-19.3
32	804	6.06-6.56	72.69-78.75	3.2-6.4	2.08	3	4.5	16.3-22.1

2- Chemical Analysis

Grade	Standard	C	Si	Mn	Р	S
A4(A500)	INSO 3132	≤0.37	≤0.6	≤1.6	≤0.045	≤0.045

		Yield Strength	/ield Strength Tensile Strength		Elongation (%)	
Grade	Symbol	ReH, N/mm ²	Rm, N/mm ²	A ₅	A ₁₀	Agt
A4	A500	≥500	≥650	≥10	≥8	





Grade B500B

This product is produced with low equivalent carbon and weldability and has high strength (yield point of at least 500 MPa), without harming the ductility, which reduces the steel consumption in the structure by about 20% and thus the overall cost of the project. Using B500B rebar can reduce the size of the column of the structure with heavy loads. B500B grade is one of the British Standard BS 4449-2005 grades. BS 4449-2005 contains provisions for three steel grades that all have a yield strength of 500 MPa, but with different ductility



Technical Data Sheet Hot Rolled Carbon and Low Alloy Steel Rebar GRADE B500B

Shape:



Size: 8-32 mm

Delivery Standard: DIN 488, BS 4449:2005,

ISO 6935-2, GOST 5781, INSO 3132

1- Dimensional Properties

Nominal Diameter	Nominal Cross Area	1m bar weigth	12m bar weigth	Transverse rib (mm) width height (min)		Longitudinal rib (mm) width height (min)		Rib spacing
d	A _n (mm ²)	(kg/m)	w (kg)	b ₁	h ₁	b ₂	h ₂	c (mm)
8	50.3	0.367-0.423	4.408-5.072	0.8-1.6	0.52	1	1.2	4.8-6.6
10	78.5	0.585-0.647	7.022-7.762	1.0-2.0	0.65	1.3	1.5	5.5-7.5
12	113	0.844-0.932	10.123-11.189	1.2-2.4	0.78	1,5	1.8	6.1-8.3
14	154	1.15-1.27	13.79-15.25	1.4-2.8	0.91	2	2.1	7.1-9.7
16	201	1.50-1.66	18.01-19.91	1.6-3.2	1.04	2	2.4	8.2-11.0
18	254	1.90-2.10	22.80-25.20	1.8-3.6	1.17	2	2.7	9.2-12.4
20	314	2.35-2.59	28.16-31.12	2.0-4.0	1.30	2	3	10.2-13.8
22	380	2.83-3.13	33.97-37.55	2.2-4.4	1.43	2	3.3	11.2-15.2
25	491	3.70-4.00	44.35-48.05	2.5-5.0	1.63	2	3.8	12.8-17.3
28	616	4.64-5.02	55.64-60.28	2.8-5.6	1.82	2.5	4.2	14.3-19.3
32	804	6.06-6.56	72.69-78.75	3.2-6.4	2.08	3	4.5	16.3-22.1

2- Chemical Analysis

Grade	Standard	C	Si	Mn	Р	S
B500B	BS	0.18-0.22	≤0.3	0.6-0.8	≤0.050	≤0.050

		Yield Strength	Tensile Strength	Elongation (%)			
Grade	Symbol	ReH, N/mm ²	Rm, N/mm ²	A ₅	A ₁₀	Agt	
B500B	B500B	≥500	Rm/ReH≥ 1.08	≥10		-	



A2-Dimensional and Geometrical Properties

Description	Tolerance	Shope	Description	Tolerance	Shape
Size	-3% 4%	H1.	Twist	1 degree/m	9
Length	±100 mm		Concavity	b/H≤ 2%	*
Rombodiy	D ₂ -D ₁ /D ₂ ≤4%		Convexity	b/H≤ 2%	
Bending	≤ 8 mm/m		Skew	15 mm	(دوسر شعثهاشمشل)



Low carbon low alloy steel billet

This company produces a wide range of steel billets based on national and international standards. Quality parameters and acceptance limits of product quality are controlled. Inspection, assessment and quality control of used raw materials in production of billet are carried out.

Technical Data Sheet STEEL BILLET Low carbon low alloy steel billet

Size: 125 and 150 mm

Delivery Standards: EN 2005-10080, DIN 1-488, ASTM A2015-615, GOST 2005-380, INSO 1398-20300

Shape: Squair Billet

Chemical Analysis: according to standards INSO 1392-3132, GOST2008-380, EN 2017 2-10025,

DIN 1-488, BS 4449:2005

INSO 3132-1392

Grade	C(max)	Si(max)	Mn(max)	P(max)	S(max)	N(max)	CE (max)
A 240		0.55	0.75	0.050	0.050	8	
A 340	0.32	0.60	1.3	0.045	0.045		0.50
A 350	0.27	0.55	1.5	0.040	0.040	0.012	0.51
A 400	0.37	0.60	1.6	0.045	0.045		(m)
A 420	0.30	0.55	1.5	0.040	0.040	0.012	0.56
A 500	0.40	0.60	1.8	0.045	0.045		(m)
A 520	0.32	0.55	1.8	0.040	0.040	0.012	0.61

GOST380-2008

Grade	C	Si	Mn	S(max)	P(max)	Other
ST 3SP	0.14-0.22	0.15-0.30	0.40-0.65	0.04	0.04	V 2 4
ST 4SP	0.18-0.27	0.15-0.30	0.40-0.70	0.04	0.04	(t a)
ST 5SP	0.28-0.37	0.15-0.30	0.50-0.80	0.04	0.04	17 <u>2</u> 1

EN 10025-2 2017

Grade	C(max)	Si(max)	Mn(max)	S(max)	P(max)	Other
S275JR (ST 44)	0.21	0.55	1.4	0.045	0.045	÷
S355JR (ST 52)	0.24	0.55	1.6	0.045	0.045	=

BS 4449:2005

Grade	C	Si(max)	Mn	P(max)	S(max)	Cu(max)	N(max)	CE(max)
B500A	0.18-0.22	0.3	0.55-0.65	0.05	0.05	8.0	0.012	0.35
B500B	0.18-0.22	0.3	0.60-0.80	0.05	0.05	0.8	0.012	0.35
B500C	0.18-0.22	0.3	0.65-0.85	0.05	0.05	0.8	0.012	0.35











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