



**zeinox**

ISO 9001 : 2008 Certified  
OHSAS 18001 : 2007 Certified



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OHSAS 18001 : 2007 Certified

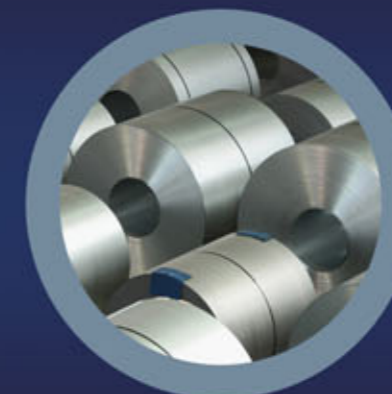
# EGYPTIAN ARAB METALS

High Quality & Best Services

## Egyptian Arab Metals

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Founded 2000, ZEINOX (Formerly known as AL ZEINY STEEL) has taken an important and growing role in Stainless Steel Egyptian Market.

Since 2006 ZEINOX has developed Stainless Steel Service Center to fulfill our customers with their requirements, maintaining quality of processing due to the required measures.

On the basis of sophisticated and strict quality control ZEINOX is certified with ISO 9001:2008 for Quality Management System and OHSAS 18001:2007 for Occupational Health and Safety.

### **Our Vision:**

To establish ZEINOX as the first company in the production of Stainless Steel Raw Materials in Egypt and Middle East.

### **Our Mission:**

ZEINOX is looking forward to emerging and expanding in the fields of importing, manufacturing/trading of metals, and supplying Stainless Steel for industrials companies.

The company would like to establish and maintain a positive reputation within the industrial community.

We are committed to the following:

- Conformance with requirements of Quality Management Systems.
- Developing industrial and commercial constitution maintaining quality of processing due to the required measures.
- Continues improvement for the work environment and industrial technology.
- Fulfillment of our customers' requirements and predict their anticipations seeking for preserving their satisfaction and loyalty.
- Achievement of a suitable profit for shareholders.
- Continues human recourses development to reach physical and moral stabilization to preserve their loyalty and belonging to the company.
- Enlargement of the company's share in both local and middle east markets.
- Preserve the health and safety of our employments and customers.
- Conformance with laws, specification, internal regulations and governmental decrees related to health and safety.

# Our Certificates :



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**Cut-To-Length**



**Slitting**



304-BB



304-2B



304-#4



304-#8



304-BA



304-HL



304-Embossed plate



304-MR

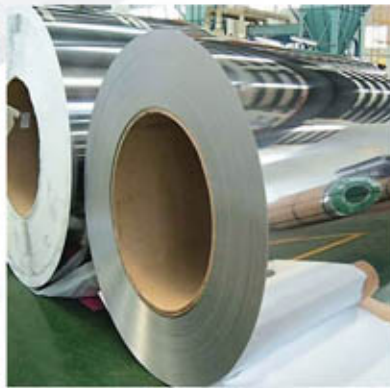




## 1- Coils :

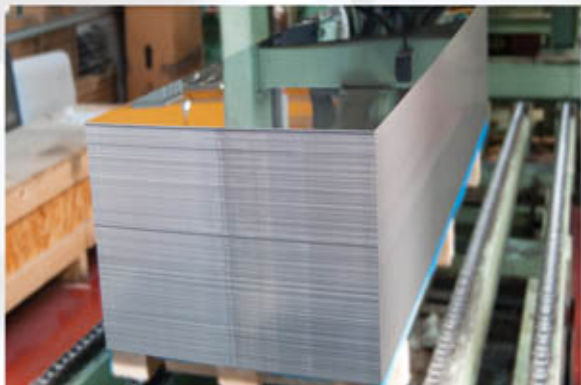


Coils

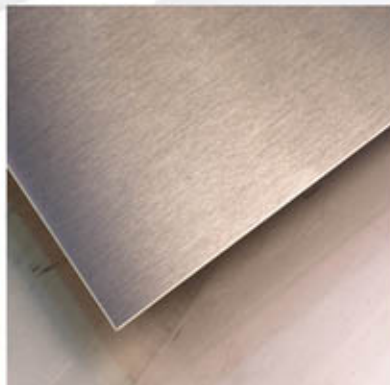


Narrow Coils

## 2 - Sheets :



Blanks

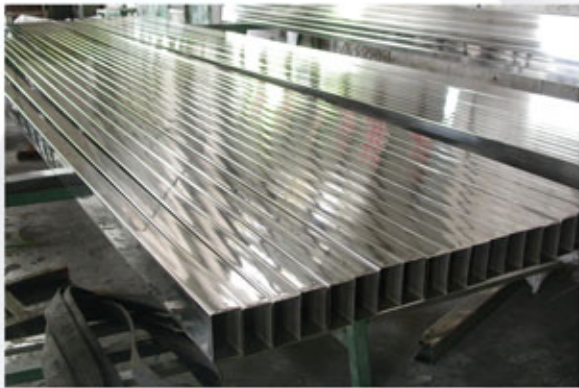


Standrad

## 3 - Circles :



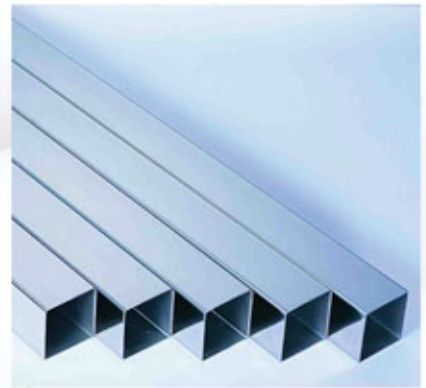
**4 - Pipes :**



Rectangular

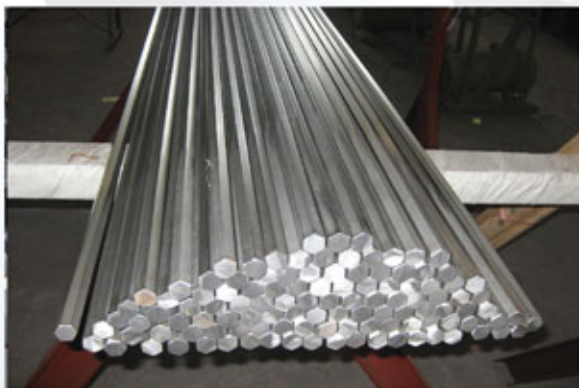


Round



Square

**5 - Bars :**



Hexagonal

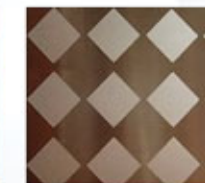
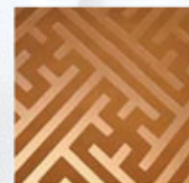


Round



Square

**6 - Color :**





Grade	UNS No.	Chemical analysis (%) specified								
		C	Si	Mn	P	S	Cr	Mo	Ni	Other
<b>Austenitic stainless steels</b>										
253MA	S30815	0.05 -0.10	1.1 - 2.0	0.8	0.040	0.030	20.0 - 22.0		10.0 - 12.0	N 0.14-0.20 Ce 0.03-0.08
301	S30100	0.15	0.75	2.0	0.045	0.030	16.0 - 18.0		6.0-8.0	N 0.10
302HQ	S30430	0.03	1.00	2.0	0.045	0.030	17.0 - 19.0		8.0 - 10.0	Cu 3.0-4.0
303	S30300	0.15	1.00	2.0	0.20	0.15	17.0 - 19.0		8.0 - 10.0	
304	S30400	0.08	0.75	2.0	0.045	0.030	18.0 - 20.0		8.0 - 10.5	N 0.10
304L	S30403	0.030	1.00	2.0	0.045	0.030	18.0 - 20.0		8.0 - 12.0	N 0.10
304H	S30409	0.04 - 0.10	0.75	2.0	0.045	0.030	18.0 - 20.0		8.0 - 10.5	N 0.10
309S	S30908	0.08	1.00	2.0	0.045	0.030	22.0 - 24.0		12.0 - 15.0	
310	S31000	0.25	1.5	2.0	0.045	0.030	24.0 - 26.0		19.0 - 22.0	
316	S31600	0.08	0.75	2.0	0.045	0.030	16.0 - 18.0	2.0 - 3.0	10.0 - 14.0	N 0.10
316L	S31603	0.030	0.75	2.0	0.045	0.030	16.0 - 18.0	2.0 - 3.0	10.0 - 14.0	N 0.10
317L	S31703	0.030	0.75	2.0	0.045	0.030	18.0 - 20.0	3.0 - 4.0	11.0 - 15.0	N 0.10
321	S32100	0.08	0.75	2.0	0.045	0.030	17.0 - 19.0		9.0 - 12.0	N 0.10 Ti=5x(C-N) min. 0.70 max.
347	S34700	0.08	0.75	2.0	0.045	0.030	17.0 - 19.0		9.0 - 13.0	Nb 10xC min. 1.0 1.0 max.
904L	N08904	0.020	1.00	2.0	0.045	0.035	19.0 - 23.0	4.0 - 5.0	23.0 - 28.0	Cu 1.0-2.0

Note 1: Single values are maxima unless otherwise stated.

Note 2: Hardness specification limits given are HRB = Rockwell B scale, HRC = Rockwell C scale, HB = Brinell Hardness.

Note 4: Mechanical properties shown are for the commonly available form listed; properties of other forms for the grade may vary.



Grade	UNS No.	Properties and typical applications
<b>Austenitic stainless steels</b>		
253MA	S30815	Excellent resistance to scaling and useful creep strength at temperatures up to 1150C.
301	S30100	Combination of strength and ductility to withstand severe forming methods. Corrosion resistance comparable to 302. Rail cars, automotive components
302HQ	S30430	Wire for severe cold heading such as the manufacture of cross recess screws. Corrosion resistance at least equivalent to type 304.
303	S30300	Free machining grade. Domestic and mild industrial environment. Water low in chlorides. Nuts and bolts, shafts, fittings. Corrosion resistance lower than 304.
304	S30400	Good resistance to corrosion, good for malleability and weldability. Most commonly used grade. Wine storage, laundry and kitchen products, water, food, architectural, cryogenic and high temperature applications. UGIMA 304 - improved machinability bar with same properties.
304L	S30403	Corrosion resistance as for 304. Low carbon variation for heavy gauge welded sections.
304H	S30409	Corrosion resistance as for 304. High carbon gives improved high temperature strength.
309S	S30908	Excellent resistance to corrosion, particularly attack by hot sulphur compounds in oxidising gases. Sulphite liquors and acids such as acetic, citric, lactic and nitric. Welding wire for joining dissimilar steels.
310	S31000	Excellent corrosion resistance at normal temperatures. Good resistance to oxidation and carburising atmospheres in high temperatures over 850C to 1100C. Welding wire for joining dissimilar steels.
316	S31600	High corrosion resistance to the complex sulphur compounds used in pulp and paper processing. Also resists attack by marine and corrosive industrial atmospheres. Suitable for mild seacoast atmosphere, pulp and paper, heat exchangers, propeller shafts, dyeing equipment. UGIMA 316 improved machinability bar, with same properties.
316L	S31603	Corrosion resistance as for 316. Low carbon variation, suitable for heavy gauge welding.
317L	S31703	Improved corrosion resistance over type 316. Often successfully applied where type 316 has given only moderate performance. Applications such as acetic acid distillation, pulp and paper machinery, ink and dyeing processes. 317L is a variation of 317 suitable for heavy gauge welding.
321	S32100	Excellent corrosion resistance, equivalent to 304 in the annealed condition and superior if the application involves service in 425C-870C range. Typical applications include expansion joints, furnace parts, aerospace and power industries, heat exchangers and steam generators.
347	S34700	This grade is resistant to chromium carbide precipitation. Most commonly found as a consumable for welding 321.
904L	N08904	'Super austenitic' grade with very high corrosion resistance, especially to strong acids and chlorides. Frequently used in sulphuric acid service.

Note 1: Single values are maxima unless otherwise stated.

Note 2: Hardness specification limits given are HRB = Rockwell B scale, HRC = Rockwell C scale, HB = Brinell Hardness.

Note 3: 3CR12 generally conforms with both ASTM A240 grade S41003 and with EN 10088 Parts 1 and 2, grade 1.4003. Properties quoted are from EN 10088.2.

Note 4: Mechanical properties shown are for the commonly available form listed; properties of other forms for the grade may vary.

## Ferritic & Martensitic Stainless Steel :

Grade	UNS No.	Chemical analysis (%) specified								
		C	Si	Mn	P	S	Cr	Mo	Ni	Other
<b>Ferritic stainless steels</b>										
3CR12 (Note 3)	1.4003	0.03	1.00	1.50	0.040	0.015	10.5 - 12.5		0.3 - 1.0	N 0.03
409	S40900	0.08	1.0	1.0	0.045	0.030	10.5 - 11.75		0.50	Ti 6xC min. 0.75 max.
430	S43000	0.12	1.0	1.0	0.04	0.030	16.0 - 18.0		0.75	
430F	S43020	0.12	1.0	1.25	0.06	0.15 min.	16.0 - 18.0			
434	S43400	0.12	1.0	1.0	0.04	0.03	16.0 - 18.0	0.75 - 1.25		
<b>Ferritic/Austenitic (Duplex) stainless steels</b>										
2205	S31803	0.030	1.00	2.0	0.030	0.020	21.0 - 23.0	2.5 - 3.5	4.5 - 6.5	N 0.08 - 0.20
UR52N*	S32520 S32550	0.030	0.80	1.50	0.035	0.020	24.0 - 26.0	3.0 4.0	5.5 - 8.0	N 0.20-0.35 Cu 0.5-2.0
<b>Martensitic stainless steels</b>										
410	S41000	0.15	1.00	1.00	0.040	0.030	11.5 - 13.5		0.75	
420	S42000	0.15 min	1.00	1.00	0.040	0.030	12.0 - 14.0			
431	S43100	0.20	1.00	1.00	0.04	0.030	15.0 - 17.0		1.25 - 2.50	
<b>Precipitation hardening steel</b>										
630	S17400	0.07	1.00	1.00	0.04	0.03	15.0 - 17.5		3.0 - 5.0	Cu 3.0-5.0 Nb • Ta 0.15-0.45

Note 1: Single values are maxima unless otherwise stated.

Note 2: Hardness specification limits given are HRB = Rockwell B scale, HRC = Rockwell C scale, HB = Brinell Hardness.

Note 3: 3CR12 generally conforms with both ASTM A240 grade S41003 and with EN 10088 Parts 1 and 2, grade 1.4003. Properties quoted are from EN 10088.2.

Note 4: Mechanical properties shown are for the commonly available form listed; properties of other forms for the grade may vary.



Grade	UNS No.	Properties and typical applications
<b>Ferritic stainless steels</b>		
3CR12 (Note 3)	1.4003	Useful corrosion resistance particularly in wet abrasion environments. Readily welded and formed into tanks, flues, bins, chutes, rail wagons, etc.
409	S40900	Resists atmospheric and automotive exhaust gas corrosion. Extensively used in auto exhaust systems.
430	S43000	Good combinations of corrosion resistance, formability and mechanical properties. Typical applications include automotive trims, element supports, cold headed fasteners, refrigerator doors.
430F	S43020	430F is a free machining version of 430, suitable for high speed machining. Corrosion resistance is lower than 430.
434	S43400	Molybdenum improves the pitting resistance over grade 430. Good for automotive trim components.
<b>Ferritic/Austenitic (Duplex) stainless steels</b>		
2205	S31803	2205 microstructure is approximately 50 ferrite and 50 austenitic, which results in the steel possessing high strength and hardness, and resistance to erosion, fatigue, stress corrosion cracking and pitting and crevice corrosion. Applications in marine, chemical and petrochemical industries.
UR52N*	S32520 S32550	'Super Duplex' grade exhibiting exceptional resistance to hot chlorides and sulphides with high strength. Applications in marine, chemical and petrochemical industries.
<b>Martensitic stainless steels</b>		
410	S41000	Resists dry atmospheres, fresh water, mild alkalines and acids, steam and hot gases. Must be hardened for maximum heat and corrosion resistance. Typical applications include cold heading, bolts, nuts and screws, pump parts and shafts, steam and gas turbine parts, mine ladder rungs.
420	S42000	Good resistance in the hardened condition to the atmosphere. Food, fresh water and mild alkalines or acids. Higher carbon hardenable grade. Typical applications include cutlery, surgical instruments, shear blades, needle valves.
431	S43100	Excellent resistance to a wide variety of corrosive media, approaching that of 304. High tensile and torque strength. Pump and boat shafts, nuts, bolts and marine hardware.
<b>Precipitation hardening steel</b>		
630	S17400	Precipitation hardening ('aging') treatment after machining gives high strength without distortion. Corrosion resistance similar to type 304. Pump shafts and valve spindles.

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Note 3: 3CR12 generally conforms with both ASTM A240 grade S41003 and with EN 10088 Parts 1 and 2, grade 1.4003.

Properties quoted are from EN 10088.2.

Note 4: Mechanical properties shown are for the commonly available form listed; properties of other forms for the grade may vary.