









# **ROLLED PRODUCTS**

#### COILS

Alloys - 1xxx / 2xxx / 3xxx / 5xxx / 6xxx / 7xxx / 8xxx
Thickness - Coils 0.3mm - 6 mm
Standard Width - 813mm - 1524 mm

#### Finishes available :

Mill finish surface (with clean residual oil or degreased by thermal treatment )

Marked by Labeling : other requirements according to relevant quality standards.

#### Coils available

Up to 3mm (0.125") thickness, stress leveled, inside diameter 508 + 12.7mm (20+0.5") outside diameter 1524 mm(60") maximum.

sheets form may be delivered with Bureau Veritas, Germanischer Lloyd or Det Norske Veritas certificates produced according to their respective rules

## SHEETS

Alloys	- 1xxx / 3xxx / 5xxx						
Thickness	2	0.4mm	-	6.00 mm			
Standard Width		900mm	-0	1250 mm			
Standard Length		1000mm	22	6000mm			

#### Technical Conditions:

Raised pattern types available: Stucco, diamond and fiuted.

Embossing depths available : 0.25mm + 0.05mm (0.01 +0.002\*)

#### Finishes available

Mill Finish surface (with clean residual oil or degreased by thermal treatment.) stress leveled, marked by labeling, other requirements according to relevant quality standards.

Coils available with inside diameter of 508 + 12.7mm (20 +0.5°) and a maximum outs of 1524mm (60°).

#### CHEQUERED PLATES

Alloys		1xxx / 3xxx / 5xxx						
Thickness	-	0.5mm	-	8 mm				
Standard Width		900mm	+ .:	1250 mm				
Standard Length		2000mm	20	4000mm				
Temper								

#### Technical Conditions

Raised pattern types available : Five bar, two bar, Diamond

Available height of raised pattern of 1.1mm - 1.5mm  $(0.059^{\circ}0$  on one side and a smooth surface on the other.

### Finishes available :

Mill Finish surface (with clean residual oil or degreased by thermal treatment ) marked by labeling, other requirements according to relevant quality standards.

## PLATES

Alloys	-	1xxx / 2xx	x / 3x	xx / 5xxx / 7xxx
Thickness	-	6.3mm	-1	250 mm
Standard Width	*	900mm	- 1	1550 mm
Standard Length-		1000mm	20	6000mm

#### Technical Conditions :

#### Options available :

Plates cut Sawed or milled ) of final length and width, ink jet continuous marking according to Aluminium Association Standards, ASTM or as per customer request, marked by labeling or stenciling, neutral paper interleaved, other requirements according to relevant quality standards.

Plates from 5083, may be delivered with Bureau Veritas, Germanischer Lloyd or Det Norske Veritas certificates, produced according to their respective rules.

## PVC Potective Coating :

A thin film of protective PVC coating is available upon request, Coating available on one or both sides, Coating thickness: 70pm, See through and blue color available.



# **EXTRUSION PRODUCTS**

#### EXTRUDED ROD



	Size (A)	Length			
Alloy family	mm	inch	mm	inch	
2xxx	19.525 - 500.0	0.375 - 19.68	2000 - 6000	78.75 - 236.25	
Gxxx	4 - 633.4	0.157 - 21.00	2000 - 6000	78.75 - 236,25	
5xxx	19.525 - 533.4	0.375 - 21.00	2000 - 6000	78.75 - 236.25	
7xxx	19 - 508.0	0.748 - 20.00	2000 - 6000	78.75 - 236.25	

## **EXTRUDED SQUARE BAR**



	Size (A)	Length			
Alloy family	mm	inch	mm	inch	
2xxx	12.7 - 406.4	0.50 - 16.00	2000 - 3658	78.75 - 144.00	
бххх	6 - 406.4	0.236 - 16.00	2000 - 3658	78.75 - 144.00	
5xxx	19.05 - 177.8	0.75 - 7.00	2000 - 3658	78.75 - 144.00	
7xxx	12.7 - 406.4	0.50 - 16.00	2000 - 3658	78.75 - 144.00	

## EXTRUDED HEXAGONAL BAR



	Size (A)	Length			
Alloy family	mm	inch	mm	inch	
2xxx	19.05 - 60.0	0.75 - 2.36	3000 - 3658	1181 - 144.00	
бххх	8.00 - 60.0	0.315 - 2.36	3000 - 3658	1181 - 144.00	
5xxx	8.00 - 60.0	0.315 - 2.36	3000 - 3658	1181 - 144.00	
7xxx	19.05 - 60.0	0.75 - 2.36	3000 - 3658	1181 - 144.00	

## EXTRUDED FLAT BAR



	Size (H)		Size	(B)	Length		
Alloy family	mm	inch	mm	inch	mm	inch	
2xxx	3.0 - 400.0	0.25 - 15.75	20.0 - 480.0	075 - 18.90	2000 - 6000	78.75 - 236.25	
6xxx	3.175 - 368.3	0.125 - 14.5	20.0 - 480.0	075 - 18.90	2000 - 6000	78.75 - 236.25	
5xxx	3.0 - 400.0	0.25 - 15.75	20.0 - 480.0	075 - 18.90	2000 - 6000	78.75 - 236.25	

## **EXTRUDED ROUND TUBE**



	Diameter	(D)	Wall Thic	kness (S)	Length		
Alloy family	mm	inch	mm	inch	mm	inch	
бххх	38.1 - 553.0	1,50 - 21,77	6.35 - 90.0	0.26 - 3,64	2000 - 6000	78.75 - 236.25	
5xxx	38.1 - 553.0	1.50 - 21.77	6.35 - 90.0	0.25 - 3.54	2000 - 6000	78.75 - 236.25	

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## Wrought Alloys Chemical Composition limits (per cent)

ALLOYS (ISS)		EQUIVALENT ALLOY (AA)	COP	PER	MANGN	ESIUM	SILIC	ON	IRON	MAN	IG ANSE	OTHER Total	REMARKS
OLD	NEW	U.S.A.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MAX.	MIN.	MAX.	MAX.	
1C	19000	1100	8.	0.10	10	(0.00)	81	0.5	0.6	-0	0.1	0.1	ALUMI NIUM 99.0% MIN
		1200	-	0.05			SL+FE	1.0	23		0.05	0.1	ALUMINIUM 99.0% MIN
1B	19500	1050	23	0.05	2	83	- 23	0.25	0.4	23	0.05	0.1	ALUMINIUM 99.5% MIN
1E	19501		23	0.04	2	1720	2	0.15	0.35	2	0.03	0.1	ALUMINIUM 99.5% MIN
6		1350		0.05				0.10	0.40		0.01	0.1	ALUMINIUM 99.5% MIN
	19600	1060	50	0.05			- 2	0.25	0.35		0.03	0.1	ALUMINIUM 99.6% MIN
-	19700	1070	-	0.03	-	-		0.2	0.25		0.03	0.1	ALUMINIUM 99.7% MIN
H 15	24345	2014	3.8	5.0	0.2	0.8	0.5	1.2	0.7	0.3	1.2	0.5	
H 14	24534	2017	3.5	4.7	0.4	1.2	0.2	0.7	0.7	0.4	1.2	0.5	
N3	31000	3003	- 20	0.1	-	0.1		0.6	0.7	1.0	1.5	0.4	
=3		3103	-24	0.1	15	0.3	-:	0.50	0.7	0.90	1.5	-2.	e
		3105	-	0.3	0.2	0.8		0.60	0.7	0.30	0.8		+
N21	43000	4043	E.	0.1	100	0.2	4.5	6.0	0.6	- 83	0.5	0.2	4
N2	46000	4047	23	0.1	- 2	0.2	10.0	13.0	0.6	-	0.5	0.2	i
N4	52000	5052	20	0.1	1.7	2.6	20	0.6	0.5	200	0.5	0.4	CR + MN = 0.5
N5	53000	5086	28	0.1	2.8	4.0	29	0.6	0.5	2	0.5	0.4	CR + MN = 0.5
N6	55000	5056	-	0.1	4.5	5.6	50	0.6	0.7		0.5	0.4	CHROMIUM UPTO 0.25
N8	54300	5083	7.5	0.1	4.0	4.9	- 2	0.4	0.7	0.5	1.0	0.4	CHROMIUM UPTO 0.25
H 20	65032	-	0.15	0.4	0.7	1.2	0.4	0.8	0.7	0.2	0.8	0.4	** CR=0.15-0.35%
		6061	0.15	0.4	0.8	1.2	0.4	0.8	0.7	-3	0.15	0.4	CHROMIUM 0.04 TO 0.35
H 9	63400	6063	8	0.1	0.4	0.9	0.3	0.7	0.6	-6	0.3	0.4	-
20	9	6066	0.7	1.2	0.8	1.4	0.9	1.8	0.7	0.6	1.1	0.4	G
	64423	2	0.5	1.0	0.5	1.3	0.7	1.3	0.8	-3	1.0	-3	
91 E	63401	6101	20	0.05	0.4	0.9	0.3	0.7	0.5	20	0.03	0.1	4
-	64401	6201	2	0.1	0.6	0.9	0.5	0.9	0.5	23	0.03	0.1	-
H 30	64430	6351	-0	0.1	0.4	1.2	0.6	1.3	0.6	0.4	1.0	0.3	2
5		6082	- 25	0.1	0.6	1.2	0.7	1.3	0.5	0.4	1.0	0.3	CHROMIMUM UPTO 0.25
-	74530	7039		0.2	1.0	1.5	-	0.4	0.7	0.2	0.7	0.4	ZINC 4.0 - 5.0%
-	-	7075	1.2	2.0	2.1	2.9	-	0.5	0.5	-	0.3	0.2	ZINC (5.1 - 6.1) % & CHROMIMUM (0.18-0.28)%
->	-	8011		0.10	-	0.05	0.50	0.90	1.00	-	0.20	0.1	-

#### **Technical Specification** How Alloying Elements affect Aluminium

Series	Main Alloy	Effect on Alloying Elements		
1000 Non (99% Aluminium)		Unalloyed aluminium is highly corrosion resistant, low strength, workable, conductive, non-heat-treatable.		
2000	Copper Based	Gives strength, hardness, machinability, Heat-treatable.		
3000 Manganese Based		Adds moderate strength, good workability. Non-heat-treatable.		
5000	Magnesium Based	Moderate to high strength, Corrosion resistant. Non-heat-freatable		
6000 Magnesium & Silicon Besed		Increase strength, tomability, corrosion resistant. Heat-treatable.		
7000 Zinc Based		For greatest strength, Heal- treatable.		
8000	Non (97.3 - 989 % Aluminium) Low Weight, Corrosion resistant, easy Maintenance			

Note: 1000, 3000, 5000, and 6000 alloys have good welding characteristics and corrosion resistant. 2000 and 7000 alloys have higher strength and better machinability, but lower weldability and corrosion resistant.

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# Importance of Aluminium:

- · Lightweight with high strenght / weight ratio.
- · Corrosion resistant.
- · Electrically / thermally conductive.
- · Non-magnetic and non-conductive.
- · Non-toxic and impervious.
- · Aesthetically pleasing with a wide range of surface finishes.
- · Good for decorative, functional or structural purposes.
- · Very malleable and easily machined.
- · Recyclable Aluminium is available in a wide range of alloys to suit different applications.

## Core Area for supply:

- · Defence Industries.
- · Marine Industries.
- · Mould Industries.
- · Packaging Industries.
- · Ship Building Industries.
- · Aerospace Industries.
- · Heavy Machinery Industries.
- · Fabrication Industries.
- . Building & Construction Industries.
- · Engineering & Precision Machinery & Metal Works.
- · Power & Transmission Industries.
- · Automobile Industries.
- · Transport Industries.

## Sourcing services



Packaging and Delivery :-Packaging and delivery options available, Wooden pallets ; Tightly bound with steel / PVC straps ; water proof packing with thermoshrinkable polyethylene and silica gel (desiccant) protection with corrugated cardboard and edge protections:







