Goal: The goal of this directive is to explain the Trinox Metal fabrication and to avoid any problems in the ordering process.

Application:

1.Chemical Proporties: Materials alloy content values (%) are given in Table 1.

Table 1: Trinox Metal Stainless Steel Alloys

Type		Mass Ratio (%)										
EN 10088	AISI No	C	Si	Mn	P	S	Cr	Mo	Ni	N	Cu	Others
1.4301	304	0,07	1,00	2,00	0,045	0,015	17,5 – 19,5	-	8,0 – 10,5	0,10	-	
1.4307	304L	0,03	1,00	2,00	0,045	0,015	17,5 – 19,5	-	8,0 – 10,5	0,10	-	
1.4016	430	0,08	1,00	1,00	0,040	0,015	16,0 – 18,0	-	-	-	-	
1.4401	316	0,07	1,00	2,00	0,045	0,015	16,5 – 18,5	2,00 - 2,50	10,00 – 13,00	0,10	-	
1.4404	316L	0,03	1,00	2,00	0,045	0,015	16,5 – 18,5	2,00 – 2,50	10,0 – 13,0	0,10	-	
1.4372	201	0,15	1,00	5,5 – 7,5	0,045	0,015	16,0 - 18,0	-	3,5 – 5,5	0,05 – 0,25	-	

2.Mechanical Proporties: Materials mechanical properties are given in Table 2.

Table 2: Stainless Steel Mechanical Properties

Type	EN 10088 No	Tensile S. Rm (MPa)		Yield S. Rp0.2 (MPa)	Yield S. Rp1,0 (MPa)	Elongation Min. %		Hardness HV
		Min.	Maks.	Min.	Min.	<3 mm	≥ 3mm	
304	1.4301	540	750	230	260	45	45	170
304L	1.4307	520	700	220	250	45	45	165
430	1.4016	430	600	260	280	20	20	160
316	1.4401	530	680	240	270	40	40	...
316L	1.4404	530	680	240	270	40	40	....
201	1.4372	680	880	350	380	45	45	....

3.Geometric Properties: The geometric properties and tolerances of our products are given Table 3.

Table 3: Trinox Metal Plate Products Geometric Properties

Standart	Thickness Range (mm)	Thickness Tolerance (mm)		Width Tolerance (mm)				
		g ≤ 1000	1000 < g ≤ 1280	g ≤ 125	125 < g ≤ 250	250 < g < 600	600 ≤ g ≤ 1000	1000 < g ≤ 1280
TS EN ISO 9445-2	0,30 ≤ k < 0,40	±0, 04	±0, 04	+ 0,5	+ 0,5	+ 0,7	+ 1,5	+ 2,0
	0,40 ≤ k < 0,50	±0, 04	±0, 04					
	0,50 ≤ k < 0,60	±0, 045	±0,5 0					
	0,60 ≤ k < 0,80	±0,05	±0,05					
	0,80 ≤ k < 1,00	±0, 055	±0, 06					
	1,00 ≤ k < 1,20	±0, 06	±0, 07	+ 0,7	+ 0,7	+ 1,0	+ 1,5	+ 2,0
	1,20 ≤ k < 1,50	±0, 08	±0, 08					
	1,50 ≤ k < 1,80	±0, 08	±0, 08	+ 1,0	+ 1,0	+ 1,2	+ 2,00	+ 2,5

- EN / 2 can be produced for thickness tolerances.
- Width tolerances is for edge cut materials.

Table 4. Width Tolerances in Non-Edge Cutting Materials

Width (mm)	
600≤g <1000	1000≤g <1290
+25 / 0	+30 /0

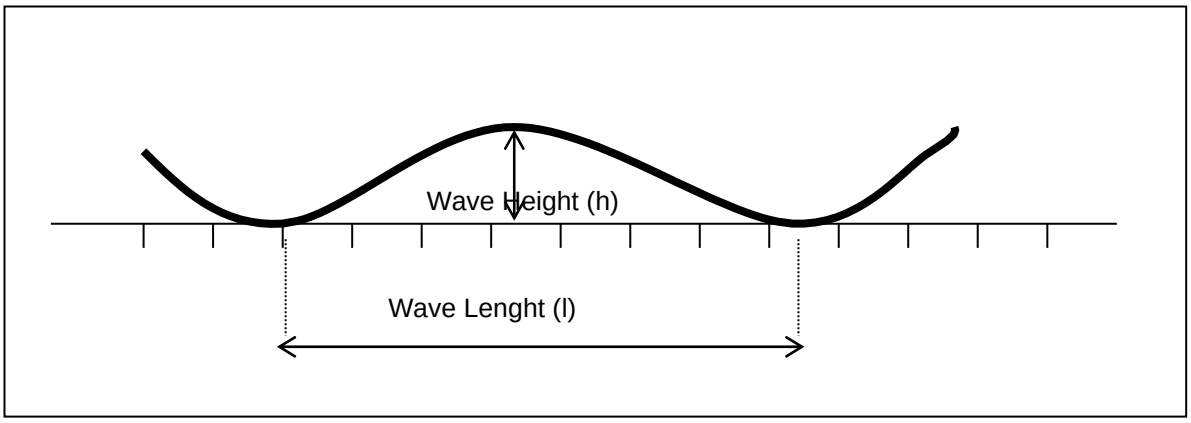
Table 5. Length Tolerance of Sheet Plate

	Tolerance (mm)
Lenght (mm)	Normal
L ≤ 1500	+5 /0

➢ **Wave, Flatness Tolerances:**

In the standard, h / l ratio is specified as maximum 0.03.

We can produce EN / 2 for our customers who have a customer special request related to the flatness.



4. Product Group Based Additional Features

Producibility Thickness: 0,3 mm – 1,80 mm

Producibility Width: 50 mm – 1290 mm

Producibility thickness for edge cutting only: 0,40 mm – 3,00 mm

4.1. Coil

- The inner diameter should be 508 mm and the outer diameter should be 1800 (max.) mm.
- Minimum weight of rolls is 3 tons, maximum weight is 22 tons.
- For thicknesses of 1 mm or more, cardboard core is not used if the roll weight is less than 5 tons.
- If the thickness is 1.5 mm or more, cardboard core is not used, regardless of weight.
- Cardboard cores are used in rolls with thicknesses of 1.00 mm and 1,20 mm depending on customer demand.
- The film is coated on the roll.

4.2. Plate

- Min. plate length 225 mm, max. plate length is 6000 mm.
- Min. width 400 mm, max. width is 1500 mm.
- The thickness of the plate is 0.4 mm - 3.00 mm.

- The min. and max. values are machine capacities. information should be obtained from the Planning Department for sheet combinations.

4.3. Strip

- The inner diameter of the strip is 508 mm.
- For thickness of 0,90 mm and above, the slitting process is combined as 50 mm*15. The maximum outside diameter of the strip is 1750 mm.
- Slitting process with thicknesses below 0,90 mm is combined as 50 mm * 15. The maximum roll weight should be 5 tons.
- Slitting is not performed at thicknesses below 0,60 mm.
- 350 mm genişlik altındaki şeritlerde kağıtlı sarım yapılmaz.
- No paper wrapping is made in strips under 350 mm width.

4.4. Disk

- Thickness should be between 0,30 – 1,20 mm.