



# Quarto plate

Product and dimension program



Outokumpu's production unit in Degerfors, Sweden, offers stainless steel quarto plate, or heavy plate, in an industry-leading range of dimensions and alloys.

Outokumpu's quarto plate products combine outstanding corrosion resistance with strength, durability and ease of fabrication. As quarto plate is rolled individually, each plate can be produced to meet specific – and often unique – customer requirements. In addition to its wide range of products, Outokumpu offers assistance with materials selection, ensuring that customers are supplied with the product that best suits their needs, whatever the application.

We can deliver this unique service because we have complete control over the entire production process, providing customers with solutions that are 100% tailor-made. After cutting to size, plates may undergo further processing such as edge preparation, surface finishing by grinding, or even the production of complex shapes. In other words, our production of hot rolled plate is a made-to-measure service designed to suit the individual needs of each customer. The tables in this document show the maximum plate length in meters (m) depending on plate thickness and width in millimeters (mm).

As the product program is continuously reviewed, developed, and improved, inconsistencies may exist at the time of inquiry. For your local contact please visit our website: [outokumpu.com/contacts](https://www.outokumpu.com/contacts)

## Size range

The size ranges shown in this document illustrate the standard manufacturing program of hot rolled plate. Other sizes can be delivered by special agreement in each case. For grades not mentioned in the Dimension Program tables or for grades not mentioned in the Steel Grade table, please contact us by [outokumpu.com/contacts](https://www.outokumpu.com/contacts) for more information about available products and dimensions. The relationship between plate thickness, width, length and maximum plate weight depends on the steel grade and special criteria may apply for different applications. Consequently, the sizes available may in certain cases differ somewhat from those given in the tables.

# Stainless steel grades

## Grades

Table 1

Core				Steels with PRE 17–22, for corrosive environments.						Outokumpu Classic family	
Steel designations				Typical chemical composition, % by mass							
Outokumpu name	EN	ASTM		C	Cr	Ni	Mo	N	Others		
		Type	UNS								
<b>Austenitic</b>											
Core 304/4301	1.4301	304	S30400	0.04	18.1	8.1					
Core 304L/4306	1.4306	304L	S30402	0.02	18.2	10.1					
Core 304L/4307	1.4307	304L	S30403	0.02	18.1	8.1					
Core 304LN/4311	1.4311	304LN	S30453	0.02	18.5	9.2		0.14			
Core 304N/4315	1.4315	304N	S30451	0.02	18.5	9.2		0.14			
Core 321/4541	1.4541	321	S32100	0.04	17.3	9.1			Ti		
Core 347 *)/4550	1.4550	347	S34700	0.05	17.5	9.5			Nb		

\*) Also available as 347H.

## Core 304/4301, Core 304L/4306 \*) , Core 304L/4307

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 2

Standard	Plate thickness (mm)	Plate width (mm)																			
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200		
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0	
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0				
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0				
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	12.0	11.0	10.0	
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	12.0	11.0	11.0	
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	11.0
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	30 < t ≤ 35	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.6	12.1	11.7	11.4	
	35 < t ≤ 40	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.7	12.2	11.7	11.3	10.9	10.5	10.2	9.9	
	40 < t ≤ 45	13.5	13.5	13.5	13.5	13.5	13.5	13.3	12.7	12.1	11.6	11.2	10.7	10.3	10.0	9.6	9.3	9.0	8.7		
	45 < t ≤ 50	13.5	13.5	13.5	13.5	13.1	12.5	11.9	11.4	10.9	10.4	10.0	9.6	9.2	8.9	8.6	8.3	8.0	7.8		
	50 < t ≤ 55	13.5	13.5	13.2	12.5	11.9	11.3	10.7	10.3	9.8	9.4	9.0	8.7	8.3	8.0	7.7	7.5	7.2	7.0		
	55 < t ≤ 60	13.5	12.8	12.1	11.4	10.8	10.3	9.8	9.3	8.9	8.6	8.2	7.9	7.6	7.3	7.0	6.8	6.6	6.3		
	60 < t ≤ 65	12.5	11.7	11.1	10.5	9.9	9.4	9.0	8.6	8.2	7.8	7.5	7.2	6.9	6.7	6.4	6.2	6.0	5.8		
	65 < t ≤ 70	11.6	10.9	10.2	9.7	9.2	8.7	8.3	7.9	7.6	7.2	6.9	6.7	6.4	6.2	5.9	5.7	5.5	5.3		
70 < t ≤ 75	10.7	10.1	9.5	9.0	8.5	8.1	7.7	7.3	7.0	6.7	6.4	6.2	5.9	5.7	5.5	5.3	5.1	4.9			
75 < t ≤ 80	10.0	9.4	8.9	8.4	7.9	7.5	7.2	6.8	6.5	6.2	6.0	5.7	5.5	5.3	5.1	4.9	4.7	4.6			
80 < t ≤ 85	9.4	8.8	8.3	7.8	7.4	7.0	6.7	6.4	6.1	5.8	5.6	5.4	5.1	4.9	4.8	4.6	4.4	4.3			
85 < t ≤ 90	8.8	8.3	7.8	7.4	7.0	6.6	6.3	6.0	5.7	5.5	5.2	5.0	4.8	4.6	4.5	4.3	4.1	4.0			
90 < t ≤ 95	8.3	7.8	7.4	6.9	6.6	6.2	5.9	5.6	5.4	5.1	4.9	4.7	4.5	4.4	4.2	4.0	3.9	3.7			
95 < t ≤ 100	7.9	7.4	7.0	6.6	6.2	5.9	5.6	5.3	5.1	4.9	4.6	4.4	4.3	4.1	3.9	3.8	3.7	3.5			
100 < t ≤ 110	7.1	6.7	6.3	5.9	5.6	5.3	5.0	4.8	4.6	4.3	4.2	4.0	3.8	3.7	3.5	3.4	3.3				
110 < t ≤ 120	6.5	6.0	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.8	3.6	3.4	3.3	3.2	3.0					
120 < t ≤ 130	5.9	5.5	5.2	4.9	4.6	4.4	4.1	3.9	3.7	3.6	3.4	3.3	3.1								
130 < t ≤ 150																				On request	

\*) Thicknesses > 110 mm, 5 % reduced mechanical values.

### Core 304LN/4311, Core 304N/4315

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 3

Standard	Plate thickness (mm)	Plate width (mm)																		
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	8.0	8.0	8.0							
	6	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0	8.0							
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	9.0	8.0	7.0	6.0			
	8	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	10.0	9.0	8.0		
	9	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	12.0	10.0	8.0	
	10	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.0	11.0
	11	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.0
	12	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
	12 < t ≤ 15	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
	15 < t ≤ 20	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.3	12.8
	20 < t ≤ 25	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	12.5	12.0	11.6	11.2	10.8	10.4	10.1
	25 < t ≤ 30	13.0	13.0	13.0	13.0	13.0	13.0	13.4	12.7	12.2	11.6	11.1	10.7	10.2	9.9	9.5	9.1	8.8	8.5	8.2
	30 < t ≤ 35	13.0	13.0	13.3	12.6	11.9	11.3	10.8	10.3	9.8	9.4	9.0	8.6	8.3	8.0	7.7	7.4	7.2	6.9	
	35 < t ≤ 40	13.1	12.3	11.5	10.9	10.3	9.8	9.3	8.9	8.5	8.1	7.8	7.4	7.1	6.9	6.6	6.4	6.1	5.9	
	40 < t ≤ 45	11.5	10.8	10.1	9.6	9.1	8.6	8.2	7.8	7.4	7.1	6.8	6.5	6.2	6.0	5.8	5.5	5.3	5.2	
	45 < t ≤ 50	10.2	9.6	9.0	8.5	8.1	7.6	7.2	6.9	6.6	6.3	6.0	5.7	5.5	5.3	5.1	4.9	4.7	4.5	
50 < t ≤ 70																			On request	

### Core 321/4541

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 4

Standard	Plate thickness (mm)	Plate width (mm)																		
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0								
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0				
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0			
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	12.0	11.0	10.0	
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	12.0	11.0	11.0	
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	11.0
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.6	12.2	
	30 < t ≤ 35	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.3	12.8	12.3	11.9	11.5	11.1	10.7	10.3
	35 < t ≤ 40	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.6	12.1	11.6	11.1	10.7	10.3	9.9	9.6	9.3	9.0	
	40 < t ≤ 45	13.5	13.5	13.5	13.5	13.5	12.8	12.2	11.6	11.1	10.7	10.2	9.8	9.4	9.1	8.7	8.4	8.1	7.9	
	45 < t ≤ 50	13.5	13.5	13.5	12.7	12.1	11.5	10.9	10.4	9.9	9.5	9.1	8.7	8.4	8.1	7.8	7.5	7.2	7.0	
	50 < t ≤ 55	13.5	13.0	12.2	11.5	10.9	10.4	9.9	9.4	9.0	8.6	8.2	7.9	7.6	7.3	7.0	6.8	6.5	6.3	
	55 < t ≤ 60	12.6	11.8	11.1	10.5	9.9	9.4	9.0	8.5	8.1	7.8	7.5	7.1	6.9	6.6	6.3	6.1	5.9	5.7	
	60 < t ≤ 65	11.6	10.8	10.2	9.6	9.1	8.6	8.2	7.8	7.5	7.1	6.8	6.5	6.3	6.0	5.8	5.6	5.4	5.2	
	65 < t ≤ 70	10.7	10.0	9.4	8.9	8.4	8.0	7.6	7.2	6.9	6.6	6.3	6.0	5.8	5.5	5.3	5.1	4.9	4.7	
	70 < t ≤ 75	9.9	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.3	6.1	5.8	5.5	5.3	5.1	4.9	4.7	4.5	4.4	
	75 < t ≤ 80	9.2	8.6	8.1	7.7	7.2	6.9	6.5	6.2	5.9	5.6	5.4	5.1	4.9	4.7	4.5	4.4	4.2	4.0	
	80 < t ≤ 85	8.6	8.1	7.6	7.2	6.8	6.4	6.1	5.8	5.5	5.2	5.0	4.8	4.6	4.4	4.2	4.0	3.9	3.7	
	85 < t ≤ 90	8.1	7.6	7.1	6.7	6.3	6.0	5.7	5.4	5.1	4.9	4.7	4.5	4.3	4.1	3.9	3.8	3.6	3.5	
	90 < t ≤ 95	7.6	7.1	6.7	6.3	5.9	5.6	5.3	5.1	4.8	4.6	4.4	4.2	4.0	3.8	3.7	3.5	3.4	3.3	
	95 < t ≤ 100	7.2	6.7	6.3	5.9	5.6	5.3	5.0	4.8	4.5	4.3	4.1	3.9	3.7	3.6	3.4				
100 < t ≤ 110	6.5	6.0	5.7	5.3	5.0	4.7	4.5	4.2	4.0	3.8	3.6	3.5	3.3	3.2	3.0					
110 < t ≤ 120	5.8	5.5	5.1	4.8	4.5	4.3	4.0	3.8	3.6	3.4	3.3	3.1	3.0							
120 < t ≤ 130	5.3	5.0	4.6	4.4	4.1	3.9	3.6	3.4	3.3	3.1	2.9									
130 < t ≤ 150																			On request	

**Core 347/4550 \*)**

Maximum plate length in meters (m) depending on the plate thickness and plate width.

**Table 5**

Standard	Plate thickness (mm)	Plate width (mm)																		
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0							
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0			
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0			
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0	12.0	12.0	11.0	10.0	
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	12.0	11.0	11.0
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	11.0
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.6	12.2
	30 < t ≤ 35	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.3	12.8	12.3	11.9	11.5	11.1	10.7	10.3
	35 < t ≤ 40	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.6	12.1	11.6	11.1	10.7	10.3	9.9	9.6	9.3	9.0	
	40 < t ≤ 45	13.5	13.5	13.5	13.5	13.5	12.8	12.2	11.6	11.1	10.7	10.2	9.8	9.4	9.1	8.7	8.4	8.1	7.9	
	45 < t ≤ 50	13.5	13.5	13.5	12.7	12.1	11.5	10.9	10.4	9.9	9.5	9.1	8.7	8.4	8.1	7.8	7.5	7.2	7.0	
	50 < t ≤ 55	13.5	13.0	12.2	11.5	10.9	10.4	9.9	9.4	9.0	8.6	8.2	7.9	7.6	7.3	7.0	6.8	6.5	6.3	
	55 < t ≤ 60	12.6	11.8	11.1	10.5	9.9	9.4	9.0	8.5	8.1	7.8	7.5	7.1	6.9	6.6	6.3	6.1	5.9	5.7	
	60 < t ≤ 65	11.6	10.8	10.2	9.6	9.1	8.6	8.2	7.8	7.5	7.1	6.8	6.5	6.3	6.0	5.8	5.6	5.4	5.2	
	65 < t ≤ 70	10.7	10.0	9.4	8.9	8.4	8.0	7.6	7.2	6.9	6.6	6.3	6.0	5.8	5.5	5.3	5.1	4.9	4.7	
	70 < t ≤ 75	9.9	9.3	8.7	8.2	7.8	7.4	7.0	6.7	6.3	6.1	5.8	5.5	5.3	5.1	4.9	4.7	4.5	4.4	
75 < t ≤ 80	9.2	8.6	8.1	7.7	7.2	6.9	6.5	6.2	5.9	5.6	5.4	5.1	4.9	4.7	4.5	4.4	4.2	4.0		
80 < t ≤ 85	8.6	8.1	7.6	7.2	6.8	6.4	6.1	5.8	5.5	5.2	5.0	4.8	4.6	4.4	4.2	4.0	3.9	3.7		
85 < t ≤ 90	8.1	7.6	7.1	6.7	6.3	6.0	5.7	5.4	5.1	4.9	4.7	4.5	4.3	4.1	3.9	3.8	3.6	3.5		
90 < t ≤ 95	7.6	7.1	6.7	6.3	5.9	5.6	5.3	5.1	4.8	4.6	4.4	4.2	4.0	3.8	3.7	3.5	3.4	3.3		
95 < t ≤ 100	7.2	6.7	6.3	5.9	5.6	5.3	5.0	4.8	4.5	4.3	4.1	3.9	3.7	3.6	3.4					
100 < t ≤ 110	6.5	6.0	5.7	5.3	5.0	4.7	4.5	4.2	4.0	3.8	3.6	3.5	3.3	3.2	3.0					
110 < t ≤ 120	5.8	5.5	5.1	4.8	4.5	4.3	4.0	3.8	3.6	3.4	3.3	3.1	3.0							
120 < t ≤ 130	5.3	5.0	4.6	4.4	4.1	3.9	3.6	3.4	3.3	3.1	2.9									
130 < t ≤ 150																				

On request

\*) Thicknesses > 110 mm, 5 % reduced mechanical values.

**Grades**

**Table 6**

Supra	Steels with PRE 22–26, for highly corrosive environments.			Outokumpu Classic family					
	Steel designations			Typical chemical composition, % by mass					
Outokumpu name	EN	ASTM Type	UNS	C	Cr	Ni	Mo	N	Others
<b>Austenitic</b>									
Supra 316/4401	1.4401	316	S31600	0.04	17.2	10.1	2.1		
Supra 316L/4404	1.4404	316L	S31603	0.02	17.2	10.1	2.1		
Supra 316LN/4406	1.4406	316LN	S31653	0.02	17.2	10.3	2.1	0.14	
Supra 316LN/4429	1.4429	316LN	S31653	0.02	17.3	12.5	2.6	0.14	
Supra 316L/4432	1.4432	316L	S31603	0.02	16.9	10.7	2.6		
Supra 316L/4435	1.4435	316L	S31603	0.02	17.3	12.6	2.6		
Supra 316/4436	1.4436	316	S31600	0.02	16.9	10.7	2.6		
Supra 316Ti/4571	1.4571	316Ti	S31635	0.04	16.8	10.9	2.1		Ti
Supra 724L/4435 *)	1.4435 mod	316L mod	S31603	0.02	17.3	13.2	2.6		

\*) Optimized composition for use in urea applications.







## Forta SDX 2507, Forta SDX 100

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 15

Standard	Plate thickness (mm)	Plate width (mm)																	
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	9.0	8.0												
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	8.0	7.0							
	7	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	11.0	8.0	6.0					
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	9.0	6.0			
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	10.0		
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	9.0	
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	11.0	10.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.7
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.1	12.6	12.1	11.6	11.2	10.8	10.4	10.1
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.1	12.4	11.9	11.3	10.8	10.4	10.0	9.6	9.2	8.9	8.6	8.3	8.0
	30 < t ≤ 35	13.5	13.5	13.1	12.3	11.7	11.1	10.6	10.1	9.6	9.2	8.8	8.5	8.1	7.8	7.5	7.3	7.0	6.8
	35 < t ≤ 40	12.8	12.1	11.3	10.7	10.1	9.6	9.2	8.7	8.3	8.0	7.6	7.3	7.0	6.7	6.5	6.3	6.0	5.8
	40 < t ≤ 45	11.3	10.6	10.0	9.4	8.9	8.5	8.0	7.7	7.3	7.0	6.7	6.4	6.1	5.9	5.7	5.5	5.3	5.1
	45 < t ≤ 50	10.1	9.5	8.9	8.4	8.0	7.5	7.2	6.8	6.5	6.2	5.9	5.7	5.4	5.2	5.0	4.8	4.7	4.5
50 < t ≤ 55	9.1	8.6	8.0	7.6	7.2	6.8	6.4	6.1	5.8	5.6	5.3	5.1	4.9	4.7	4.5	4.3	4.1	4.0	
55 < t ≤ 60	8.3	7.8	7.3	6.9	6.5	6.1	5.8	5.5	5.3	5.0	4.8	4.6	4.4	4.2	4.0	3.9	3.7	3.6	
60 < t ≤ 70	On request																		

Thickness max. 50 mm, according to EN 10028-7

## Grades

Table 16

Ultra

Steels and alloys with PRE > 27,  
for extremely corrosive environments.

Outokumpu  
**Pro**  
family

Steel designations				Typical chemical composition, % by mass					
Outokumpu name	EN	ASTM		C	Cr	Ni	Mo	N	Others
		Type	UNS						
<b>Duplex</b>									
Ultra 317L	1.4438	317L	S31703	0.02	18.2	11.6	3.1		
Ultra 725LN	1.4466	310MoLN	S31050	0.01	25.0	22.3	2.1	0.12	
Ultra 6XN	1.4529	–	N08926 **)	0.01	20.5	24.8	6.5	0.20	Cu
Ultra 904L	1.4539	904L	N08904	0.01	19.8	24.2	4.3		1,4Cu
Ultra 254 SMO	1.4547	–	S31254	0.01	20.0	18.0	6.1	0.20	Cu
Ultra Alloy 825	2.4858	–	N08825	0.01	23.0	39.0	3.2		1,7Cu Ti
Ultra 3964 *)	1.3964	–	–	0.02	20.5	15	3.2	0.27	4Mn
Sanicro® 35 ***)	–	–	N08935	0.02	27.0	35.5	6.4	0.27	Cu

\*) Also sold under the trademark Amanox®, \*\*) Also UNS N08367, \*\*\*) Sanicro® 35 is a trademark owned by Alleima AB and produced as plate and sheet by Outokumpu under a license agreement.

## Ultra 6XN

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 17

Standard	Plate thickness (mm)	Plate width (mm)													
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	
EN 10088-2 ASTM A240	7	6.0	6.0	6.0	6.0	6.0	6.0	6.0							
	8	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	6.0			
	9	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	6.0			
	10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	9.0	8.0	8.0		
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	9.0	9.0	9.0	8.0	8.0	
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	9.0	8.0
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	9.0
	15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.6	11.2	10.8
	25 < t ≤ 30	11.9	11.2	10.6	10.0	12.0	12.0	11.5	11.0	10.5	10.0	9.6	9.3	8.9	
	30 < t ≤ 35	10.2	9.6	9.0	8.5	10.8	10.3	9.8	9.3	8.9	8.6	8.2	7.9	7.6	
	35 < t ≤ 40	8.9	8.3	7.8	7.4	9.4	8.9	8.5	8.1	7.8	7.4	7.1	6.8	6.6	
	40 < t ≤ 45	7.8	7.3	6.9	6.5	8.3	7.9	7.5	7.2	6.8	6.5	6.3	6.0	5.8	
	45 < t ≤ 50	7.0	6.5	6.2	5.8	7.4	7.0	6.7	6.4	6.1	5.8	5.6	5.4	5.1	
	50 < t ≤ 60	On request													



## Ultra 254 SMO

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 18

Standard	Plate thickness (mm)	Plate width (mm)															
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700			
EN 10088-2 ASTM A240	7	6.0	6.0	6.0	6.0	6.0	6.0										
	8	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	6.0					
	9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	6.0				
	10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	8.0				
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	9.0	9.0	8.0	8.0	8.0		
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	9.0	8.0		
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	9.0	
	15 < t ≤ 20	12.0	12.0	11.8	11.2	12.0	12.0	12.0	12.0	12.0	11.7	11.2	10.7	10.3	9.9		
	20 < t ≤ 25	10.7	10.0	9.5	8.9	11.3	10.8	10.3	9.8	9.4	9.0	8.6	8.3	8.0			
	25 < t ≤ 30	8.8	8.3	7.8	7.4	9.4	8.9	8.5	8.1	7.8	7.4	7.1	6.8	6.6			
	30 < t ≤ 35	7.5	7.1	6.6	6.3	8.0	7.6	7.2	6.9	6.6	6.3	6.0	5.8	5.6			
	35 < t ≤ 40	6.5	6.1	5.7	5.4	6.9	6.6	6.3	6.0	5.7	5.4	5.2	5.0	4.8			
	40 < t ≤ 45	5.7	5.4	5.0	4.7	6.1	5.8	5.5	5.2	5.0	4.8	4.6	4.4	4.2			
	45 < t ≤ 50	5.1	4.8	4.5	4.2	5.4	5.2	4.9	4.7	4.4	4.2	4.0	3.9	3.7			
	50 < t ≤ 55	On request															

## Ultra 904L

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 19

Standard	Plate thickness (mm)	Plate width (mm)																
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	
EN 10088-2 ASTM A240	6	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0						
	7	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0						
	8	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	6.0	
	9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0	
	10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	8.0
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	9.0
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.6	11.2	10.8	10.4
	25 < t ≤ 30	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.8	11.3	10.8	10.3	9.9	9.5	9.2	8.8	8.5
	30 < t ≤ 35	12.0	12.0	12.0	12.0	11.6	11.0	10.4	10.0	9.5	9.1	8.7	8.4	8.0	7.7	7.4	7.2	7.2
	35 < t ≤ 40	12.0	11.9	11.2	10.6	10.0	9.5	9.0	8.6	8.2	7.8	7.5	7.2	6.9	6.6	6.4	6.2	6.2
	40 < t ≤ 70	On request																

## Ultra 317L

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 20

Standard	Plate thickness (mm)	Plate width (mm)																	
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200
EN 10088-2 ASTM A240	5	9.0	9.0	9.0	9.0	9.0	9.0												
	6	9.0	9.0	9.0	9.0	9.0	9.0												
	7	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	8.0	7.0						
	8	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	8.0			
	9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0	10.0	9.0	8.0	
	10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	9.0
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0
	15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0
	20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.1	10.7	10.3	10.0
	25 < t ≤ 30	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.7	11.2	10.7	10.3	9.9	9.5	9.1	8.8	8.5	8.2	7.9
	30 < t ≤ 35	12.0	12.0	12.0	12.0	11.6	11.0	10.5	10.0	9.5	9.1	8.7	8.4	8.0	7.7	7.4	7.2	6.9	6.7
	35 < t ≤ 40	12.0	11.9	11.2	10.6	10.0	9.5	9.1	8.6	8.2	7.9	7.5	7.2	6.9	6.7	6.4	6.2	6.0	5.8
	40 < t ≤ 45	11.2	10.5	9.9	9.3	8.8	8.4	8.0	7.6	7.2	6.9	6.6	6.3	6.1	5.8	5.6	5.4	5.2	5.0
	45 < t ≤ 50	10.0	9.4	8.8	8.3	7.9	7.5	7.1	6.7	6.4	6.1	5.9	5.6	5.4	5.2	5.0	4.8	4.6	4.4
50 < t ≤ 70	On request																		

## Ultra 725LN

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 21

Standard	Plate thickness (mm)	Plate width (mm)																		
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	
EN 10088-2 ASTM A240	5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0								
	6	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0								
	7	10.0	10.0	10.0	10.0	10.0	9.0	9.0	9.0	9.0	9.0	8.0	7.0							
	8	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0	10.0	10.0	9.0	9.0	8.0					
	9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	11.0	10.0	10.0	10.0	9.0	8.0			
	10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	9.0	
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	9.0	
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	9.0	
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	
	15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	10.0	10.0	9.0	
	20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.9	10.5	10.0	9.7	9.3	9.0	8.7	8.4	8.1	7.8
	25 < t ≤ 30	12.0	12.0	12.0	12.0	11.1	10.5	10.0	9.6	9.2	8.8	8.4	8.1	7.8	7.5	7.3	7.0	6.8	6.6	
	30 < t ≤ 50																			On request

## Ultra Alloy 825

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 22

Standard	Plate thickness (mm)	Plate width (mm)																	
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200
ASTM B424	8	12.0	12.0	11.0	10.0	10.0	9.0	8.0	7.0	6.0									
	9	12.0	12.0	12.0	11.0	11.0	10.0	10.0	9.0	8.0	7.0	6.0							
	10	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	8.0	7.0	6.0						
	11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	8.0	7.0						
	12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	8.0						
	12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0						
	15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0						
	20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.0	10.6	10.2	9.8						
	25 < t ≤ 30	12.0	12.0	12.0	11.6	11.0	10.4	10.0	9.5	9.1	8.7	8.4	8.0						
	30 < t ≤ 35	11.7	11.0	10.4	9.8	9.3	8.9	8.4	8.0	7.7	7.4	7.1	6.8						
35 < t ≤ 40																			On request

## Ultra 3964 \*)

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 23

Standard	Plate thickness (mm)	Plate width (mm)																	
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200
SEW 390	8	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0							
	9	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0							
	10	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.0						
	11	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.0	6.0					
	11 < t ≤ 15	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0	6.0					
	15 < t ≤ 20	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0					
	20 < t ≤ 25	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0					
	25 < t ≤ 30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0					
	30 < t ≤ 35	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3					
	35 < t ≤ 40	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.5	9.1	8.8	8.4	8.1					
	40 < t ≤ 45	10.0	10.0	10.0	10.0	10.0	9.8	9.3	8.9	8.5	8.2	8.2	8.2	6.5					
	45 < t ≤ 50	10.0	10.0	10.0	9.8	9.3	8.8	8.4	8.0	7.7	7.4	7.1	6.8	6.5					
	50 < t ≤ 55	10.0	9.5	8.9	8.4	8.0	7.6	7.2	6.9	6.6	6.3	6.1	5.8	5.6					
	55 < t ≤ 60	9.3	8.7	8.2	7.8	7.3	7.0	6.6	6.3	6.1	5.8	5.6	5.4	5.2					

\*) Only on request.

## Sanicro® 35 \*)

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 24

Standard	Plate thickness (mm)	Plate width (mm)						
		1500	1600	1700	1800	1900	2000	
ASMT B625	10	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	11	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	11 < t ≤ 15	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	15 < t ≤ 20	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	20 < t ≤ 25	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	25 < t ≤ 30	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	30 < t ≤ 35	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	35 < t ≤ 40	6.0	6.0	6.0	6.0	6.0	6.0	6.0
	40 < t ≤ 45	6.0	6.0	5.9	5.6	5.2	4.9	4.9
45 < t ≤ 50	6.0	5.6	5.2	4.9	4.6	4.6	4.4	

\*) Only on request.

Therma

Steels for high temperature applications (&gt; 550 °C).

Outokumpu  
Pro  
family

Steel designations				Typical chemical composition, % by mass					
Outokumpu name	EN	ASTM		C	Cr	Ni	Mo	N	Others
		Type	UNS						
<b>Austenitic</b>									
Therma 4828	1.4828	–	–	0.05	19.3	11.2			1,9Si
Therma 309S/4833	1.4833	309S	S30908	0.06	22.3	12.3			
Therma 253 MA	1.4835	–	S30815	0.09	21	11		0.17	1,6Si Ce
Therma 314/4841	1.4841	314	S31400	0.06	24.3	19.2			1,7Si
Therma 321H/4878	1.4878	321H	S32109	0.05	17.3	9.1			Ti
Therma 310S/4845	1.4845	310S	S31008	0.05	25.5	19.1			
Therma 304H/4948	1.4948	304H	S30409	0.05	18.1	8.3			
Therma 316H/4401	1.4401	316H	S31609	0.05	17.3	9.1	2.1		
Therma 4910	1.4910	316LN	S31653	0.02	17.3	12.5	2.6	0.14	
Therma Alloy 800/800H	1.4876, 1.4958	800, 800H	N08800, N08810	0.07	21	31			Ti+Al 0.4–0.7
Therma Alloy 800H/800T	1.4876, 1.4959	800H	N08810, N08811	0.08	21	31			Ti+Al 0.85–1.2

**Therma 309S/4833, Therma 314/4841 \*)**

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 26

Standard	Plate thickness (mm)	Plate width (mm)																
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	
EN 10095 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	8.0	7.0	7.0	6.0	6.0						
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0						
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0					
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0		
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0	11.0	10.0	9.0	8.0
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0	11.0	10.0	10.0
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.5	12.0	11.6	11.2	10.8
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.4	12.7	12.2	11.6	11.1	10.7	10.2	9.9	9.5	9.1	8.8	
	30 < t ≤ 50																	

\*) Not included in ASTM A240

**Therma 4828 \*) , Therma 253 MA, Therma 310S/4845**

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 27

Standard	Plate thickness (mm)	Plate width (mm)																
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	
EN 10095 ASTM A240	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0						
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0					
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	12.0	10.0	9.0	8.0	7.0		
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0	11.0	10.0	9.0	8.0	
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0	11.0	10.0	10.0	
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.5	12.0	11.6	11.2	10.8
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.4	12.7	12.2	11.6	11.1	10.7	10.2	9.9	9.5	9.1	8.8	
	30 < t ≤ 35	13.5	13.5	13.3	12.6	11.9	11.3	10.8	10.3	9.8	9.4	9.0	8.6	8.3	8.0	7.7	7.4	
	35 < t ≤ 40	13.1	12.3	11.5	10.9	10.3	9.8	9.3	8.9	8.5	8.1	7.8	7.4	7.1	6.9	6.6	6.4	
40 < t ≤ 45	11.5	10.8	10.1	9.6	9.1	8.6	8.2	7.8	7.4	7.1	6.8	6.5	6.2	6.0	5.8	5.5		
45 < t ≤ 70																		On request

\*) Not included in ASTM A240



## Therma Alloy 800, Therma Alloy 800H, Therma Alloy 800T

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 30

Standard	Plate thickness (mm)	Plate width (mm)																				
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200			
EN 10095, EN 10302, EN 1028-7	ASTM B409, ASTM A240	8	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	9.0	8.0							
		9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0							
		10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0						
		11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0					
		12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0				
		12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0				
		15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.9	11.4	10.9	10.5	10.1						
		20 < t ≤ 25	12.0	12.0	12.0	12.0	11.5	10.9	10.4	9.9	9.4	9.0	8.7	8.3	8.0							
		25 < t ≤ 30	12.0	11.3	10.6	10.0	9.5	9.0	8.5	8.1	7.8	7.4	7.1	6.8	6.5							
		30 < t ≤ 35	10.2	9.6	9.0	8.5	8.0	7.6	7.2	6.9	6.5	6.2	6.0	5.7	5.5							
		35 < t ≤ 40	8.8	8.3	7.8	7.3	6.9	6.5	6.2	5.9	5.6	5.4	5.1	4.9	4.7							
		40 < t ≤ 45	8.0	7.4	7.0	6.6	6.2	5.9	5.6	5.3	5.0	4.8	4.6	4.4	4.2							
		45 < t ≤ 50	6.9	6.5	6.0	5.7	5.4	5.1	4.8	4.5	4.3	4.1	3.9	3.7	3.6							
		50 < t ≤ 55	6.2	5.8	5.4	5.1	4.8	4.5	4.3	4.1	3.8	3.7	3.5	3.3	3.2							
		55 < t ≤ 60	5.6	5.2	4.9	4.6	4.3	4.1	3.8	3.6	3.4	3.3	3.1	3.0	2.8							
	60 < t ≤ 80	On request																				

## Therma 4910 \*)

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 31

Standard	Plate thickness (mm)	Plate width (mm)																			
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200		
EN 10088-2	ASTM A240	6	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0	8.0	7.0	6.0								
		7	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	8.0	7.0							
		8	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0	10.0	9.0	9.0	8.0				
		9	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	11.0	11.0	10.0	10.0	10.0	9.0	8.0		
		10	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0	9.0
		11	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0	10.0	9.0
		12	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	9.0
		12 < t ≤ 15	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	9.0
		15 < t ≤ 20	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	11.0	10.0	10.0	10.0	10.0	9.0
		20 < t ≤ 25	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	10.9	10.5	10.0	9.7	9.3	9.0	8.7	8.4	8.1	7.8	
		25 < t ≤ 30	12.0	12.0	12.0	12.0	11.1	10.5	10.0	9.6	9.2	8.8	8.4	8.1	7.8	7.5	7.3	7.0	6.8	6.6	
		30 < t ≤ 35	12.0	12.0	11.3	10.7	10.1	9.6	9.1	8.7	8.3	8.0	7.7	7.4	7.1	6.8	6.6	6.4	6.2	6.0	
		35 < t ≤ 40	11.2	10.5	9.9	9.4	8.9	8.4	8.0	7.7	7.3	7.0	6.7	6.5	6.2	6.0	5.8	5.6	5.4	5.3	
		40 < t ≤ 45	10.0	9.4	8.8	8.3	7.9	7.5	7.1	6.8	6.5	6.3	6.0	5.8	5.6	5.4	5.2	5.0	4.8	4.7	
		45 < t ≤ 50	9.0	8.5	8.0	7.5	7.1	6.8	6.4	6.2	5.9	5.6	5.4	5.2	5.0	4.8	4.7	4.5	4.4	4.2	
	50 < t ≤ 70	On request																			

\*) Not included in ASTM A240

## Therma 316H/4401

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 32

Standard	Plate thickness (mm)	Plate width (mm)																			
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200		
EN 10088-2	ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.0								
		6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0	10.0	10.0				
		7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0			
		8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	11.0	10.0	
		9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	12.0	11.0	11.0
		10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	11.0
		11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
		12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
		12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
		15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.4	12.9	12.5	12.1	11.7	
		20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.5	11.9	11.5	11.0	10.6	10.2	9.9	9.6	9.2	
		25 < t ≤ 30	13.5	13.5	13.5	13.5	13.0	12.4	11.8	11.2	10.7	10.3	9.9	9.5	9.1	8.8	8.4	8.1	7.9	7.6	
		30 < t ≤ 35	13.5	13.2	12.4	11.7	11.1	10.5	10.0	9.5	9.1	8.7	8.3	8.0	7.7	7.4	7.1	6.9	6.6	6.4	
		35 < t ≤ 40	12.2	11.4	10.8	10.2	9.6	9.1	8.7	8.3	7.9	7.5	7.2	6.9	6.6	6.4	6.1	5.9	5.7	5.5	
		40 < t ≤ 45	10.7	10.1	9.5	8.9	8.5	8.0	7.6	7.2	6.9	6.6	6.3	6.0	5.8	5.6	5.4	5.2	5.0	4.8	
		45 < t ≤ 50	9.6	9.0	8.5	8.0	7.5	7.1	6.8	6.4	6.1	5.9	5.6	5.4	5.1	4.9	4.7	4.6	4.4	4.2	
		50 < t ≤ 55	8.8	8.3	7.8	7.3	6.9	6.5	6.2	5.9	5.6	5.4	5.1	4.9	4.7	4.5	4.3	4.1	4.0	3.8	
		55 < t ≤ 60	7.9	7.4	6.9	6.5	6.1	5.8	5.5	5.2	5.0	4.7	4.5	4.3	4.1	4.0	3.8	3.6	3.5	3.4	
		60 < t ≤ 65	7.2	6.7	6.3	5.9	5.6	5.3	5.0	4.7	4.5	4.3	4.1	3.9	3.7	3.6	3.4	3.3	3.2		
		65 < t ≤ 70	6.6	6.2	5.8	5.4	5.1	4.8	4.6	4.3	4.1	3.9	3.7	3.6	3.4	3.3	3.1	3.0			

Prodec

Stainless steel grades optimized for improved machinability  
with longer tool life and enhanced quality.

Outokumpu  
Pro  
family

Steel designations				Typical chemical composition, % by mass					
Outokumpu name	EN	ASTM		C	Cr	Ni	Mo	N	Others
		Type	UNS						
<b>Austenitic</b>									
Prodec 304/4301	1.4301	304	S30400	0.04	18.1	8.3			
Prodec 304L/4307	1.4307	304L	S30403	0.02	18.1	8.3			
Prodec 316/4401	1.4401	316	S31600	0.02	17.2	10.2	2.1		
Prodec 316L/4404	1.4404	316L	S31603	0.02	17.2	10.2	2.1		
Prodec 316L/4432	1.4432	316L	S31603	0.02	16.9	10.7	2.6		
Prodec 316/4436	1.4436	316	S31600	0.02	16.9	10.7	2.6		

**Prodec 304/4301, Prodec 304L/4307, Prodec 316/4401 \*)  
Prodec 316L/4404 \*) , Prodec 316L/4432 \*) , Prodec 316/4436 \*)**

Maximum plate length in meters (m) depending on the plate thickness and plate width.

Table 34

Standard	Plate thickness (mm)	Plate width (mm)																			
		1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200		
EN 10088-2 ASTM A240	5	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
	6	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0	10.0	
	7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0	10.0	10.0	10.0	10.0	10.0	10.0	
	8	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	13.0	12.0	12.0	12.0	11.0	10.0	
	9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	12.0	11.0	11.0	
	10	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	12.0	11.0
	11	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.0
	12 < t ≤ 15	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	15 < t ≤ 20	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	20 < t ≤ 25	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
	25 < t ≤ 30	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.1
	30 < t ≤ 35	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.2	12.7	12.3	11.8	11.4	11.1
	35 < t ≤ 40	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.4	12.9	12.4	11.9	11.4	11.0	10.6	10.2	9.9	9.6	9.6
	40 < t ≤ 45	13.5	13.5	13.5	13.5	13.5	13.5	13.0	12.4	11.8	11.3	10.9	10.4	10.0	9.7	9.3	9.0	8.7	8.4	8.4	8.4
	45 < t ≤ 50	13.5	13.5	13.5	13.5	12.8	12.2	11.6	11.1	10.6	10.1	9.7	9.3	8.9	8.6	8.3	8.0	7.7	7.5	7.5	7.5
	50 < t ≤ 55	13.5	13.5	12.9	12.2	11.6	11.0	10.4	10.0	9.5	9.1	8.7	8.4	8.0	7.7	7.4	7.4	7.2	6.9	6.7	6.7
	55 < t ≤ 60	13.3	12.5	11.8	11.1	10.5	10.0	9.5	9.0	8.6	8.3	7.9	7.6	7.3	7.0	6.7	6.7	6.5	6.3	6.0	6.0
	60 < t ≤ 65	12.2	11.4	10.8	10.2	9.6	9.1	8.7	8.3	7.9	7.5	7.2	6.9	6.6	6.4	6.1	5.9	5.7	5.5	5.5	5.5
	65 < t ≤ 70	11.3	10.6	9.9	9.4	8.9	8.4	8.0	7.6	7.3	6.9	6.6	6.4	6.1	5.9	5.6	5.4	5.2	5.0	5.0	5.0
70 < t ≤ 75	10.4	9.8	9.2	8.7	8.2	7.8	7.4	7.0	6.7	6.4	6.1	5.9	5.6	5.4	5.2	5.0	4.8	4.6	4.6	4.6	
75 < t ≤ 80	9.7	9.1	8.6	8.1	7.6	7.2	6.9	6.5	6.2	5.9	5.7	5.4	5.2	5.0	4.8	4.6	4.4	4.4	4.3	4.3	
80 < t ≤ 85	9.1	8.5	8.0	7.5	7.1	6.7	6.4	6.1	5.8	5.5	5.3	5.1	4.8	4.6	4.5	4.3	4.1	4.0	3.7	3.7	
85 < t ≤ 90	8.5	8.0	7.5	7.1	6.7	6.3	6.0	5.7	5.4	5.2	4.9	4.7	4.5	4.3	4.2	4.0	3.8	3.7	3.7	3.7	
90 < t ≤ 95	8.0	7.5	7.1	6.6	6.3	5.9	5.6	5.3	5.1	4.8	4.6	4.4	4.2	4.1	3.9	3.7	3.6	3.4	3.4	3.4	
95 < t ≤ 100	7.6	7.1	6.7	6.3	5.9	5.6	5.3	5.0	4.8	4.6	4.3	4.1	4.0	3.8	3.6	3.6	3.6	3.6	3.6	3.6	
100 < t ≤ 110	6.8	6.4	6.0	5.6	5.3	5.0	4.7	4.5	4.3	4.0	3.9	3.7	3.5	3.4	3.2	3.2	3.2	3.2	3.2	3.2	
110 < t ≤ 120	6.2	5.7	5.4	5.1	4.8	4.5	4.2	4.0	3.8	3.6	3.5	3.3	3.1	3.0	2.9	2.9	2.9	2.9	2.9	2.9	
120 < t ≤ 130	5.6	5.2	4.9	4.6	4.3	4.1	3.8	3.6	3.4	3.3	3.1	3.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	
130 < t ≤ 150	On request																				

<sup>\*)</sup> Thicknesses > 110 mm, 5 % reduced mechanical values

### Stock standard

Quarto Plates are kept in stock at Outokumpu service centers throughout Europe as well as in other parts of the world. The stock program for each service center is adapted to local market demands and will consequently be different at different locations. Information on the products available in your area can be obtained from the local Outokumpu sales office. For your local contact please visit our website: [outokumpu.com/contacts](http://outokumpu.com/contacts)

### Product standards

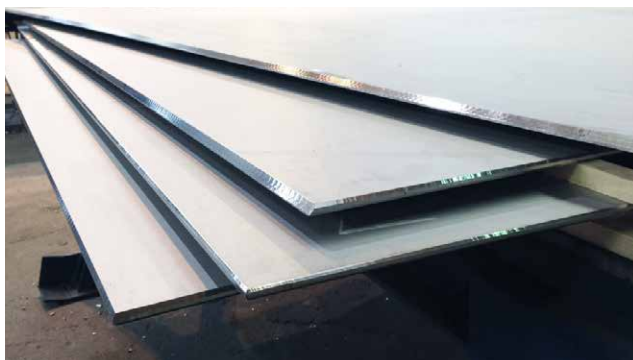
Quarto Plates are manufactured to order in conformity with the applicable international or national standards, such as EN, ASTM, ASME, and JIS. Production according to other standards and specifications may be possible by special agreement. NORSOK approval is available for Outokumpu grades Forta DX 2205, Forta SDX 2507, Forta SDX 100, Ultra 6XN and Ultra 254 SMO.

### Surface finish

Quarto Plates are normally delivered in the hot rolled, annealed and pickled condition, i.e. 1D (EN) or Finish No. 1 (ASTM). Other surface finishes are available such as 1G, ground on one or two sides down to 0.8 µm, according to EN 10028-7. For special architecture and building applications, a 1K surface can be supplied by prior agreement.

### Edge preparation

Quarto Plates are normally delivered with plasma cut or sheared edges. We also have the capabilities to prepare the plates for welding with tailored edges. Several different types of joint are available, e.g. V, X, U and J. Further information is available on request.



### Corrugated plate

We can offer corrugated plates. These are produced by press brake bending and various shapes and profiles with tailored edges can be produced. Further information on available shapes and dimension is available on request.

### Cut shapes

We can offer flat shapes cut from plate. These shapes are plasma cut from plates of all grades within the Product and Dimension Program. Shapes can be produced directly from the customers CAD drawings. In cooperation with our Plate Service Centers we can also offer cut shapes by water-jet cutting. This cutting method offers better tolerances and finer edges than plasma cutting. Shapes may also be delivered edge prepared. Further information on the dimension program for cut shapes is available on request.



### Packing

We offer standard packages for all types of transportation. Depending on customer requirements, the type of product and the mode of transportation, additional packing methods are available. For more information, please contact your nearest Outokumpu Stainless representative.

### Providing overall solutions

Outokumpu has the expertise and equipment to supply ready-to-assemble stainless steel solutions. Design and materials selection are determined in close cooperation with the customer to provide the most cost-effective solution. Outokumpu has extensive research resources and knowledge and can offer customers an overall solution including tailor-made products and services.

# Working towards a world that lasts forever

We work with our customers and partners to create long lasting solutions for the tools of modern life and the world's most critical problems: clean energy, clean water, and efficient infrastructure. Because we believe in a world that lasts forever.

outokumpu classic			outokumpu pro					
<b>Moda</b>	<b>Core</b>	<b>Supra</b>	<b>Forta</b>	<b>Ultra</b>	<b>Dura</b>	<b>Therma</b>	<b>Prodec</b>	<b>Deco</b>
Mildly corrosive environments	Corrosive environments	Highly corrosive environments	Duplex & other high strength	Extremely corrosive environments	High hardness	High service temperatures	Improved machinability	Special surfaces

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