

## 321 / 321H Premium+

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**Premium+** is a service provided by Industeel allowing the delivery of annealed and pickled stainless steel plates within 4 weeks ex-mill after receipt of an order and an exhaustive material test certificate.

The 4 weeks lead-time applies to the first 50 tonnes of the order, the standard lead-time applies to the remaining.

**321 / 321H Premium+** answers to the more stringent technical requirements.

This offer is the perfect solution to respond to the projects worldwide and for a wide range of technical.

#### CERTIFICATE

#### MATERIAL TEST CERTIFICATE ACCORDING TO EN 10204

3.1 for plates thickness = < 30 mm

3.2 TÜV for plates > 30mm

#### STANDARDS

> EURONORM: EN 10088.2 / EN 10088.4 / EN 10028.7 / EN10095

Double certification 1.4541 (X6CrNiTi18-10) / 1.4878 (X8CrNiTi18-10)

> ASTM/ASME: ASTM A240M / ASME SA240M

Double certification 321 / 321H

#### ADDITIONAL STANDARDS

CE marking EN 10088.4

AD2000-W2 / AD2000-W10

NACE MR 0175 - MR 0103 - ISO 15156 - ISO 17945

Dimensional tolerances according to ISO 18286 for thickness and flatness

Surface condition according to EN 10163

Complementary informations:

T° of TTH and holding time mentioned on Material Test Certificate (MTC)

Specify on certificate: "Plate free of radioactivity» and "Hot rolled, annealed and pickled"

Food contact: (CE) N° 1935/2004 - FR Arrêté du 13/01/1976 - IT Decreto 11/11/2013 N° 140

PED 2014/68/EU marking

**CERTIFICATE**

**CHEMICAL ANALYSIS (LADLE COMPOSITION)**

According to standards: C, Mn, P, S, Si, Cu, Ni, Cr, Mo in %

+ Co, Al, B

+ Ferrite calculated according to Delong Diagram and ASTM E562/E1245

Example of chemical analysis report on certificate

	C%	Mn%	P%	S%	Si%	Cu%	Ni%	Cr%	Mo%	Nb%	Ti%	N%	(01)*	(02)**	(03)***	Co%
Min	0.040						9.000	17.000					5.000	5.0		
Heat Analysis	0.042	1.842	0.0328	0.0014	0.469	0.306	9.207	17.057	0.373	0.006	0.353	0.0092	6.887	8.4	0.051	0.134
Max	0.080	2.000	0.0450	0.0150	0.750	0.750	12.000	19.000	0.750	0.100	0.700	0.1000	100.000	100.0		

\* F (117)= Ti/(C+n) - \*\* F (120)=Ti/C - \*\*\* F (138) = C + N

**POSITIVE MATERIAL IDENTIFICATION (PMI)**

Conformity check on each product

**MECHANICAL TESTING**

According to standards

Tensile test: Rp0.2, Rp1.0, Rm, El%,

Hardness: HB, HRC < 22, KV according to NACE

Charpy test at 20°C

**CORROSION TESTING**

According to EN ISO 3651-2 and ASTM A262-E



**DELIVERY CONDITIONS**

**DIMENSIONAL PROGRAM**

321 Premium +					
Thickness (mm)	Width (mm)	Length (mm)	Thickness (mm)	Width (mm)	Length (mm)
			8	2500	6000
			10	2500	6000
15	2000	6000	15	2500	6000
20	2000	6000	20	2500	6000
			25	2500	6000
			30	2500	6000
			35	2500	6000
			40	2500	6000
			50	2500	6000

**DIMENSIONAL TOLERANCES**

321 Premium +		
Thickness (mm)	Width (mm)	Length (mm)
According to ISO 18286	According to ISO 18286 Class A	According to ISO 18286 Class A

## DELIVERY CONDITIONS

### STRESS DIE STAMPING

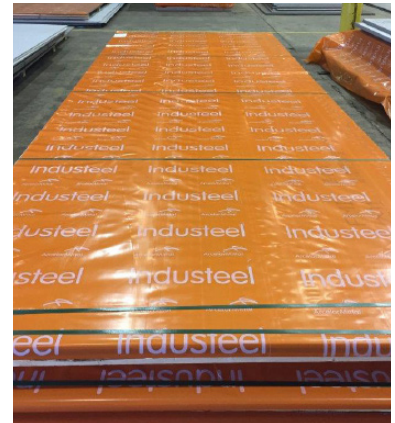
↑ VGRF - tracking number  
Plate number and its index - Heat number  
321H Premium+

### INK MARKING

Length x Width x Thickness  
Plate number and its index - Heat Number  
321 Premium + A/SA 240 321/321H 1.4541/1.4878  
MADE IN BELGIUM BY INDUSTEEL E.U.

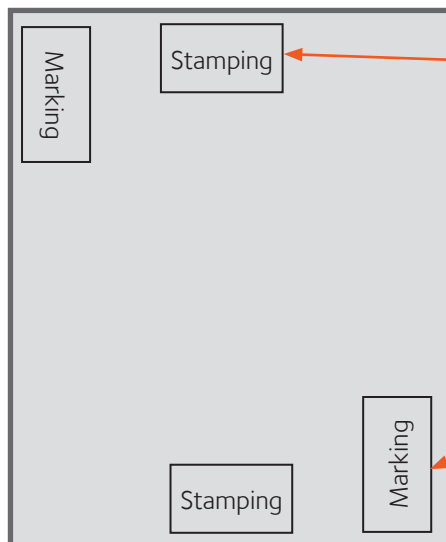
### PACKAGING

As per Industeel specification «Packing Type B» + protection using a plastic film  
Maximum weight per packing: 5 tonnes - Rafters 80x100 mm  
Same plate size and thickness per packing if item < 5 tonnes, otherwise plates grouped per size with different thicknesses.



### LOCATION STAMPING & MARKING

On each plate (example)



VGRF 904665  
404665.001 82071  
321 Premium +

12000 x 2500 x 12 mm  
404665.001 82071  
321 Premium + A/SA240 321/321H  
1.4541/1.4878  
MADE IN BELGIUM BY INDUSTEEL E.U

### TRANSPORT BY TRUCK

Material covered by a tarpaulin

## YOUR CONTACTS

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*Note - This technical data and information represents our best knowledge at the time of printing. However, it may be subject to some slight variations due to our ongoing research program on Stainless steel grades. We therefore suggest that information be verified at time of enquiry or order. Furthermore, in service, real conditions are specific for each application. The data presented here is only for the purpose of description, and may only be considered as guarantees when our company has given written formal approval.*

*All information in this brochure is for the purpose of information only. Industeel reserves the right to change its product range at any time without prior notice.  
All Industeel facilities are ISO 9001, ISO 14001 and OHSAS 18001 certified.  
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