



Nickel Alloyed Plates

Steel Grades for Cryogenic Applications

Steel Grades for Cryogenic Applications – Nickel Alloyed Plates

General Information

We produce heavy plate for various branches and areas of application with 800 employees in Ilsenburg and Salzgitter. From our location in the center of Germany and Europe, we supply approximately 800,000 tons of heavy plate annually in 350 steel grades to our customers all over the world.

Steel Grades for Cryogenic Applications According to European Standards or ASTM/ASME

12Ni14, 12Ni19, X12Ni5, X7Ni9, X8Ni9,
A/SA 203 Gr. D, A/SA 203 Gr. E, A/SA 353, A/SA 553
Other grades on request.

Certification

By all well-known certification companies (for example DNV, BV, LR, GL, ABS and LRS)

Dimensions

| Dimensions | |
|--------------------------------|-------------------|
| Thickness | 5–80 mm* |
| Width | |
| Quenched and Tempered | max. 3,500 mm |
| Direct Quenching | max. 4,800 mm |
| Double Normalized and Tempered | max. 4,000 mm |
| Length | |
| Quenched and Tempered | 4,000 – 14,000 mm |
| Direct Quenching | 4,000 – 24,000 mm |
| Double Normalized and Tempered | 4,000 – 24,000 mm |
| Plate Weight | max 20.5 t |

* Thickness > 80 mm on request.

Processing Skills

Plate Rolling

Rolling stand with 80,000 kN force
State of the art descaling
Surface inspection of both sides of the plate
100% ultrasonic inspection possible with our 2012 built ultrasonic testing facility

Shot Blasting

Maximum degree of descaling: SA ½ according to SIS 055900

Primer

Dry film thickness: approx. 15 to 25 µm
PVB and epoxy-based iron-oxide primer
Zinc-epoxy primer
Zinc-silicate primer

Edge Preparation / Beveling

U, V, X, Y, double-U, double-Y seams (other seams on request)
Thickness: 5 - 90 mm
Length: 4,000 - 18,800 mm
Mechanical beveling machine: Linsinger

Four Roller Plate Bending

Bending diameter: min. 1,200 mm
Thickness: max. 35 mm
Width: max. 3,000 mm
Yield point: 355 N/mm²
Piece weight: max. 16 t

All production and transport processing measures are designed to minimize residual magnetism.



Construction of a liquid gas tank inside a vessel.

Areas of Application

The nickel alloyed plates of Ilseburger Grobblech can be used for various areas of applications.

References*

| Project | Country | Weight | Thickness | Material | Delivery |
|------------------------------|------------------|---------|-----------|-------------|-------------|
| Two Land-Based LNG Tanks | Papua New Guinea | 3,300 t | 5–29 mm | A 553 | 2010 - 2011 |
| One Land-Based Ethylene Tank | Dubai | 660 t | 5–20 mm | A 553/X7Ni9 | 2011 |
| Vessel Ethylene Tanks | China | 710 t | 10–50 mm | X12Ni5 | 2012 |
| Two Land-Based LNG Tanks | Australia | 3,600 t | 5–30 mm | A 553 | 2012 |
| Vessel Ethylene Tanks | China/Korea | 4,000 t | 10–50 mm | X12Ni5 | 2012 |
| Three Land-Based LNG Tanks | France | 6,100 t | 5–29 mm | X7Ni9 | 2012 - 2013 |
| One Land-Based Ethylene Tank | Qatar | 1,145 t | 5–20 mm | A 553 | 2012 - 2013 |
| One Storage Tank | China | 550 t | 10–40 mm | A 553 | 2013 |
| One Land-Based LNG Tank | China | 1,700 t | 5–27 mm | A 553 | 2013 |
| Three Land-Based LNG Tanks | China | 4,900 t | 5–29 mm | X7Ni9 | 2013 |

*Since 2010 only.

The ILG Principle

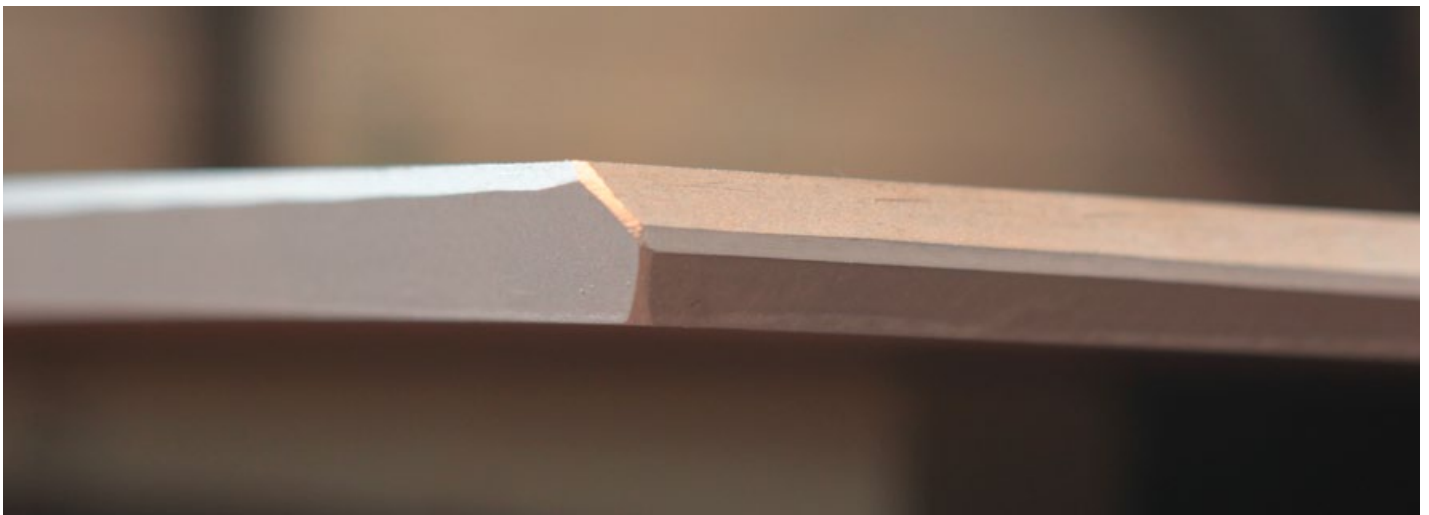
Starting from the receipt of the iron ore up to the delivery of the plates to its customers, Ilseburger Grobblech GmbH ensures a continuous quality assurance.

Our Expertise

Ilseburger Grobblech GmbH has more than 30 years of experience with the production and processing of nickel alloyed steel. Due to this expertise, the continuous quality assurance and the in-house processing, the plates of Ilseburger Grobblech GmbH have an exceptional surface quality. Furthermore, especially the competence of our employees enables a high flexibility concerning modifications during the processing of the order.

Your Benefits

Through these advantages of Ilseburger Grobblech GmbH, you are able to reduce your level of monitoring and controlling as well as we are able to make cost-efficient offers due to in-house processing. Additionally, you can benefit from a personalized project handling, which is adapted to your individual needs. This personalization also has the benefit of a high degree of flexibility concerning the design of your order.



Nickel plate with double-Y seam.

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