

Nickel Alloyed Plates

Steel Grades for Cryogenic Applications



General Information

We produce heavy plate for various branches and areas of application with 650 employees in Ilsenburg. From our location in the center of Germany and Europe, we supply approximately 700,000 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, LRS an ABS)

Dimensions

| Dimensions | | |
|--------------|--------------------------------|-------------------|
| Thickness | | 5–80 mm* |
| Width | | |
| | Quenched and Tempered | max. 3,500 mm |
| | Direct Quenching | max. 3,800 mm |
| | Double Normalized and Tempered | max. 3,800 mm |
| Length | | |
| | Quenched and Tempered | 4,000 – 16,000 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 Surface inspection of both sides of the plate 100% ultrasonic inspection

Shot Blasting

Maximum degree of descaling: SA $1\!\!\!/_2$ according to SIS 055900

Primer

Dry film thickness: approx. 15 to 35 µm PVB and epoxy-based iron-oxide primer Zinc-epoxy primer Zinc-silicate primer

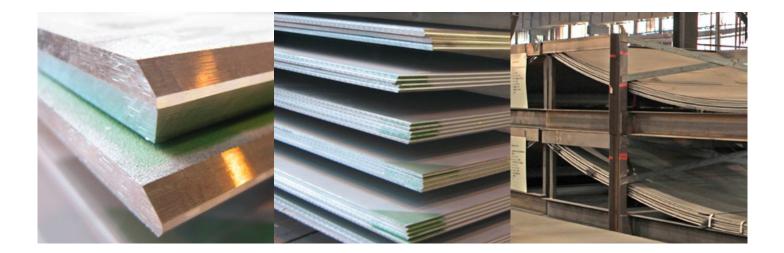
Edge Preparation / Beveling

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. 620 mm Thickness: 6–50 mm Width: max. 3,500 mm

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



Areas of Application

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

References*

| Project | Weight | Country | Material | Delivery |
|--|---------|------------------|--------------------------|-----------|
| Two Land-Based LNG Tanks | 3,300 t | Papua New Guinea | A 553 | 2010-2011 |
| Land-Based Ethylene Tank | 660 t | Dubai | A 553/X7Ni9 | 2011 |
| Vessel Ethylene Tanks | 710 t | China | X12Ni5 | 2012 |
| Two Land-Based LNG Tanks | 3,600 t | Australia | A 553 | 2012 |
| Vessel Ethylene Tanks | 4,000 t | China/Korea | X12Ni5 | 2012 |
| Three Land-Based LNG Tanks | 6,100 t | France | X7Ni9 | 2012-2013 |
| Land-Based Ethylene Tank | 1,145 t | Qatar | A 553 | 2012-2013 |
| Storage Tank | 550 t | China | A 553 | 2013 |
| Land-Based LNG Tank | 1,700 t | China | A 553 | 2013 |
| Three Land-Based LNG Tanks | 4,900 t | China | X7Ni9 | 2013 |
| Four Land-Based LNG Tanks | 7,000 t | Russia | X7Ni9 | 2014-2015 |
| Land-Based LNG Tank | 545 t | Russia | X7Ni9 | 2016/2017 |
| Vessel LNG Fuel Gas Tank | 1,075 t | China | LR5%Ni (X12Ni5) | 2016 |
| Vessel LNG Fuel Gas Tank | 480 t | China | X8Ni9 (ABS) | 2016 |
| Vessel LNG Fuel Gas Tank | 1,920 t | Germany | X8Ni9 (RINA) | 2016-2018 |
| Vessel LNG Fuel Gas Tank | 430 t | China | SA553T1 | 2018 |
| Land-Based Ethylene Tank | 435 t | Slovakia | X7Ni9 | 2018 |
| Land-Based LNG Tank | 1,870 t | China | X7Ni9 | 2018/2019 |
| Vessel LNG Fuel Gas Tank | 2,010 t | China | X8Ni9 (BV) | 2018 |
| Three Land-Based LNG Tanks | 5,844 t | China | X7Ni9 | 2019 |
| Vessel LNG Fuel Gas Tank | 270 t | Germany | X8Ni9 (LR) | 2019 |
| LEG-/LPG-/Ammonia-/VCM-Carrier Tank | 585 t | Germany | X8Ni9 (DNV-GL) | 2019 |
| Two Vessel LNG Fuel Gas Tank | 130 t | China | SA553T1 (DNV-GL) | 2019 |
| Land-Based Ethylene Tank | 260 t | Mexico | A553T1 | 2020 |
| Vessel LNG Fuel Gas Tank | 300 t | Germany | X8Ni9 (LR) | 2020 |
| Vessel LNG Fuel Gas Tank | 305 t | Germany | X8Ni9 (LR) | 2020 |
| Vessel LNG Fuel Gas Tank | 67 t | China | SA553T1 (DNV-GL) | 2020 |
| Land-Based LNG Tank | 755 t | Canada | SA553T1 | 2020 |
| Four Vessel LEG-/LPG-/Ammonia-/VCM-Carrier | 8,500 t | China | LR5Ni (LR) | 2020 |
| Vessel LNG Bunker Barge Tank | 365 t | China | SA553T1 / SA553T1 (RINA) | 2020 |
| Vessel LNG Carrier Tank | 2,880 t | China | X(Ni9 (DNV-GL) | 2020 |
| Two Land-Based LNG Tanks | 4,380 t | Russia | A 645 Gr. B | 2021/2022 |
| *Since 2010 only. | | | | |

The ILG Principle

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

Our Expertise

Ilsenburger Grobblech GmbH has more than 30 years of experience with the production and processing of nickel alloyed steel. Since 2021 we are operating a new MultiFlex-Quench from SMS to achieve superior surface quality and flatness of our Nickel plates.

Your Benefits

Through these advantages of Ilsenburger 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. Ilsenburger Grobblech GmbH Veckenstedter Weg 10 38871 Ilsenburg Germany Tel.: +49 39452 85-0

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