## Industeel



## CryElso™ 9Q Cryogenic steel



## High quality 9% Nickel steel for cryogenic storage tanks and pressure vessels with service temperature down to -196°C

**CryElso™ 9Q** is a Quenched and Tempered martensitic steel specifically designed for deep cryogenic applications such as onshore large scale above ground LNG storage tanks. Thanks to its finely tuned chemical composition associated to a robust and optimized production route, thick sections up to 125mm (5 inches) can be delivered and used for the fabrication of large equipment servicing at temperatures down to -196°C (-320F).

**CryElso™ 9Q** is a high strength material with excellent fracture toughness (CTOD) and crack arrest properties used for decades in most critical industries.

#### **Properties**

#### **Standards**

**CryElso™ 9Q** is compliant with:

- ASTM / ASME A / SA-553 type I (UNS K81340)
- EN 10028-4 X7Ni9 (1.5663)
- EN 10028-4 X8Ni9+QT680 (1.5662+QT680)

For other standard compliancy, please consult.

Multiple certifications are possible on request.

#### Delivery conditions

**CryElso™ 9Q** can be produced in thicknesses from 5 mm and up to 100+ mm (3/16" up to 4+"). Maximum plate weight: 20 tons per unit. Industeel proposes the following available sizes:

Thickness (mm/inches)	Width (mm/inches)	Length (mm/inches)
4.75mm to 6.99mm - 3/16 " to 0.28"	1200mm to 2700mm - 48" to 108" (*)	4000mm to 12000mm - 160" to 480"
7.00mm to 7.99mm - 0.28" to 5/16"	1200mm to 3400mm - 48" to 136" (*)	4000mm to 13000mm - 160" to 520"
8.00mm to 8.99mm - 5/16" to 0.35"	1200mm to 3600mm - 48" to 144" (*)	
9.00mm to 17.99mm - 0.35" to 11/16"	1200mm to 3800mm - 48" to 152" (*)	
18.00mm to 50.00mm - 11/16" to 2"		4000mm to 16000mm - 160" to 640"
50.01mm up to 125mm - 2" to 5"		

<sup>\*</sup> Please consult for wider.

By special agreement, prefabricated pieces and/or components can be delivered according to drawings and specifications. Please consult.

# **CryElso**™

our cryogenic steel

60 years

of dedicated service between 1964-2024

400,000 MT

of our CryElso™ 9Q poured in our mills

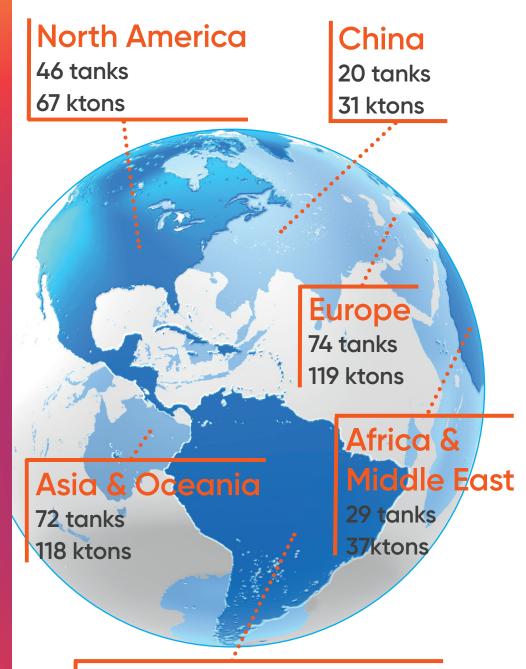
250 LNG tanks

using our CryElso™ 9Q worldwide

Industeel Belgium
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**9Q** 



### **South/Central Americas**

16 tanks 25 ktons

#### Your contact

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Technical data and information are to the best of our knowledge at the time of editing. However, they may be subject to some slight variations due to our ongoing research programme on steels. Therefore, we 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 are only for the purpose of description, and considered as guarantees when written formal approval has been delivered by our company. Further information may be obtained from the address opposite.