



#### "One Company, Many Locations, Servicing Globally"





## **Cold Climate Ex-Proof Cranes**





MRC 900Kg

100





ANALING

EP. ID. 933-X002 CLASS A2/1Bm

FAL

EP. ID. 933-X-043

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The Yamal LNG Project is an integrated natural gas liquefaction complex with a capacity of 16.5 million tonnes per year developed on the basis of gas reserves within the South Tambey Field. The plant site is located north of the Arctic Circle on the Eastern shore of the Yamal Peninsula in Northwest Siberia, Russia.

Average temperatures vary from +6°C in summer

- to -27°C in winter, with the extreme low of -50°C.
- LNG tank Jib Cranes located outdoors on top of LNG tanks.
- > 4 off 7.5t MRC at 17m jib arm radius and 12.5m to underside of jib arm.
- > 4 off Auxiliary Jib Cranes capacity 900kg, reach 6.53m, hook path 51.4m, manual slew.
- Special Low temperature steel with

minimum V-notch impact strength of the steel 27 joules at -50°C.

- > All selected components including motors, gear boxes, ropes, limit switches, electrics, lights, cables, control panels, gas detectors, exhaust fans, are all suitable for -50°C.
- > Complete jib arm including all electromechanical items such as hoists and controls

## Cranes for the Arctic region to operate *in temperatures dropping down to minus 50°C*

DANES

are enclosed in an insulated heated enclosure. Constantly connected heaters inside the enclosure maintain the internal temperature above 0°C.

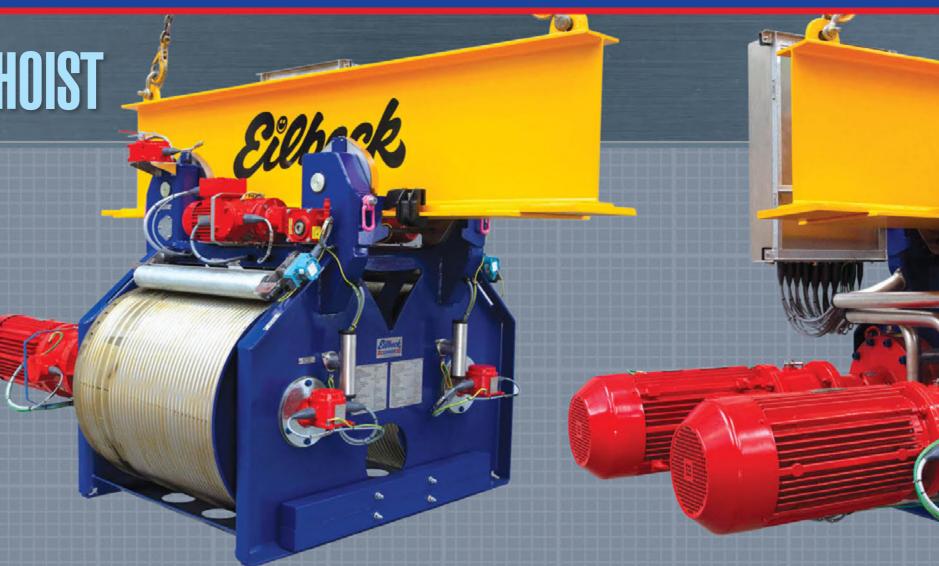
- > Zone 2 IIB T3 as per ATEX.
- Designed to European Standards.
- > Russian certification and dual language documentation (English and Russian).

# LNG TANK HOIST

Eilbeck Cranes has developed the LNG Tank Hoist to satisfy both the Hazardous Area Zone requirements as well as safe operational requirements to suit the delicate exercise of removal and replacement of the LNG Tank Pumps.

### FULL REDUNDANCY

The double drum configuration enables full redundancy on lifting the LNG Pump.





1. MOTOR, BRAKE & GEARBOX 2. PRESSURE ROLLER

Suitable for the harsh coastal environment with motor, brake and gearbox all made of cast iron instead of aluminium.

Pressure roller with limit switch follows the rope on the drum to quickly detect rope crossover.

#### 3. TWIN HOIST DRUMS

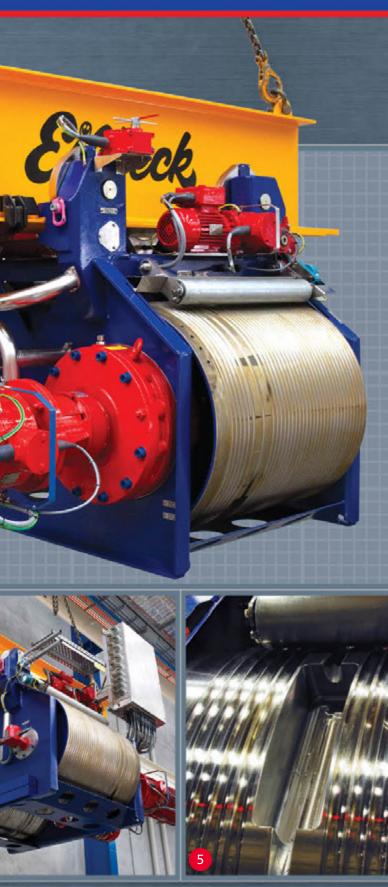
**4. ROTARY LIMITS** 

**5. FERRULE POCKET** 

Twin hoist drums can be operated synchronised to allow one hoisting rope and one backup redundant rope or operated independantly.

Both hoist drums are fitted with rotary limits for working and final hoisting limits.

Machined pocket in the hoist drum allows for the rope quick connect ferrule coupling to wind on smoothly.



#### **1. HOIST INSIDE FULLY INSULATED ENCLOSURE**

To ensure year round availability of the LNG Tank Jib Cranes, the jib arm and hoist are fully enclosed in an insulated housing which includes heaters, gas detection, exhaust fans, flashing lights all ATEX Zone 2 certified.

#### **2. GAS DETECTION**

Inside the insulated enclosure, full length walkways provide service access to the hoist along the entire length of the jib arm complete with bulkhead work lights. Gas detectors installed inside the enclosure will activate an exhaust fan should explosive gases be detected.

#### **3. AUDIBLE WARNING** 4. EXHAUST FAN



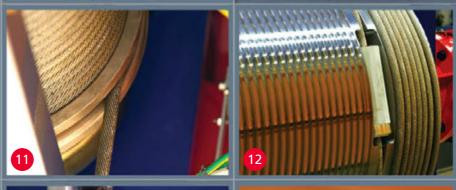
**5. SS CATENARY 6. ENCLOSURE HEATERS** 7. BRONZE HOOK BLOCK

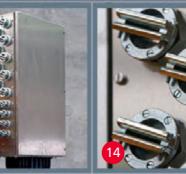
# NINUS 50°C COMPONENTS

**8. SOLID BRONZE WHEELS** 9. AUXILIARY HOIST **10. ROPE OVERWIND ROLLER**  Non sparking solid brass wheels designed specifically for explosion proof requirements, safe operation and easy maintenance.

















**17. ATEX CONTROL PENDANT 19. AUXILIARY CRANE FIXED HOIST** 

Non-sparking Stainless Steel Catenary.

Crane operating temperature inside the enclosure is kept within +30/-36°C range.

Non-sparking Bronze coated Hook Block.





**18. CONTROL PANEL** 

#### 11. BRONZE ROPE GUIDE **12. ROPE FERRULE QUICK** COUPLER **13. JUNCTION BOX**

**Stainless Steel Junction** Box.

**14. CABLE GLANDS** 

Flat Cable Glands.

- **15. TRAVEL LIMIT SWITCH**
- **16. ROTARY LIMIT SWITCH**





**20. SLEW GEARBOX** 

**Auxiliary Crane Manual** Slew Gearbox.



#### **ISO 9001 and OHS Certificates**









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