



engineering  
trasporto sollevamento

# Hoists & Winches

The way to lift your ideas



# THE COMPANY

ETS is a Leading Company for the manufacturing of Lifting Devices dedicated to the OIL & Gas market both On-Shore & Off-Shore.

ETS main responsibility is towards the continuous improvement of the quality of the product with special attention to environment and safety.

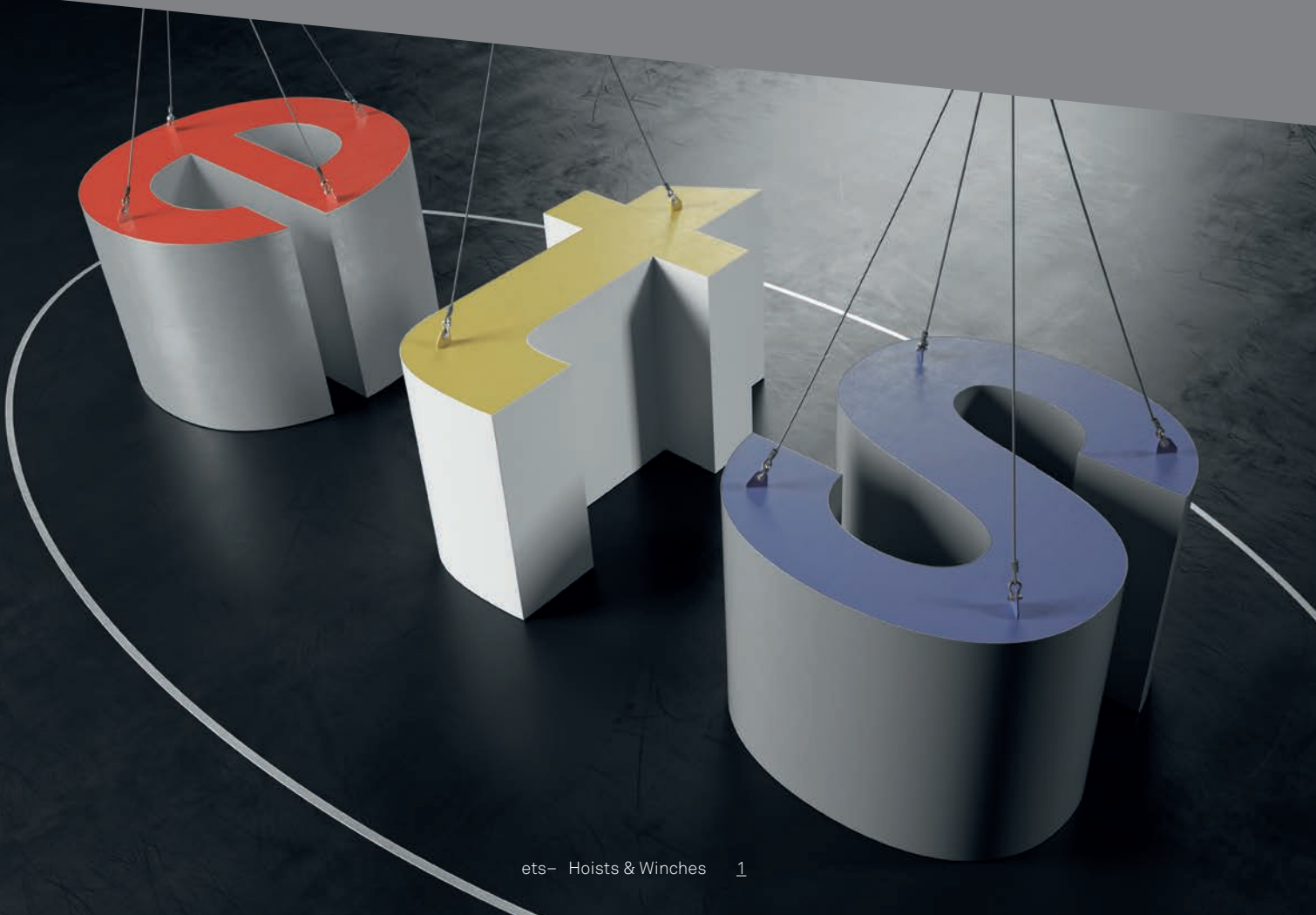
Modern technologies, constant training and commitment are the key factors that complete the great experience matured in the lifting sector after more than 40 years of activities.

Each achievement is the lifeblood for a new challenge.

Commitment, expertise, flexibility, innovation make ETS one of the most fair and dynamic companies of this sector in Europe with thousands of projects awarded all over the world for all major EPC companies.

Follow us in our daily endeavor to study, design and realize for you.

THE WAY TO LIFT YOUR IDEAS.



# QUALITY

ETS Engineering Spa besides the design and production of cranes and hoists in accordance with Machine Directive 2006/42/EC, is also to design and produce cranes and hoists in accordance to European Directive Atex 2014/34/EU.

ETS is certified ISO 9001, ISO 14001 and OHSAS 18001 and notified through Bureau Veritas for the production of explosion-proof cranes with deposit of Technical File of Risk Analysis as prescribed by the Annex VIII of Atex Directive.

All products ETS satisfy safety requirements for explosion-proof areas Group II and Category 2 a 3 (Zone 1 and Zone 2 for Gas plus Zone 21 and 22 for Dust).

The explosion-proof classification comply with Exd and Exd/e enclosure protection.





# DOCUMENTATION

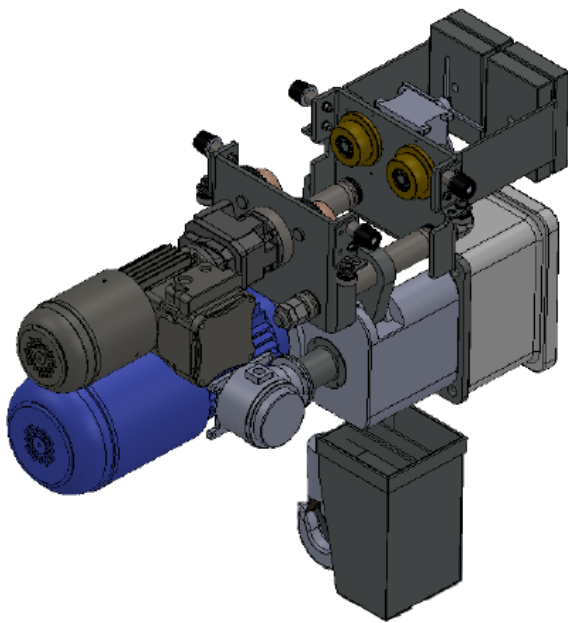
The Technical Writing of Documentation attached to order is a profession that requires particular technical competences and knowledge of laws and rules.

Clearness, completeness, easy consultation, precision, style, graphic ability and multi-language translation are essential factors that make of ETS the ideal partner for all Engineering Procurement and Contractor (EPC) Companies. Each Project has a dedicated specification and a vast availability of Documentation (Drawings 2d&3d, Calculation Report, 3.1 Certificates, Motors Data Sheets, Noise Data Sheets, Welding Book, NDE Reports, Painting Tests Report, Wiring Diagrams, Functional Tests Report, Atex and/or IECex Certificates and many more).

# 3D MODELLING OF ETS HOISTS & WINCHES WITH **SOLID WORKS PROGRAM**

- Benefits OF 3D Modelling
- Solid and compact design
  - Personalization according to the client's requirements
  - Possibility of True Lift on request
  - Structure, motors and mechanical parts are calculated with wide margin for the maximum security and endurance with the passing of time.
  - State-of-the-art technological solutions.
  - Maximum scrupulousness in the choice of materials.





## ETS EXPLOSION-PROOF **HOISTS & WINCHES**

The range of the hoists guarantees the maximum security for capacities from 2000 Kg. to 20000 Kg. The range of winches goes from 500 kg. to 200.000 kg.

The WRH rope hoist is manufactured in accordance with the Machines Directive 2006/42/EC and the Atex Directive 2014/34/EU. IECex version, EAC certification and Norsok compliance also available.

Hoists and winches are suitable for uses in potentially explosive areas with Eex-d & Eex-d(e) protection for Zone 1 & 2 group 2G & 3G and for Gas (IIA, IIB, IIC) and Dust (Zone 22) and Temperature Class T3 & T4 & T5.

The three-phase asynchronous motor with IP55 (also IP66) protection with insulation class F and over-temperature B allows the highest performances in the respective utilization classes.

### Main features

- Limit Switch for all movements;
- Operating Temperature  $-20^{\circ}\text{C}$  /  $+55^{\circ}\text{C}$  ( $-40^{\circ}\text{C}$  available);
- Std. Supply voltage 400 V / 50 Hz;
- TEFC IC 411 motors;
- Prototype Test Certificate;
- Motor Duty S4;
- Routine testing on motors;
- Hook DIN 15401
- **Hook** Bronze coated;
- Safety rope Coeff. 5/ **Chain Coeff. 4**;
- Versions for Zone 1 & 2 IIA/IIB/IIC T3/T4/T5 IP55/IP66.
- Versions for Zone 21 & 22 IIIA/IIIB/IIC 135°C.
- **Working Class M5 as standard**;
- **PTC for all Motors and Heaters for Low Temperatures**;
- **3.1 Certificates for main components**;
- **Solid Bronze Wheels as standard (not coated)**;

Controls by push button and/or wireless remote control.







## NO-SPARKING **MANUAL** **HOISTS AND WINCHES**

They are equipped with solid bronze wheels, bronze coated hook with security latch, bronze braking pawl and AISI 316 stainless steel handling chains.

Available capacities from 500 Kg. to 30000 Kg.

Classification: II 2GD c IIB T4 T125° C X

Available versions:

- Standard
- Compact
- Low headroom
- Rack & pinion system for off-shore
- Special for curved monorail also with rack



