







# **Explosion Protection Classification and Marking**

Hoists and cranes from J.D. Neuhaus have an unbeatable advantage over electrically-driven lifting equipment. Even the standard versions are suitable for use in explosion-hazardous areas and bear explosion-proof labelling according to the ATEX standard.

### **Environmental Protection and Quality**

Long service life of their products and their recyclability make an important contribution towards relieving the environmental burden. Furthermore, JDN's lean management and production has been adapted to minimize energy consumption, emissions, sewage and waste; it also uses environmentally-compatible production processes and materials. Resources are used sparingly and waste is recycled wherever possible.



J.D. Neuhaus are used in several industries.



## **About ElectroMech**

ElectroMech is a USD 100 million, multinational company in Material Handling with its global headquarters in Dubai and having a presence in 60 countries. We have manufacturing plants in the UAE, Indonesia and Saudi Arabia with the Global Design & Development Centre and Asia's largest overhead crane manufacturing facility in Pune, India.

We are an innovation-led, customer-centric, technology-driven, fast-progressing global group which offers advanced Material Handling Solutions to a wide spectrum of industries for the most challenging applications.

We are serving clients from different sectors, such as automotive, railways, shipbuilding, aerospace, energy, metal, nuclear, defence, heavy engineering, process plants, construction, infrastructure, warehousing and logistics.

With an array of products and solutions, ElectroMech is a onestop shop for all your material handling needs. Our range of offerings includes Overhead Cranes, Gantry Cranes, Stacker Cranes, Explosion-protected Hoists & Cranes, Pneumatic & Hydraulic Hoists, Process Cranes, Customised Material Handling Solutions, Rubber Tyred Gantry Cranes, Steerable Transfer Trollies, Forklifts & Lift trucks, Rollers, Pushers, and Push-Pull & Manoeuvres.

For a few of the technologies, we have partnered with globally renowned manufacturers viz., Abus, J.D. Neuhaus, Hyster Yale® and Easy Mover.

We believe in going the extra mile and that's why we have a separate subsidiary company, Cranedge, that caters to the aftersales requirements of the industry and offers services throughout the lifecycle of the product.







### The JDN mini

Capacities: 125kg to 980kg

Air Pressure: 6bar

The JDN mini is the most compact hoist, with weight up to 21kg and an integrated NFC sensor with service app that makes it truly unique in the industry. Recipient of IF Design Award 2019 in Product Category.

### **Advantages**

#### **Long Lifetime**

Its intelligent construction increases the number of operating hours of the new JDN mini through targeted optimisation to 800 hours. This makes a significant contribution to the reduction of the total cost of ownership (TCO), since the extended service life means that new devices are purchased much less frequently to replace units that have reached the end of their service life.

#### **Custom-fit Configuration**

A standardised 'interface' for using various types of hooks. Hooks are also available in steel and stainless steel.

Together with a load sleeve and chain made of stainless steel as well as a motor housing of uncoated cast aluminium the JDN mini is perfect for use in fields such as the food industry.

#### Safety

A redundant optional fall support capable of holding the maximum capacity of a hoist coming free of the supporting structure. The new limit switches offer another safety bonus. They will switch off the lifting and lowering movement as soon as the bumper touches the stop valve.

#### **Sensitive Control**

The control is connected with the casing via a single hose with pull relief, bundling three control lines inside. This enhances operating comfort and flexibility. Added to this are the precision valves, enabling precise dosing of the air supply and thus making it possible to lift and lower loads smoothly.

#### **Higher Speed**

JDN mini 500 will reach a Maximum lifting speed of 12m/min at full load (500kg). The maximum speed can also be continuously preset, so reduced, without losing power at a given carrying capacity. This can protect loads even more when necessary and, at the same time, the speed can also be more finely managed.



**Easy Maintenance** 

The smartest new development in the

area of maintenance is the NFC sensor

integrated into the service flap. The user

certificates for the hoist by getting on a smartphone and using the new JDN

service app. Much of the maintenance work such as lubricating the motor

chamber, exchanging the chain guide, and

even exchanging the motor unit can now

the hook' - without dismounting the mini.

be carried-out on the new JDN mini 'on

This also saves an incredible amount of

time and increases occupational safety.

can access the operating instructions and

Easy Maintenance



Long Lifetime



Custom-fit Configuration



Safety



Sensitive Control



Higher Speed





Special High Performance Grease for Oil-free Operation



#### Service Unit Filter Regulator





#### Supply

- ➤ Hose Trolleys
- > Spiral Hose
- ➤ Energy Chain ➤ C-rail
- > Square Bar

#### **Trolleys**

- > Manual Trolley
- > Reel Chain Trolley
- > Motor Trolley

#### **Housing Finish**

- > Standard JDN Green
- > 3-coat offshore paint system

#### Filter Silencer

#### Controls

- > Rope Control (sensitive)
- > E Control (single speed)
- > F Control (multi-function)
- > Remote Control
- > Electropneumatic Interface

#### **Chain Container**

- > Chain Box
- > Chain Bag

#### Hook

- > Standard
- > Copper-plated
- > Stainless Steel

#### Limit Switch for Lift



#### **Standard Features**

- Suitable for application in hazardous areas
- > Sensitive infinitely variable speed control for the precise positioning of loads
- Easy operation
- > Suitable for lube-free operation
- > 100% duty rating and unlimited duty cycles

- Low maintenance
- Low headroom, lightweight
- Sound absorption
- Insensitive to dust, humidity and temperatures ranging from -20°C up to +70°C
- > From 1t upwards with overload protection (EC-version)

### **Advantages**

> Strong - Fast - Silent

High performance with more efficiency by reliability plus high lifting and lowering speeds. Low sound emissions.

High Level of Safety

Integrated emergency stop switch from 1t upwards with overload protection.

> Oil-Free Operation

Patented, permanent motor lubrication during operation, using a high-performance grease. No additional motor lubrication required.

Patented Motor-Brake System

For operation with low maintenance and little wear. Based on the proven design of the JDN mini Series.

Modern Design - Compact Size

Features no protruding control hoses or parts susceptible to damage, making the PROFI also suitable for horizontal pulling

100% Duty Rating – No Downtime

## The JDN mini Food Grade

Capacities: 125kg, 250kg, 500kg, 980kg

Air Pressure: 6bar

#### Standard Features

- > Parts like load hook, chain are made up of stainless steel.
- Hoist body made up of aluminium.
- Washable with water & disinfectants
- Impervious to high humidity
- Used in food, chemical and pharma industry.





## **Air Hoists PROFI**

Capacities: 250kg to 100t Air Pressure: 4bar or 6bar

PROFI Series are very robust and therefore suitable for tough industrial applications even in continuous working processes. The PROFI Series scores well with its 100% duty rating and explosion protection as standard.



# **Low Headroom Trolleys**

Capacities: 0.5t to 6.3t Air Pressure: 6bar

Where headroom is restricted and standard trolleys can't meet the lifting height requirements we recommend JDN Low Headroom Trolleys whereby our air hoists are mounted horizontally.

#### **Standard Features**

- > Small number of maintenance / wear-free moving parts
- > No additional motor lubrication required
- 2-step travelling speed
- > Adjustable trolley widths to suit your requirements

#### **Special Features**

- > Able to negotiate curves
- > Extended trolley tie bars for bulky or elongated loads





# **Trolleys**

Capacities: 0.25t to 20t Air Pressure: 4bar or 6bar

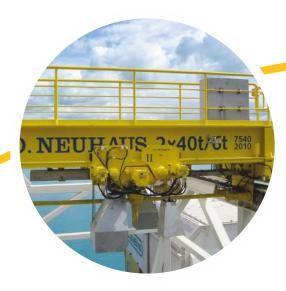
JDN Trolleys are available for all hoists of the PROFI and M series:

- > Manual trolleys (LN) for pushing or pulling the trolleys by hand
- > Reel chain trolleys (LH) for moving the trolleys by operating the reel chain mechanism
- > Motorised trolley (LM) air motor powered

#### **Standard Features**

- > Easy to install
- > With anti-climb and anti-drop devices
- > Robust manufacture requiring little maintenance
- Able to negotiate curves





# **Pneumatic Crane Systems**

Capacities: 0.125t to 100t, Span: Up to 36m

Air Pressure: 4bar or 6bar

#### **Accessories**

- > Filter silencer
- Filter regulator
- > Service unit
- Main air emergency-stop valve
- > Chain box
- Special grease cartridge for oil-free operation, volume 250ml
- Limit switch for lifting and travelling
- Booster valve (control lengths over 12m)
- Extension arm for control on motorised trolley

- Additional suspension for chain box (for installation in trolley)
- Copper-plated load hook for increased spark protection
- Stainless steel load hook (up to 750kg capacity)
- Stainless steel chain (reduced capacity) up to 6t
- Manual emergency lowering device for PROFI 3t to 20t hoists
- > Special paint finishes

Explosion-protected JDN Crane Systems are the right choice for the most challenging environmental conditions, whether onshore or offshore. Available in air drive or hydraulic drive versions.

The delivery programme comprises explosion-proof cranes which can be designed to your individual needs, customised installations are our speciality. Depending on your requirements JDN air hoists in motor trolleys or monorail hoist systems are integrated into the crane design. An ergonomically designed pneumatic pendant control is supplied with two speed control as standard for crane and trolley travel. Infinitely variable hoist and trolley speed control is also available.

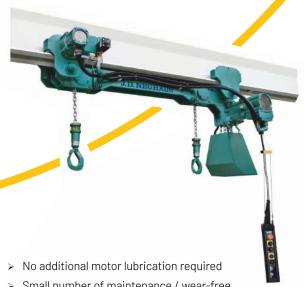


# **Big Bag Handling Air Hoists**

Capacities: 1.1t and 2.2t

Air Pressure: 6bar

For big bag handling J.D. Neuhaus offers innovative design solutions to meet the special requirements of these applications. One load hook for standard cruciform lifting beam designs. Twin load hooks for more complex cruciform lifting beam designs or for standard lifting beam designs with two suspension points.



#### **Advantages**

- Particularly suited for use as big bag handling hoists and for the movement of all kinds of bulky loads due to the low headroom design
- > Compact, modern design
- > Suitable for use as a synchronised hoist in twin-hook design
- The use of JDN standard components guarantees reliable operation and cost-effective manufacture
- Small number of maintenance / wear-free moving parts
- Suitable for use as standard in areas at risk of explosion

#### **Technical Details**

- Instant starting vane motor requiring low maintenance
- Fail safe disc brake immediately holds load safely in the event of interruption of air supply
- All gearbox components made of tempered or hardened high-grade steel
- > Anti-climb and anti-drop devices
- > Lateral guiding plates
- Pendant control unit with emergency shut-off valve

#### **Standard Features**

- Ideally suited for working in hazardous areas (explosion risk)
- ➤ Insensitive to humidity, dust and temperatures from -20°C up to +70°C
- > Low headroom, compact design
- Low air consumption
- World-wide service

## **Monorail Air Hoists**

Capacities: 10t to 115t per unit

Air Pressure: 6bar

JDN Monorail Hoists are available with air or hydraulic drive for the offshore industry, or wherever heavy loads have to be moved in reduced spaces. Depending on the application JDN Monorail Hoists can be used in tandem.

#### **Accessories**

- > Increased spark protection
- > Rack and pinion drive
- > Overload protection
- Two speed trolley travel control
- > Filter silencer





ElectroMech offers a wide range of Pneumatic & Hydraulic Hoists in association with J. D. Neuhaus, Germany – a world leader in the technology.

## **Ultra-low Monorail Hoists**

Capacities: 1t to 100t Air Pressure: 6bar

Where loads have to be lifted and transported in extremely reduced spaces the JDN Ultra-Low Monorail Hoists provide the ideal solution. For example the Ultra-Low Monorail Hoist with a load capacity of 6t has a headroom of only 230mm.

#### Standard Features

- > Ideally suited for working in hazardous areas (explosion risk)
- Insensitive to humidity, dust and temperatures from -20°C up to +70°C
- > Extremely low headroom
- > Low air consumption
- Available with increased spark protection





#### **Options**

- Offshore version for special corrosion protection under tough weather conditions (salty, moist air) on sea and land
- > Offshore paint finish
- Rack and pinion drive
- Delta-P overload protection
- Ultra-low hoists
- Pneumatic, hydraulic or electric remote control

- Load display systems
- > Radio remote control
- Articulated trolleys for limited side pulling
- Individual acceptance by the authorised companies of your choice
- Special versions according to your requirements
- > Cryogenic versions down to -45°C

# **BOP Handling Systems**

Capacities: 20t to 200t

BOP (Blow Out Preventer) handling systems from J.D. Neuhaus are recognised for their reliable, robust and efficient operation on land and on jack-up and semisubmersible drilling platforms. The Monorail Air Hoists (EH) in our BOP handling systems feature a compact design with low installation height. They can be used as double hoists in standard BOP handling systems or, when linked together with a coupling rod, can be operated as a 4-point BOP handling system. For extremely low headrooms we recommend our ultra-low hoists from the UH series. Alternatively, all BOP handling systems are available with hydraulic drives.



# Hydraulic Hoists & Monorail Hoists

Capacities: 3t to 100t

#### **Advantages**

- > Ideally suited for working in hazardous areas (explosion risk)
- > Extremely low noise emissions
- > Fully enclosed, highly robust gear motor
- > Integrated overload protection
- Only two supply connections at hoist 'P' and 'T', leakage oil drained internally
- > The drive is hermetically sealed-off from the environment





# **Cryogenic Hoists**

# Hoists for use in the Toughest Conditions

The temperature range of standard JDN hoists is  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ . JDN has developed hydraulic hoists for applications at temperatures as low as  $-45^{\circ}\text{C}$ , such as BOP handling in arctic areas. To enable these hydraulic drives to be used under such extreme temperatures, they are fitted with a device that pre-heats the drives to a temperature of  $-25^{\circ}\text{C}$  before being operated.

#### **Advantages**

- > Application range: temperatures as low as -45°C
- > Hydraulic drive
- > Easy starting thanks to pre-heating device for the drives
- > Operation with low-temperature hydraulic fluid
- Tested under real conditions and in use in Siberia



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## **Subsea Hoists**

# Hoists for use in the Toughest Conditions

PROFI Subsea Hoists are versatile and indispensable tool for professional divers and are suitable for horizontal work as well as for oblique pulling.

#### **Advantages**

- > Air or hydraulic drive
- > Infinitely variable speeds can be regulated sensitively
- > With overload protection
- > Very versatile, also suitable for horizontal and oblique pulling thanks to hook suspension

Services partner



## An **()** ElectroMech initiative

# **Expert Services**

Cranedge is a fully-owned subsidiary of ElectroMech and a professional service company dedicated to providing complete after-sales services for a range of material handling equipment and systems.

The Cranedge team of engineers is thoroughly trained to undertake commissioning, servicing, maintenance and overhauling jobs of JDN hoists and cranes. They have also undergone BOSIET training making them competent to undertake offshore projects. In addition to this, we are supported by the expert team of JDN, Germany, for specialised tasks.

For more details

Visit: www.emech.com/in/service
E-mail: enquiry@cranedge.com
Call: Toll-free 1800 209 0010





Cranedge is your one-stop solution for all after-sales service requirements, such as

- Spares
- > Repairs
- Servicing
- > Crane
- One-time Health Check-up
- ModernisationOverhauling





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