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Tip of the Month

Get high performance grease cartridge for easy maintaining your self lubricating new PROFI TI series. Order with part No 11901.

Safety first

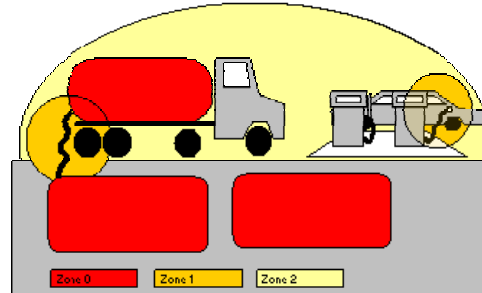
For training your staff on operation, care and maintenance of JDN Air Hoists we offer trainings courses in our facilities. Further information you will find on our website and in the flyer "JDN Product Training". Or simply ask for.



...and do not forget. Deadline for our Photo Award is the 31st of October. Take part and win.

The meaning of the zones 0, 1, 2 and "Safe Area"

According to ATEX every operator of a plant has to classify the hazardous areas of the plant into zones. The image illustrates simplified the zones of explosives atmospheres:



- **Zone 0**
Permanent explosive atmosphere.
- **Zone 1**
Zone 1 hazardous area is classified as an area where an explosive atmosphere is likely to occur during normal operation. These conditions would be expected to be present for between 10 and 1000 hours per year.
- **Zone 2**
In zone 2 hazardous area an explosive gas is not likely to occur during normal operation but if it should occur for some reason it would only exist for a short time. A potentially explosive atmosphere will occur for less than 10 hours per year.
- **Safe Area**
Non hazardous area, no explosive atmosphere.

JDN History, Part 3

Johann Diederich II.
(25.9.1813 - 18.12.1883)

Under his leadership the business made great progress. During this time of growing industry the winch maker kept faith in his products for which a specialised knowledge and a high degree of skill was required. J. Diederich Neuhaus manufactured winches for the locks at the river Ruhr, winches for the many horse driven carriages, but also for the railroads which gained importance day by day as waggons had to be lifted, rails aligned and goods moved. Every year he also manu-

factured more and more winches for the arduous conditions found in the underground coal mines.



Wooden shaft winch

Options for JDN Air Winches

For JDN Air Winches we offer numerous options:

- Emergency stop
- Overload protection
- Drum guard
- Free-spooling clutch
- Pressure roller
- Long drum
- Slack rope detector
- 2nd rope-end fastening
- Limit switch system
- Pulling frame
- Adaption plate
- Emergency lowering device
- Offshore painting

As well as

- **Rope drums with grooving** that we want to introduce to you today more detailed.



The advantages at a glance

- Good guiding characteristics over several rope layers
- Orderly winding over entire rope length
- Increased rope service life
- Reduction of rope damage
- Increased safety in working processes

Rope drums with grooving for proper multi layer winding

On rope drums with a continuous helical grooving winding of the first rope layer starts with constant axial pitch.

At further winding it is expected that the second rope layer is again subject to helical axial displacement.

In practice however the behaviour is quite different, because a lateral displacement is the result and a zigzag-shaped winding pattern is formed which is not capable of providing a guiding function for the subsequent rope layers.

The grooving of **JDN Air Winches** consists of two separate areas on the rope drum circumference (see photo). A large circumferential area of approx.

80% is provided with rope grooves which run parallel to the circumferential direction. A second circumferential area has no rope grooves.

Figure 1 shows the surface of the drum shell with an illustration of the wound-on rope.

This clearly shows the particularly good guiding characteristics due to the long, uninterrupted pitch-free valleys between neighbouring rope windings.

These provide for orderly winding of the second rope layer, which in turn contributes to similarly good guiding of the next rope layer. This results in exceptionally good guiding characteristics over several ropelayers.

Fig. 1



Further information you find at www.jdn.de within the winches chapter.

Questions regarding this newsletter may be forwarded to: marketing@jdn.de.

Your **J.D. NEUHAUS** Sales Team