

## INSTRUCTIONS FOR PACKING AND TRANSPORTING ACCUMULATORS

Hydropneumatic Piston Accumulators are considered as dangerous goods UN 3164, Articles, Pressurized, Pneumatic, 2.2 when the accumulator is **pre-charged** with **compressed nitrogen** on Road, Railway, Sea and Air.

For this reason the shipping company should have qualified personnel to handle the shipments and packaging of accumulators.

Law requires that at least one person has been educated for shipping dangerous goods in the company (ADR / RID-, IMDG- and IATA-regulations)

### PACKING

- Use pallet with collar (stronger outer packaging)
- Make sure that the accumulator is not in direct contact with the pallet
- Fill the caps between the accumulators with styrofoam or equivalent sufficient isolation to prevent movement of the accumulators in the pallet
- Cover the pallet with plastic sheet to prevent the moisture from getting in the package
- Bind the pallet with a rim or a strap
- Attach all necessary warning labels ( danger code 2.2  )

### TRANSPORTING

- Prepare documents (dispatch note, pallet identification markings, invoices if needed, MDG-form)
- Order transportation:
  - NOTE, this is dangerous goods UN3164, Articles, Pressurized, Pneumatic, 2.2
  - 1. for ROAD - transportation use European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2013)
  - 2. for SEA- transportation use IMDG Code, 2010 Edition Amdt 35-10
  - 3. for AIR- transportation use DGR 54th edition (IATA)
- UN 3164 has Special provisions which are mentioned in above literature
  - ROAD ADR-Special provision 594 (when packed in stronger outer package)
  - SEA IMDG-Special provision 283 (if pre-charge pressure x capacity = max. 80 bar)
  - AIR DGR- Special provision A114 (same as SEA)

### NOTICE

All Special provisions has more demands that is explained in this document (see literature) and all the demands must be complied in order to use Special provisions !

### **For further information contact**

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