DEMAG
Cranes & Components

# Now also up to 50 tons – The new Demag DR 20 rope hoist

Efficient and versatile

# Safety and efficiency down to the last detail


39455

The Demag DR 20 rope hoist extends the successful range of DR rope hoists for cranes with the addition of a version for load capacities up to 50 t. Three different designs facilitate versatile application.

Like its smaller brothers, it offers
- **high efficiency** thanks to FEM 2m classification
- **optimum utilization of space** thanks to its compact design
- **high availability** thanks to a low maintenance requirement
- **fast handling** thanks to high hoist speeds
- **good value for money** thanks to comprehensive series features

It meets all of the requirements for state-of-the-art hoists for tomorrow's needs.

**Low-vibration, quiet-running motor**
- Optimised motor design for low-vibration, quiet operation
- 12/2-pole or 4-pole squirrel-cage motor with cylindrical rotor
- Thermal contacts to protect against overheating as standard
- IP 55 enclosure
- Duty factor higher than FEM level

**Fast acting brake**
- Demag DC disk brake with brake release and motor start-up monitoring, minimum brake safety factor of 1.8
- Fast acting brake thanks to integrated electronic modules

**Gearbox lubricated for life**
Three-stage helical gearbox with high endurance gearing and oil lubrication for the entire service life

**Protective rope guide**
- Rope guide made of tough plastic
- Smooth rope lead-in by means of hardened pressure rollers mounted on anti-friction bearings
- Inclined pull up to 4° without touching the rope guide

**State-of-the-art electrical equipment**
- Reliable internal signal transmission
- Electrical equipment completely of modular design
- Load spectrum recorder to determine the remaining safe working period integrated in the controls
- Pulse generator to monitor the motor function


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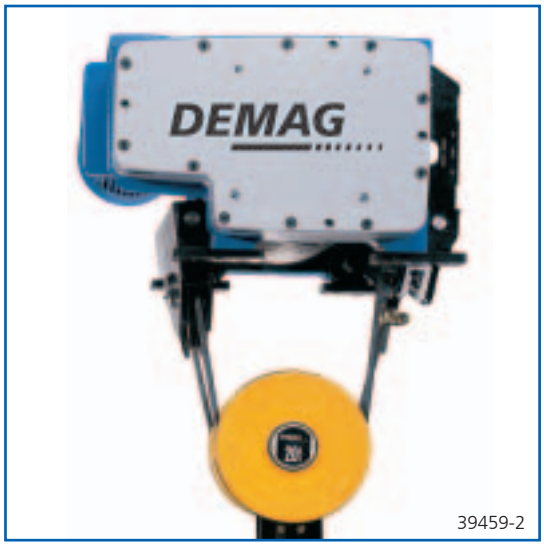

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**Precision geared limit switch**
- Automatic cut-off of the lifting and lowering motions in the upper and lower limit positions
- 4 contacts set for emergency cut-off in the upper and lower positions as standard
- Additional safety thanks to fast-to-slow cut-off
- Other functions, e.g. an operating limit switch, can also be set

**Overload protection**
- Electro-mechanical overload protection integrated in the rope retaining cross-head
- Evaluation by means of the central electronic unit which also specifies the partial load switching point for a measuring run at slow lifting speed
- Electronic overload protection for summation when several hoists are used, load display and slack rope cut-off

**Ergonomically optimised controls**
- DSE-10R control pendant
  - For two-stage and stepless operation
  - Control cable available in two lengths, each infinitely adjustable in length by 4 m
  - Display for the load range and specific installation status information
  - IrDA interface for direct data transfer with laptop and PDA
  - Load display for use with electronic overload protection

- Demag DRC-10 radio control
  - hand-held transmitter with proportional pushbuttons
  - Radio technology based on cell phone standards
  - Bidirectional signal transmission
  - Intelligent charging system
  - Display to show the load range and installation-specific data

**Models**
- GDR basic hoist – the optimum solution for plant engineering
  - Can be operated in 3 mounting positions
  - Rope lead-off possible in any direction
  - Rope guide can be used for every rope lead-off position
  - Electrical enclosure can be fitted to the hoist frame

- FDR foot hoist – the solution ready for installation in cranes and plant engineering
  - Reeving components for 2/1, 4/1 and 4/2 fitted to the hoist

- EZDR double-rail crab – the series hoist for double-girder cranes
  - Standard track gauges 1400/ 2240/ 2800mm
  - Compact with optimum approach dimensions
  - Anti-derailment and lift-off protection as standard
  - Infinitely variable cross travel for low-sway and gentle positioning
  - Cross-travel inverter and braking resistor integrated in the electrical enclosure

# Save space – gain time – cut costs

**Ensuring investments in state-of-the-art cranes remain profitable**
DR rope hoists and Demag standard cranes make it possible to achieve a wide variety of designs which guarantee to provide an optimum balance between costs and performance to meet your specific needs.

**From planning to commissioning and lasting availability**
You can rely on the expertise and service provided by Demag engineers as well as the qualifications of authorised Demag partners.

The fastest way to obtain more information is via the Demag Infoline +49 (0) 2335 92-2922 or **www.demag-hoistdesigner.com**.


Hoist Designer enables you to integrate the Demag DR rope hoist into your AutoCAD design with ease. You simply click on the information and data you need. Demag DR rope hoist: The new force in crane technology Made by Demag.

## Selection table

| Group of mechanisms FEM/ISO | Load capacity t | Hook path m | Hoist speed m/min | Load capacity t | Hook path m | Hoist speed m/min |
|---|---|---|---|---|---|---|
| | 2/1 | | | 6/1 | | |
| 1 Am/M 4 | 12,5 | 24<br>36<br>54 | 6/1<br>12/2<br>1–16 (22) | 40 | 12<br>18<br>24,7 | 4/0,7<br>0,3–3,3 (7,7)<br>0,3–5,3 (7,4) |
| 2 m/M 5 | 10 | | | 32 | | |
| 3 m/M 6 | 8 | | | 25 | | |
| 4 m/M 7 | 6,3 | | | 20 | | |
| | 4/1 | | | 8/1 | | |
| 1 Am/M 4 | 25 | 12<br>18<br>27 | 3/0,5<br>6/1<br>0,5–5 (7)<br>0,5–8 (11) | 50 | 9<br>13,5<br>18,5 | 3/0,5<br>0,3–2,5 (3,5)<br>0,2–4 (5,5) |
| 2 m/M 5 | 20 | | | 40 | | |
| 3 m/M 6 | 16 | | | 32 | | |
| 4 m/M 7 | 12,5 | | | 25 | | |
| | 4/2 | | | 8/2 | | |
| 1 Am/M 4 | 12,5 | 12,3<br>21,2<br>33,2 | 6/1<br>12/2<br>1–16 (22) | 25 | 10,3<br>16,3<br>23,4 | 3/0,5<br>6/1<br>0,5–5 (7)<br>0,5–8 (11) |
| 2 m/M 5 | 10 | | | 20 | | |
| 3 m/M 6 | 8 | | | 16 | | |
| 4 m/M 7 | 6,3 | | | 12,5 | | |

Values in brackets indicate 1.5 times the rated speed, with which loads weighing up to a third of the rated load can be moved.

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