Options tailored to your needs

Not only the basic version of the Demag DMR modular rope hoist can be precisely tailored to meet the customer's needs. Thanks to many additional options, the DMR offers an impressive range of EVEN MORE additional functions.

EVEN BETTER EFFICIENCY: HOIST INVERTER AND PROHUB

A hoist inverter offers optimum utilisation of the motor's output and enables you to position loads even more accurately thanks to variable speed control. An absolute boost for handling: the ProHub function with inverter control regulates the lifting speed depending on the current load. In this way, the lifting speed can be increased by 50 per cent for loads that weigh up to 30 per cent of the rated load capacity.

EVEN BETTER TRACTION: DUALDRIVE/DUALDRIVE PLUS

Achieve even better traction for travelling hoist units – for example for outdoor applications. Our DualDrive unit drives two wheels at the same time. The additional "plus" offered by the system: thanks to its predefined mounting position, a second travel drive can be installed to meet application requirements.

EVEN MORE FLEXIBILITY: DRC D3 RADIO CONTROL SYSTEM

The high-performance DRC D3 radio control system has a long transmitter range and allows up to 40 radio systems to be operated in close proximity to each other. Up to three transmitters can be paired with the system as a precautionary measure – and control can be transferred at the press of a button. Integrated power management and rechargeable batteries enable uninterrupted operation for up to five days.

EVEN BETTER OVERVIEW: DEMAG STATUSBOARD

The entire lifting operation at a glance: Demag StatusBoard not only informs you about the weight of the current load, but also shows the system status and other operating data. The colour display shows information on multiple lines and can also be easily read at a longer distance.

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EVEN BETTER ACCURACY: F10 MECHANICAL MICROSPEED UNIT

You can position loads even more accurately with the mechanical microspeed unit of the F10 drive that is used in the co-axial design. The drive consists of two separate conical-rotor motors for the main and creep lifting motions. The motors offer outstanding braking capacity as well as automatic braking if the power drops or the motor is switched off.

Simple and online

It could not be easier to find the Demag modular rope hoist to meet your specific needs: configure a rope hoist that matches your requirements simply and easily online with the Demag Designer-Portal at www.demag-designer.com.

Configuration start page

Product selection

Product result

FLEXIBLE CONFIGURATION

Our DMR configurator includes all of the versatility of our product. You have all the choices – regardless of whether you have already decided for the co-axial or C-design. Our web-based configuration tool guides you through selection of the individual parameters and then presents you with a DMR modular rope hoist that is tailored to your needs.

INTUITIVE INTERFACE

A practical and intuitive user interface ensures that you can find the right solution to meet your needs quickly and easily. The DMR configurator also supports you with default basic equipment that is based on many years of Demag expertise in the rope hoist sector. All default settings can, of course, be adjusted to match your preferences throughout the further configuration.

ORDER DIRECT

When you have configured your DMR rope hoist, you can also conveniently order it straight away via Demag Shop at www.demag-shop.com.

YOUR BENEFITS:
- Select your DMR modular rope hoist step by step at www.demag-designer.com
- Individual selection of all variants
- Save your configuration
- **Immediate results:**
  - Product description and technical data
  - CAD geometry data configured in 2D or 3D
  - Circuit diagrams
  - Documentation
  - Delivery time details
- **Simply order at** www.demag-shop.com

Reliable engineering

We focus on our customers' individual requirements and have been a leading supplier of rope hoists for the crane sector and engineering applications for many years. The Demag brand stands for innovation, absolute reliability, many years of expertise and first-class service.

INNOVATION

As a leader in innovation, our primary objective is to satisfy our customers' requirements even better. For this reason, we continuously work on improving our rope hoists and developing outstanding products for you. With our Demag DMR modular rope hoist, we have raised our customer focus to a new level.

RELIABILITY

Our customers can concentrate fully on their core business – since they have the certainty that their rope hoists operate reliably. Demag rope hoists are renowned for their high handling rates, cost-effective operation and high levels of safety all over the world.

EXPERIENCE

You can rely on us as your partner with many years of experience in rope hoist manufacturing. Thanks to our innovative ideas and pioneering approach, we already paved the way for an increasingly digitalised industry many years ago and continue to drive this technology to meet the needs of the future.

SERVICE

We offer our customers a wide range of valuable services to cover the entire life cycle of their rope hoists. Everything from a single source. Thanks to our global service network, our highly trained service teams can look after our customers' needs direct at their premises and without delay. Our highly efficient spare parts logistics system ensures quick deliveries if service work is necessary and prevents lengthy downtimes.

Technical data – selection criteria to FEM/ISO

The size of the hoist is determined by:

- the load spectrum
- the average operating time
- the load capacity and
- the reeving arrangement

1. What are the operating conditions?
2. What is the specified safe working load?
3. To what height must the load be lifted?
4. What is the required lifting speed?
5. Do loads need to be lifted and lowered with great accuracy?
6. Is horizontal load travel necessary?
7. How is the hoist to be controlled?

The group is determined from the operating time and load spectrum.

Load spectrum			Average operating time per working day in hours				
1	Light		1 - 2	2 - 4	4 - 8	8 - 16	Over 16
2	Medium		0.5 - 1	1 - 2	2 - 4	4 - 8	8 – 16
3	Heavy		0.25 - 0.5	0.5 - 1	1 - 2	2 - 4	4 - 8
4	Very heavy		0.12 - 0.25	0.25 - 0.5	0.5 - 1	1 - 2	2 - 4
Group of mechanisms			**1 Bm**	**1 Am**	**2 m**	**3 m**	**4 m**
Reeving arrangement							
2/1 4/1 6/1 8/1							
4/2 8/2 12/2							

| Load capacity [t]				Size	1 Bm	1 Am	2 m	3 m	4 m
1	2	–	–		–	–	–	–	■
1.25	2.5	–	–		–	–	–	■	–
1.6	3.2	–	–		–	–	■	–	■
2	4	–	–	DMR 3	–	■	–	■	–
2.5	5	–	–		–	–	■	–	–
3.2	6.3	–	–	DMR 5	–	■	–	–	■
4	8	–	–		–	–	–	■	
5	10	–	–		–	–	■	–	■
6.3	12.5	–	–	DMR 10	–	■	–	–	■
–	16	16	20	DMR 16*	■	–	■	–	■
–	–	20	25		–	–	–	■	–
10	20	32	40		–	–	■	–	–
12.5	25	40	50	DMR 20	–	■	–	–	–

* 2 m / 16 t = 6/1; 1Bm / 16 t = 4/1

THE LOAD SPECTRUM

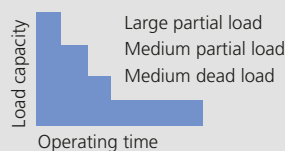(in most cases estimated) can be evaluated according to the definitions below:

1 Light
Hoist units which are usually subject to very small loads and only in exceptional cases to maximum loads.
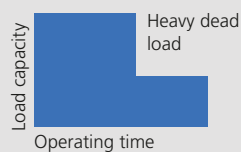
Load capacity / Operating time — Small partial load, Small dead load
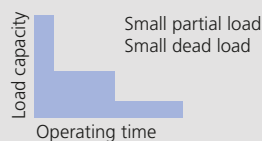
2 Medium
Hoist units which are usually subject to small loads but often to maximum loads.

Load capacity / Operating time — Large partial load, Medium partial load, Medium dead load

3 Heavy
Hoist units which are usually subject to medium loads but frequently to maximum loads.

Load capacity / Operating time — Heavy dead load

4 Very heavy
Hoist units which are usually subject to maximum or almost maximum loads.

Load capacity / Operating time — Very heavy dead load

Example:

Load capacity	5 t
Load spectrum	"Medium" from table
Lifting speed	6 m/min
Lifting speed	1 m/min
Reeving	4/1
Average hook path	3 m
No. of cycles/hour	20
Working time/day	8 hours

Example for calculation to FEM/ISO

The average operating time per working day is estimated or calculated as follows:

$$\text{Operating time per day} = \frac{2 \times \text{average hook path} \times \text{no. of cycles/hour} \times \text{working time/day}}{60 \times \text{lifting speed}}$$

$$\text{Operating time/day} = \frac{2 \times 3 \times 20 \times 8}{60 \times 6} = 2.66 \text{ hours}$$

For the medium load spectrum and an average daily operating time of 2.66 hours, the table shows group 2m. For a load capacity of 5 t and 4/1 rope reeving, the table indicates hoist size DMR 5 - 5.

Selection table

DMR 3 / DMR 5 / DMR 10 / DMR 16

Range	Load capacity [t]	Hook path [m]	2-stage [m/min]	Variable [m/min]	ProHub* [m/min]	Group of mechanisms [FEM/ISO]
DMR 3				**2/1**		
	1	12	1.3/8	0.32-6.4	9.6	4m/M7
	1.25	20	2/12	0.5-12.5	19	3m/M6
	1.6	30	2.6/16	1-25	38	2m/M5
	2		1.3/8	0.32-6.4	9.6	1Am/M4
				4/1		
	2	6	0.7/4	0.16-3.2	4.8	4m/M7
	2.5	10	1/6	0.32-6.4	9.6	3m/M6
	3.2	15	1.3/8	0.5-12.5	19	2m/M5
	4		0.7/4	0.16-3.2	4.8	1Am/M4
DMR 5				**2/1**		
	1.6	12	1.3/8	0.32-6.4	9.6	4m/M7
	2	20	2/12	0.5-12.5	19	3m/M6
	2.5	30	2.6/16	1-25	38	2m/M5
	3.2		1.3/8	0.32-6.4	9.6	1Am/M4
				4/2		
	1.6	9.9	1.3/8	0.32-6.4	9.6	4m/M7
	2	16.3	2/12	0.5-12.5	19	3m/M6
	2.5		2.6/16	1-25	38	2m/M5
	3.2		1.3/8	0.32-6.4	9.6	1Am/M4
				4/1		
	3.2	6	0.7/4	0.16-3.2	4.8	4m/M7
	4	10	1/6	0.32-6.4	9.6	3m/M6
	5	15	1.3/8	0.5-12.5	19	2m/M5
	6.3		0.7/4	0.16-3.2	4.8	1Am/M4
DMR 10				**2/1**		
	3.2	12	1.3/8	0.32-6.4	9.6	4m/M7
	4	20	2/12	0.5-12.5	19	3m/M6
	5	30	2.6/16	1-25	38	2m/M5
	6.3	40	1.3/8	0.32-6.4	9.6	1Am/M4
				4/2		
	3.2	5.8	1.3/8	0.32-6.4	9.6	4m/M7
	4	11.35	2/12	0.5-12.5	19	3m/M6
	5	18.4	2.6/16	1-25	38	2m/M5
	6.3	25.2	1.5/8	0.32-6.4	9.6	1Am/M4
				4/1		
	6.3	6	0.7/4	0.16-3.2	4.8	4m/M7
	8	10	1/6	0.32-6.4	9.6	3m/M6
	10	15	1.3/8	0.5-12.5	19	2m/M5
	12.5	20	0.7/4	0.16-3.2	4.8	1Am/M4
DMR 16				**4/1**		
	16	6 / 10 / 15 / 20	0.7/4	0.16-3.2	4.8	1Bm/M3
				6/1		
	12.5	4.1	0.7/4	0.22-4.3	6.4	3m/M6
	16	13.3	0.9/5.3			2m/M5

DMR 20

Range	Load capacity [t]	Hook path [m]	2-stage [m/min]	Variable [m/min]	ProHub* [m/min]	Group of mechanisms [FEM/ISO]
DMR 20				**2/1**		
	6.3	20	1.3/8	0.32-6.4	9.6	4m/M7
	8	30	2/12	0.5-12.5	19	3m/M6
	10	40	2.6/16		24	2m/M5
	12.5	54	1/6 1.3/8 2/12	0.64-16		1Am/M4
				4/2		
	6.3	8.2	1.3/8	0.32-6.4	9.6	4m/M7
	8	15.2	2/12	0.5-12.5	19	3m/M6
	10	22.2	2.6/16		24	2m/M5
	12.5	31.9	1/6 1.3/8	0.64-16		1Am/M4
				4/1		
	12.5	10	0.7/4	0.16-3.2	4.8	4m/M7
	16	15	1/6	0.32-6.4	9.6	3m/M6
	20	20	1.3/8		12	2m/M5
	25	27	0.5/3 0.7/4 1/6	0.32-8		1Am/M4
				8/2		
	12.5	8.2	0.7/4	0.16-3.2	4.8	4m/M7
	16	11.8	1/6	0.32-6.4	9.6	3m/M6
	20	16.6	1.3/8		12	2m/M5
	25	27.5	0.5/3 0.7/4 1/6	0.32-8		1Am/M4
				6/1		
	20	6.7	0.7/4	0.22-4.3	6.4	4m/M7
	25	10		0.26-5.3	8	3m/M6
	32	13.3 18				2m/M5
	40	28.3	0.7/4			1Am/M4
				12/2		
	20	8	0.7/4	0.22-4.3	6.4	4m/M7
	25	11.3	0.9/5.3	0.26-5.3	8	3m/M6
	32	18.5				2m/M5
	40		0.7/4			1Am/M4
				8/1		
	25	7.5	0.5/3	0.16-3.2	4.8	4m/M7
	32	10	0.7/4	0.2-4	6	3m/M6
	40	13.5				2m/M5
	50	21.3	0.5/3			1Am/M4

* ProHub: 50% higher lifting speed for up to 30% of rated load capacity.

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