

# Smooth travel characteristics – versatile connection arrangements

Demag travel units are high-quality components for materials handling systems and general engineering requirements. Their triedand-tested design provides for efficient and reliable operation. They can be used as travel units in many applications, ranging from travelling cranes and steel superstructures to specific engineering needs.

Demag DFW-L travel units can be used as compact rail-mounted solutions and connected direct to load-bearing structures. They display excellent travel characteristics, even at high loads, thanks to tight tolerances (virtually no track gauge differences, skewing or misalignment). Specially selected motors provide smooth starting for all loads.

## TRAVEL UNIT CONNECTION TO MEET INDIVIDUAL NEEDS

**Side crane girder connection:** flush with top edge, flush with bottom edge, raised, lowered **Top crane girder connection**: top-mounted

#### YOUR MOST IMPORTANT BENEFITS AT A GLANCE

- Tried-and-tested design also for arduous operating conditions
- Various sizes suitable for all output requirements
- Travel speeds up to 12.5/50 m/min with polechanging motors
- Variable-speed travel motions up to 63 m/min thanks to inverter-fed drives
- Changes in track gauge can be accommodated using interchangeable spacer elements
- Smooth travel thanks to anti-friction bearings lubricated for life
- Large distance between bearings to accommodate horizontal forces
- Easy assembly and good accessibility
- Minimum maintenance
- Optional horizontal guide rollers

	Travel unit	Max, wheel load	Travel wheel dia,	Wheel base ekt	Length <sup>1)</sup>	Height	Width <sup>2)</sup>
	Туре	[kg]	[mm]	[mm]	[mm]	[mm]	[mm]
For single-girder connection	DFW-L-L 112	3,350	112	1,750	1,920	180	214
	DFW-L-E 112	3,500	112	2,000, 2,500	2,204, 2,704	243, 247	135, 135
	DFW-L-E 125	5,000	125	2,000, 2,500, 3,150	2,224, 2,724, 3,374	281, 285, 289	138, 140, 140
	DFW-L-E 160	7,000	160	2,000, 2,500, 3,150	2,280, 2,780, 3,430	353, 357, 361	158, 160, 160
	DFW-L-E 200	10,000	200	2,000, 2,500, 3,150, 4,000	2,336, 2,836, 3,486, 4,336	436, 440, 444, 444	183, 185, 185, 185
For double-girder connections	DFW-L-Z 160	7,000	160	2,500, 3,150	2,780, 3,430	352, 356	160
	DFW-L-Z 200	10,000	200	2,500; 3,150, 4,000	2,846, 3,446, 4,346	437, 438, 439	185
	DFW-L-Z 250	16,000	250	2,500, 3,150, 4,000	2,890, 3,540, 4,390	470, 473, 472	210
	DFW-L-Z 315	22,000	315	2,500, 3,150, 4,000, 4,200, 5,000	2,975, 3,625, 4,475, 4,675, 5,476	506, 508, 508, 508, 510	250
	DFW-L-Z 400	30,000	400	3,150, 4,000, 4,500, 5,000	3,735, 4,585, 5,085, 5,585	552, 550, 552, 552	285



Crane end carriage with drive unit (A-type gearbox and Z-type motor) and Demag DPZ cellular foam buffer

#### TORSIONALLY RIGID BOX-SECTION DESIGN

The travel unit features a rugged design thanks to its rigid, enclosed box-section profile. Precisely welded diaphragm plates reinforce the connection area, enabling load-bearing structures such as crane girders, sliding roof sections or foundry carriages to be connected safely and reliably.

#### **PRECISE CONNECTION**

The travel wheel axes are precisely positioned in relation to the connecting surfaces thanks to CNC machining. The crane girder mating plates feature reliable high-tension bolted connections to the superstructure for ease of assembly and good accessibility. Track gauge dimensions can be adjusted by simply replacing the spacer elements.

#### **EN 13001 CLASSIFICATION**

- Standard steelwork classification for Demag DFW-L travel units with HC3/S3 to EN 15011/EN 13001
- For hoist unit types and duty types > HD1 with lifting speeds up to 20 m/min.
- Other classifications on request

The drive unit is perfectly matched to the travel unit and optimised for travel applications, also for arduous operating conditions.

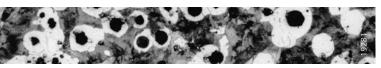
Demag DFW-L travel units are driven by a Demag cylindrical-rotor brake motor. Designed to match specific requirements and featuring additional flywheel mass, it offers torque properties for highly favourable starting characteristics. The offset geared motor is specified for frequent starting and stopping. Helical teeth and the high-quality gearing components ensure low-noise operation.

For even smoother starting or infinitely variable travel speed control, we recommend Demag drives with a frequency inverter.



Travel units with spacer elements for track gauge adjustment





Section through the travel wheel material (magnified 200 times) with encapsulated graphite granules (black dots) for self-lubricating property

### TRAVEL WHEELS MADE OF SPHEROIDAL-GRAPHITE CAST IRON

The self-lubricating property of this material keeps crane runway wear to a minimum and additionally enhances the smooth travel characteristics of the travel unit thanks to its inherent shock-absorbing effect. A residual flange marking clearly indicates when the flanged travel wheel has to be replaced.

#### **RELIABLE REPLACEMENT**

The reproducible geometry of the wheel blocks provides for smooth travel characteristics and, if required, enables them to be replaced quickly and reliably – without the need for special tools.

**DEMAG CRANES & COMPONENTS GMBH** 

Wetter site Ruhrstrasse 28 58300 Wetter/Germany

**E** info@demagcranes.com

+49 2335 92-0 +49 2335 92-7676

0817 EN/DE 208 975 44 700 IS 845.1 No liability for errors or omissions. Subject to change. Printed in Germany D/310817/PDF