

*World premiere: DMF 400|11*

## **Reaching new manufacturing dimensions with our expanded DMF series**

**The DMF 400|11 from DMG MORI combines the proven concept of the new traveling column series with a working area volume of 4.7 m<sup>3</sup>.**

*With the DMF 200|8, DMF 300|8 and DMF 300|11, which have been developed from scratch, DMG MORI has repeatedly demonstrated its innovative competence in recent years. Based on this pioneering moving column concept, the machine tool manufacturer is now also presenting the largest model in the series, the DMF 400|11. Compared to the previous model, the world premiere impresses with a 20 percent stiffer and 1.1 m<sup>3</sup> larger working area. The stable construction results from the cast-iron machine bed, three linear guides and ground and cooled ball screws. In the double ball test, the DMF 400|11 achieves an accuracy of 5 µm. This makes the moving column machine the perfect companion for machining demanding large components – from structural parts and long beams to components for die and mold making.*



*Compared to its predecessor, the DMF 400|11 has an enlarged working area with travels of 4,000 x 1,100 x 1,050 mm.*

The traveling column machines from DMG MORI have always been the right choice for machining long components. With travels of 4,000 x 1,100 x 1,050 mm, the DMF 400|11 also offers plenty of space in the Y and Z axes. The optional partition wall also creates two separate workspaces, enabling set-up parallel to machining time through pendulum machining of the spindle. The fixed table is designed as standard for workpieces weighing up to 8,000 kg. DMG MORI can

optionally integrate one or two rotary tables for components weighing 1,200 kg each. An add-on table as an A-axis with a load capacity of 500 kg is also available. The modular system is supplemented by an FD rotary table for demanding milling-turning operations and larger tool magazines with currently up to 120 pockets. The standard magazine holds 40 tools with a length of up to 400 mm. The tool change is carried out behind the worktable – a special feature of the latest DMF generation from DMG MORI. This gives the DMF 400|11 a high level of process reliability. In addition, the linear guides are located outside the work area, which protects them from abrasive materials and contributes to the longevity of the components.

### **Precision and dynamics for all applications**

A highlight of the innovative traveling column concept from DMG MORI – and therefore also of the DMF 400|11 – is the constantly cantilevered Y-axis. It gives the machine a constant rigidity over the entire travel path. This allows users to use the maximum spindle power at all times – regardless of the spindle position. Extensive cooling measures as standard ensure high long-term thermal accuracy with minimal tolerances. The ball screws in the X, Y and Z axes are driven by a toothed belt with arrow teeth and ensure the best surface finish. The rapid traverse rates with linear drives – standard on the DMF 400|11 in the X-axis – are up to 80 m/min.

The optimized B-axis of the DMF 400|11 has a helical gearbox and improved clamping with 6,000 Nm. The standard equipment includes the integrated speedMASTER spindle with 15,000 rpm. Alternatively, a model with a 20,000 rpm speedMASTER spindle and a 12,000 rpm powerMASTER spindle with higher torque (288 Nm) are available. As with all MASTER spindles, a 36-month warranty applies here too, irrespective of the runtime. With the HSK-A100 interface, the cutting performance of the machine can be increased even further.

### **Optimum equipment for future-proof production**

The DMF 400|11 can be easily integrated into digital infrastructures, making the investment absolutely future-proof. Exclusive DMG MORI technology cycles also increase productivity in machining, for example through the problem-free programming of freely swiveling angle heads using angularTOOL. Production on the DMF 400|11 becomes even more productive with the help of automation solutions. DMG MORI has already integrated appropriate interfaces for this, for example for the use of robot handling.