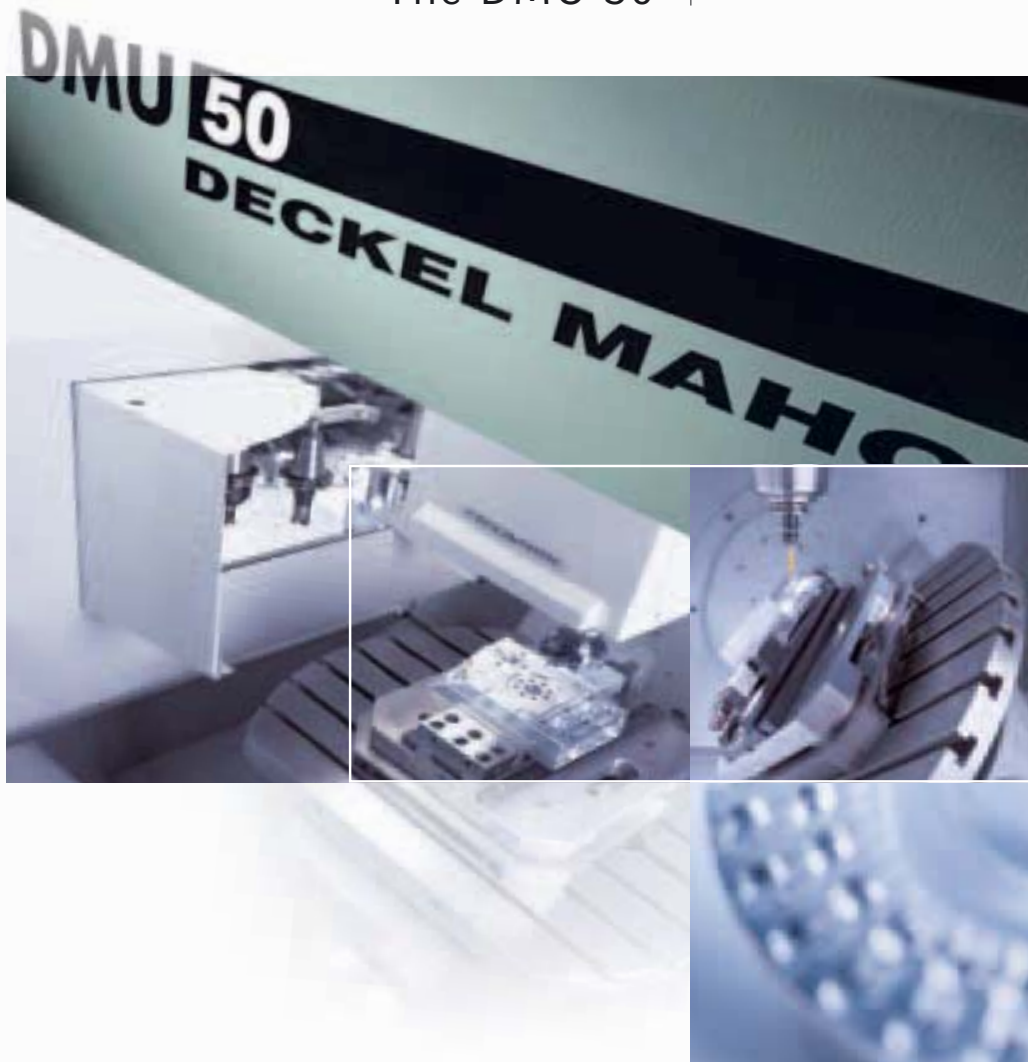


The DMU 50



CNC universal milling with up to five axes using the most innovative DMG technology

The DMU 50 sets a new standard in the shop, for training, in the laboratory as well as tool, fixture, and mould construction. This CNC universal milling machine is characterized by innovative engineering – in every detail. Highlights such as the digital drives on all axes and the main spindle, as well as top-of-the-line options, such as a rapid traverse up to 945 ipm, acceleration up to 16.4 ft./s², and a milling spindle with up to 10,000 rpm contribute to the increased dynamics of the DMU 50. Instead of a fixed table, which is common for this machine category, the DMU 50 is now available with

a top-of-the-line option of a manual or driven swivel rotary table that has a hydraulic table clamp. This puts two additional machining axes at your disposal. The machine design has been completely revamped.

The state-of-the-art cross slide construction with a rigid, ribbed, cast-iron base offers a foundation with noticeably more precision.

State-of-the-art control technology, with 15" TFT screen and 3D software, ensures the highest job processing times, precision and reliability. With the DMU 50, DMG offers the perfect entry-level machine in the field of modern milling centers.

This means precise and efficient manufacturing of complex workpieces.

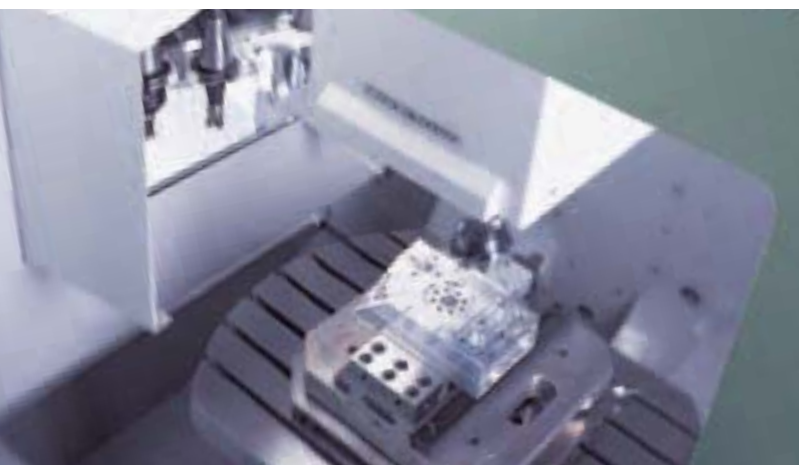
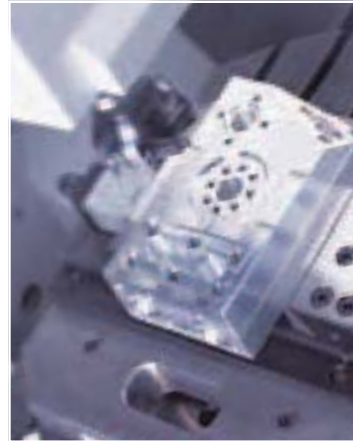


Digital drives, with speeds up to 10,000 rpm

The machine design of the universal milling machine DMU 50 offers the perfect solution for manufacturing everything from single pieces to small series. Digital drives, speeds up to 10,000 rpm and a powerful tool changer with 16 or 30 pockets allow the automatic manufacturing of even complex workpieces. Jobs involving various machining tasks can be done in as little as two settings. The half cabin, with a high walled enclosure, an easy to see work

area, and the optional second work area door, increase ergonomics and emphasize the universality of this compact machine.

The cross-slide design with rigid cast-iron components, combined with a mineral cast-iron machine base offer maximum stability. This leads to a noticeable increase in precision and surface quality.

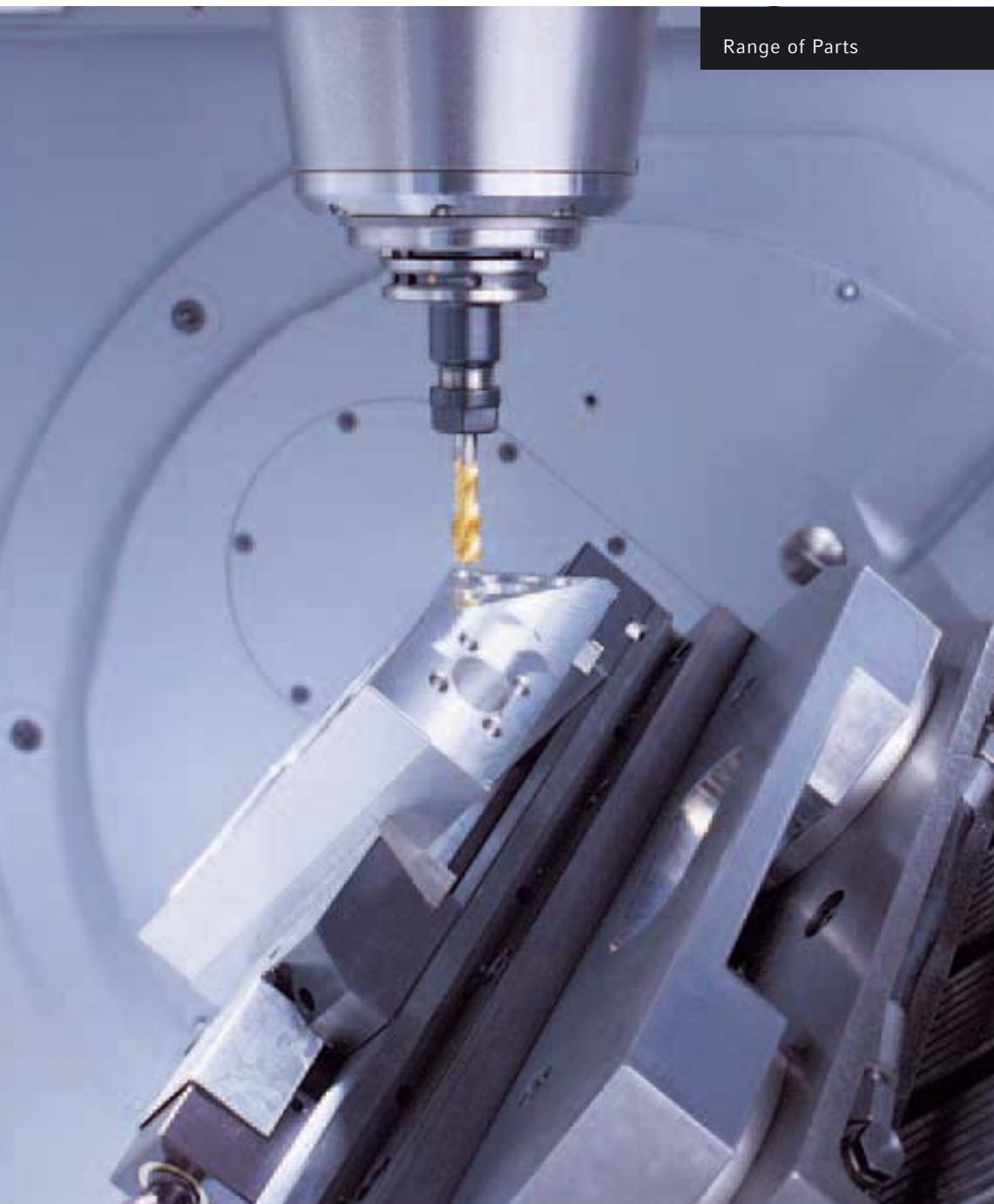


DMU 50:
Work area designed for easy viewing.

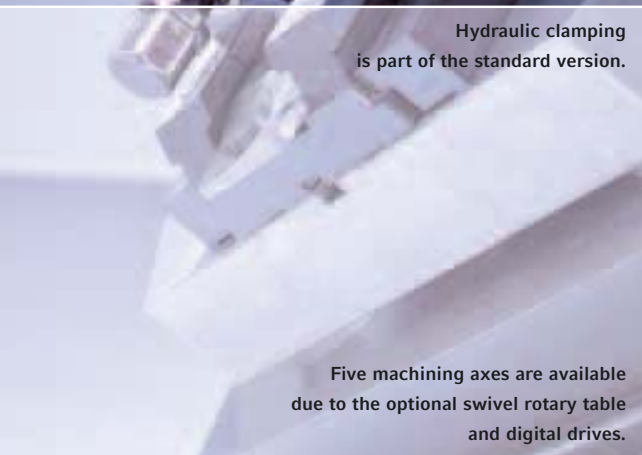


NEW DESIGN
// SPACE GREEN METALLIC

The DMU 50 is also available in
space green metallic.



Hydraulic clamping
is part of the standard version.



Five machining axes are available
due to the optional swivel rotary table
and digital drives.



State-of-the-art technology in the most compact space – from manual to five axes

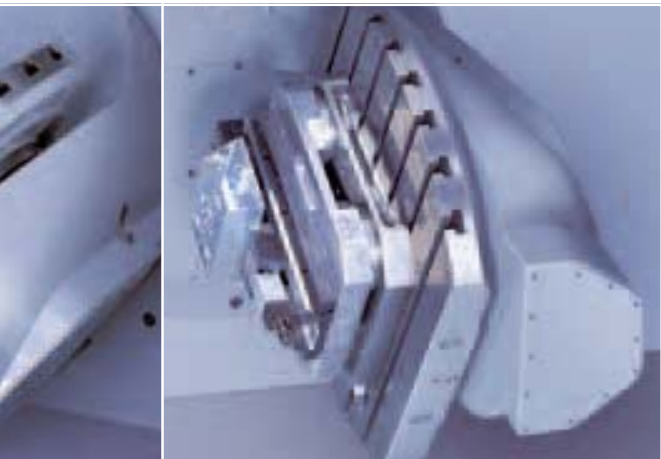
The new custom table-options offer clear advantages for every application: rigid table, manual swivel rotary table, and swivel rotary table with digital drives. This is how even very complex workpieces are machined in as little as two settings.

The swivel rotary table expands the standard configuration of this machine-class by two additional axes – the B- and C-axis. Hydraulic table clamping is already available on the standard version, and the enormous swivel range up to 115° allows undercuts of up to 20°.

DMU 50 – the ideal solution for tool manufacturing. Guideways, drives, measuring devices and tools are optimally positioned outside the work area, preventing contamination by chips.

With the flexible tool changer, the DMU 50 performs very complex and automated applications. AC-drives are located on the main spindle and on all linear axes. They ensure the kind of performance that is expected of a

modern universal milling machine. The main spindle delivers power up to 17.4 hp. The rapid traverse of 472 ipm with the option of 945 ipm, is remarkable for a machine of this size. Wide guideway clearances, rigid drive trains, circulating roller guideways, and dimensionally stable connections of the bed and table assembly offer the highest precision even during high loads.





State-of-the-art cross slide design
with rigid, ribbed cast-iron base.

DMU 50 DECKEL MAHO





Fast tool exchange
to minimize chip-to-chip times.

Three table options
for individual machining applications



Fixed table.



Manual swivel rotary table.



Swivel rotary table with digital drives.

Top-of-the-line options for every application



Above:
Tool changer chain
with 30 pockets and
double grippers.



Right:
Tool changer with 16
pockets and pick-up
magazine allows setup
parallel to production
time.

The high performing and reliable tool changers of the DMU 50 – with the option of 16 pockets in pick up mode or 30 pockets with fast double gripper – offer setup parallel to production time. This, combined with minimal chip-to-chip times, save time throughout all areas of production.

In addition, contamination with chips is prevented due to the separation of the work area and tools. The tools are held in flexible clamps, leading to optimal positioning.

This ensures precision from the drawing to the workpiece.

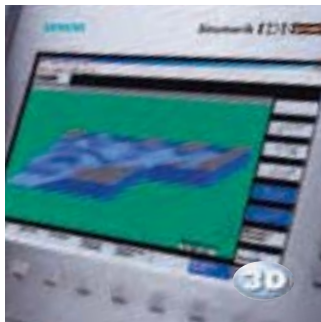
Whether you choose the Siemens 840D powerline, the Heidenhain iTNC 530, or the Heidenhain MillPlus IT – these high-tech CNC's lead the way toward success and thus fit seamlessly into the performance spectrum of the DMU 50.

All three CNC-controls stand out with their enormous storage capacities, extremely fast processors, and their excellent user-friendliness due to 15" TFT screens and supportive 3D software.

They also enable direct access to external networks via Ethernet or Internet, and thus provide a gateway to the

service and security of DMG Netservice.

The highest performance for increased productivity: with the latest control generation from Siemens or Heidenhain, competitive advantages can be planned and programmed.



Siemens 840D powerline

Highlights:

- _ ShopMill open
- _ Fast network connections
- _ Processing from the hard drive
- _ Fast editing of large programs
- _ Simple, graphically supported setup
- _ Extensive tool management
- _ 15" TFT screen

Your advantages:

- _ Easiest interactive programming
- _ Programming without additional documentation
- _ Wide range of preprogrammed cycles
- _ Security due to pre-job simulation
- _ Sophisticated tool handling



Heidenhain iTNC 530

Highlights:

- _ Workshop or DIN-ISO programming
- _ 3D tool representation
- _ Graphic programming
- _ Coordinate transformation
- _ Tool management with context-sensitive help function
- _ Hardware: Pentium II-based
- _ 15" TFT screen

Your advantages:

- _ Familiar and proven Heidenhain user interface
- _ Fastest program creation through graphic programming
- _ An extensive selection of pre-programmed cycles



Heidenhain MillPlus IT

Highlights:

- _ MillPlus software
- _ The latest software interfaces
- _ Geometry- and temperature compensation
- _ Adjustable lurch control
- _ Comfortable integration of Windows™ applications on dual processor system (optional)
- _ 15" TFT screen

Your advantages:

- _ Ergonomic menu design
- _ Highest flexibility for data access
- _ Integrated safety technology
- _ Full performance of the control even when running external applications



DMG ControlPanel with 15" TFT screen and state-of-the-art 3D software



The DMG Powertools:
Improve performance with
intelligence! Software tools
from DMG mean more safety
and efficiency.

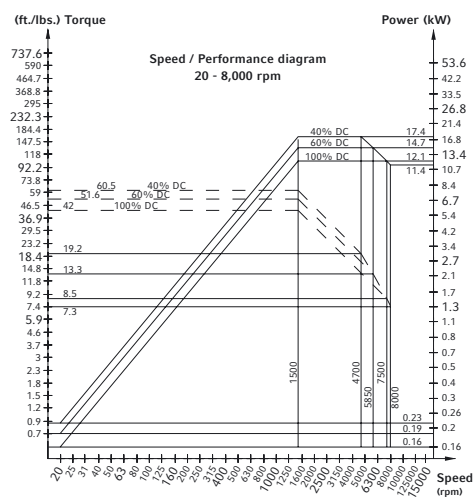




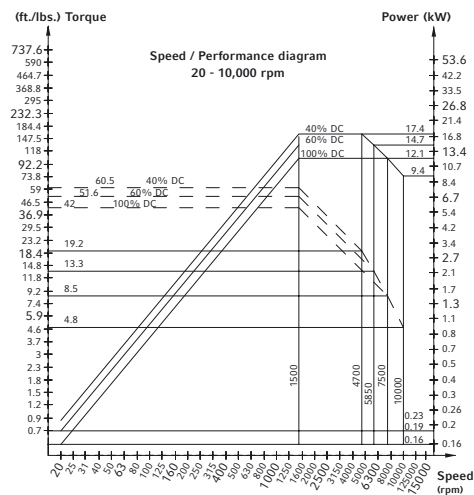
Range of Parts

Machine

Performance diagram of the DMU 50 with 8,000-spindle



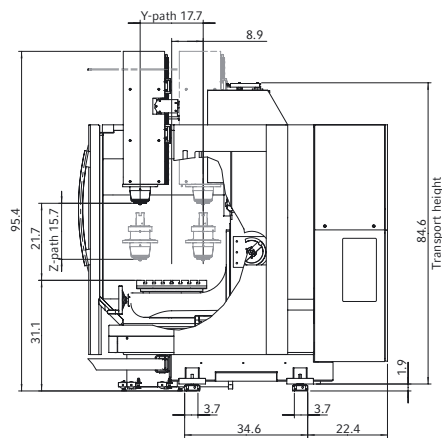
Performance diagram of the DMU 50 with 10,000-spindle



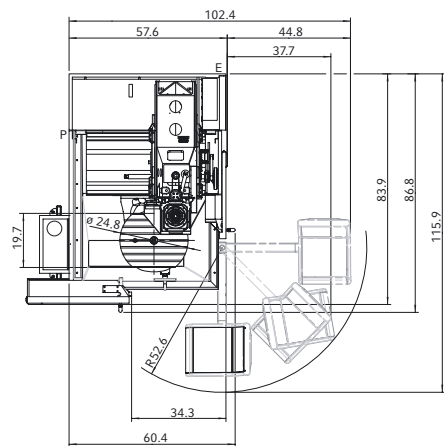
The technology of the DMU 50

Floor plans and measurements (in inches) for the DMU 50

Side view

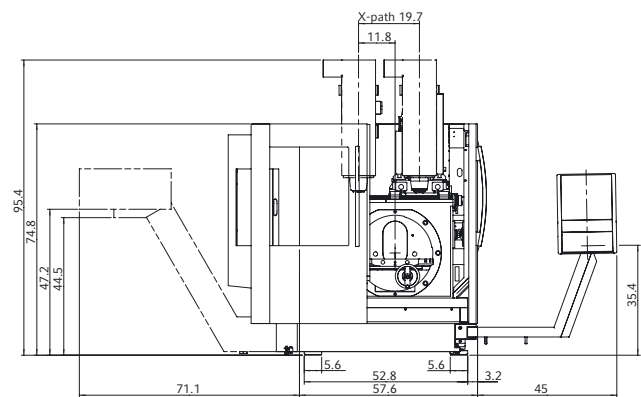


Top view

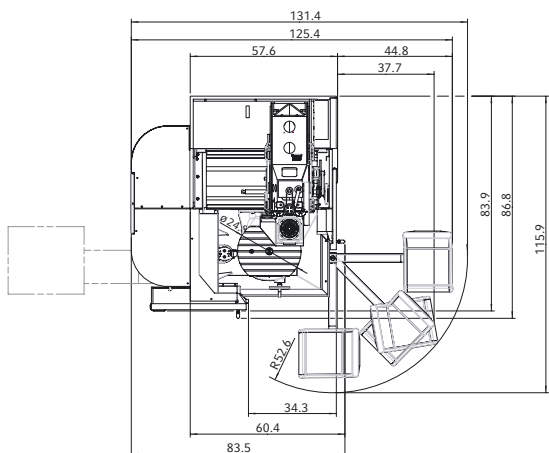


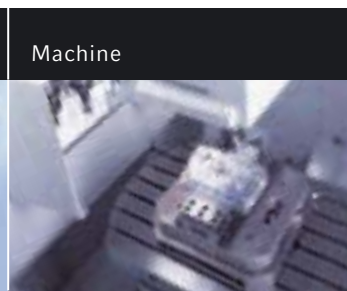
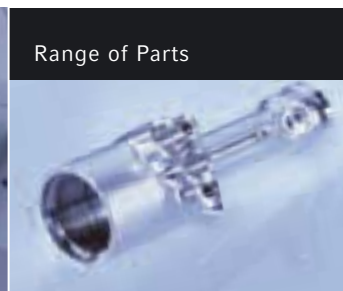
Floor plans and measurements (in inches) of the DMU 50 with tool changer (30 pockets) and auger

Frontal view



Top view





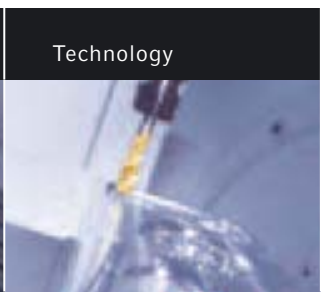
Range of Parts

Machine

Technical Data:

Machine type		DMU 50
Work area		
Traverse path X (longitudinal)	in.	19.7
Traverse path Y (across)	in.	17.7
Traverse path Z (vertical)	in.	15.7
Main drive		
Type of drive	AC-controlled	digital
Speed range	rpm	20 - 8,000 / 20 - 10,000*
Drive power (100 / 40% DC)	hp	12.1 / 17.4
Torque (40% DC)	lb./ft.	60
Feed Drives		
Drive type X / Y / Z	AC-controlled	digital
Feed rate	ipm	394 / 787*
Rapid traverse X / Y / Z	ipm	472 / 945*
Feed power X / Y / Z	kN	4.8
Fixed table		
Dimensions	in.	27.6 x 19.7
Max. load	lbs.	1,100
Swivel rotary table with manual drives		
Dimensions	in.	ø 24.8 x 19.7
Max. load	lbs.	440
Table clamping		hydraulic
Table rotation	Degrees	360
Table swivel range	Degrees	115 (-5 / +110)
Swivel rotary table with digital drives		
Dimensions	in.	ø 24.8 x 19.7
Max. load	lbs.	440
Table clamping		hydraulic
Table rotation	Degrees	360
Table swivel range	Degrees	115 (-5 / +110)

* optional



Performance features and technology of the DMU 50

Technical Data:

Machine type

DMU 50

Tool changer - pick-up option

Magazine	Type	Plate with clamp
Storage pockets	number / lbs.	16 / 13.2
Max. tool length	in.	11.4
Max. tool diameter	in.	5.1 / 3.1
Chip-to-chip time	Sec.	10

Tool changer – chain option

Magazine	Type	Chain with double gripper
Storage pockets	number / lbs.	30 / 13.2
Max. tool length	in.	11.4
Max. tool diameter	in.	5.1 / 3.1

Tool fitting	Type	CAT 40 (SK40)
--------------	------	---------------

Connections

Output	hp	23 / 50*
Power supply	V	400

Machine weight

Weight	lbs.	8,140
--------	------	-------

Machine options

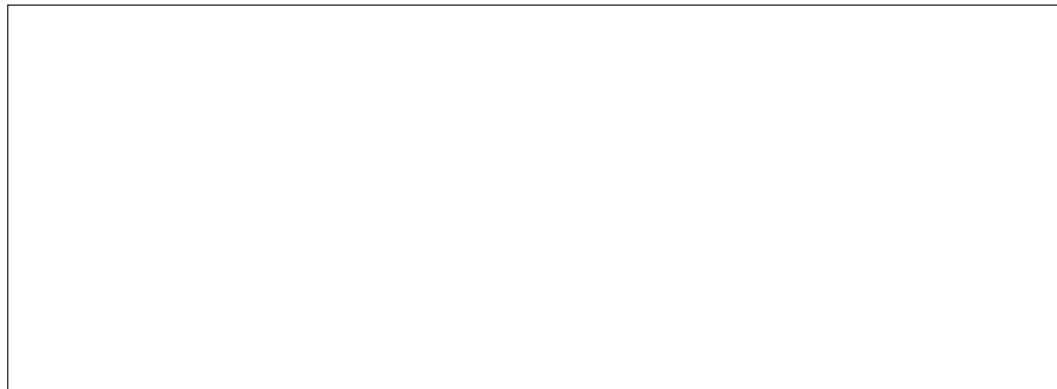
Electric hand wheel		•
Spindle 10,000 rpm		•
Tool fitting	HSK-A63	•
Parts apparatus for fixed table		•
Measuring probe		•
Tool breakage control		•
Direct measuring system for rotary axes / linear axes		•
Laser tool measuring		•
Tool magazine		•
Chip conveyor		•
Coolant / Air-cooling switching		•

Control

Heidenhain MillPlus IT
Heidenhain iTNC 530
Siemens 840D powerline
incl. ShopMill open

* optional

Always close by



info@dmgamerica.com – www.dmgamerica.com

DMG Chicago Inc.

1665 Penny Lane
Schaumburg, IL 60173 · USA
Tel.: (847) 781-0277
Fax: (847) 781-0388
Service Fax: (847) 781-0377

DMG Charlotte Inc.

13509 South Point Blvd.
Charlotte, NC 28273 · USA
Tel.: (704) 583-1193
Fax: (704) 583-1149
Service Fax: (704) 583-1466

DMG Houston Inc.

757 Kenrick, Suite 108
Houston, TX 77060 · USA
Tel.: (281) 999-3641
Fax: (281) 999-1279

DMG Los Angeles Inc.

3880 East Eagle Drive
Anaheim, CA 92807 · USA
Tel.: (714) 237-9976
Fax: (714) 237-9978

DMG Canada Inc.

165 Admiral Blvd.
Mississauga, ON
L5T 2T3 · Canada
Tel.: (905) 795-2891
Fax: (905) 795-0393

DMG México S.A. de C.V.

Boulevard Díaz Ordaz No. 124
Colonia Santa María · Monterrey
Nuevo León 64650 · México
Tel.: (+52) 81-8289-6100
Fax: (+52) 81-8378-6652

DMG Brazil

Rua do Rocio · 423 - 10º and S/1001
04552-000 São Paulo · Brasil
Tel.: (+55 11) 3017-5165
Fax: (+55 11) 3017-5167

DMG Used Machine Division

York Franke, Used Machinery Sales
1665 Penny Lane
Schaumburg, IL 60173 · USA
Tel.: (847) 781-0277 x 262
Fax: (847) 781-0388

DMG Training Academy

Sachin Bapat, Director
1665 Penny Lane
Schaumburg, IL 60173 · USA
Tel.: (847) 781-0277 x 256
Fax: (847) 781-0388

DMG America Inc.: 1665 Penny Lane, Schaumburg, IL 60173
Tel.: (847) 781-0277, Fax: (847) 781-0388
info@dmgamerica.com, www.dmgamerica.com

DMG