dmc m950

Dry deburring-finishing machine





CMS is part of SCM Group, a technological world leader in processing a wide range of materials: wood, plastic, glass, stone, metal and composites. The Group companies, operating throughout the world, are reliable partners of leading manufacturing industries in various market sectors, including the furniture, construction, automotive, aerospace, ship-building and plastic processing industries. SCM Group coordinates, supports and develops a system of industrial excellence in 3 large highly specialized production centres employing more than 4,000 workers and operating in all 5 continents. SCM Group: the most advanced skills and know-how in the fields of industrial machinery and components.

CMS SpA manufactures machinery and systems for the machining of composite materials, carbon fibre, aluminium, light alloys, plastic, glass, stone and metals. It was established in 1969 by Mr Pietro Aceti with the aim of offering customized and state-of-the-art solutions, based on the in-depth understanding of the customer's production needs. Significant technological innovations, originating from substantial investments in research and development and take-overs of premium companies, have enabled constant growth in the various sectors of reference.



CMS Metal Technology is the brand dedicated to the production of metalworking machines and technical articles offering a wide range of complete water-jet cutting systems, pressure intensifiers and dry or wet deburring and satin finishing machines. Since the 90's, thanks to the acquisition of Tecnocut and constant internal developments, **CMS Metal Technology** has been able to gain high international prestige, boasting more than 1,500 installations worldwide. **CMS Metal Technology** is the reliable partner of leading industries in various sectors such as automotive, aerospace, machining, furniture and industrial architecture.

SCM Group Industrial Machinery and Components

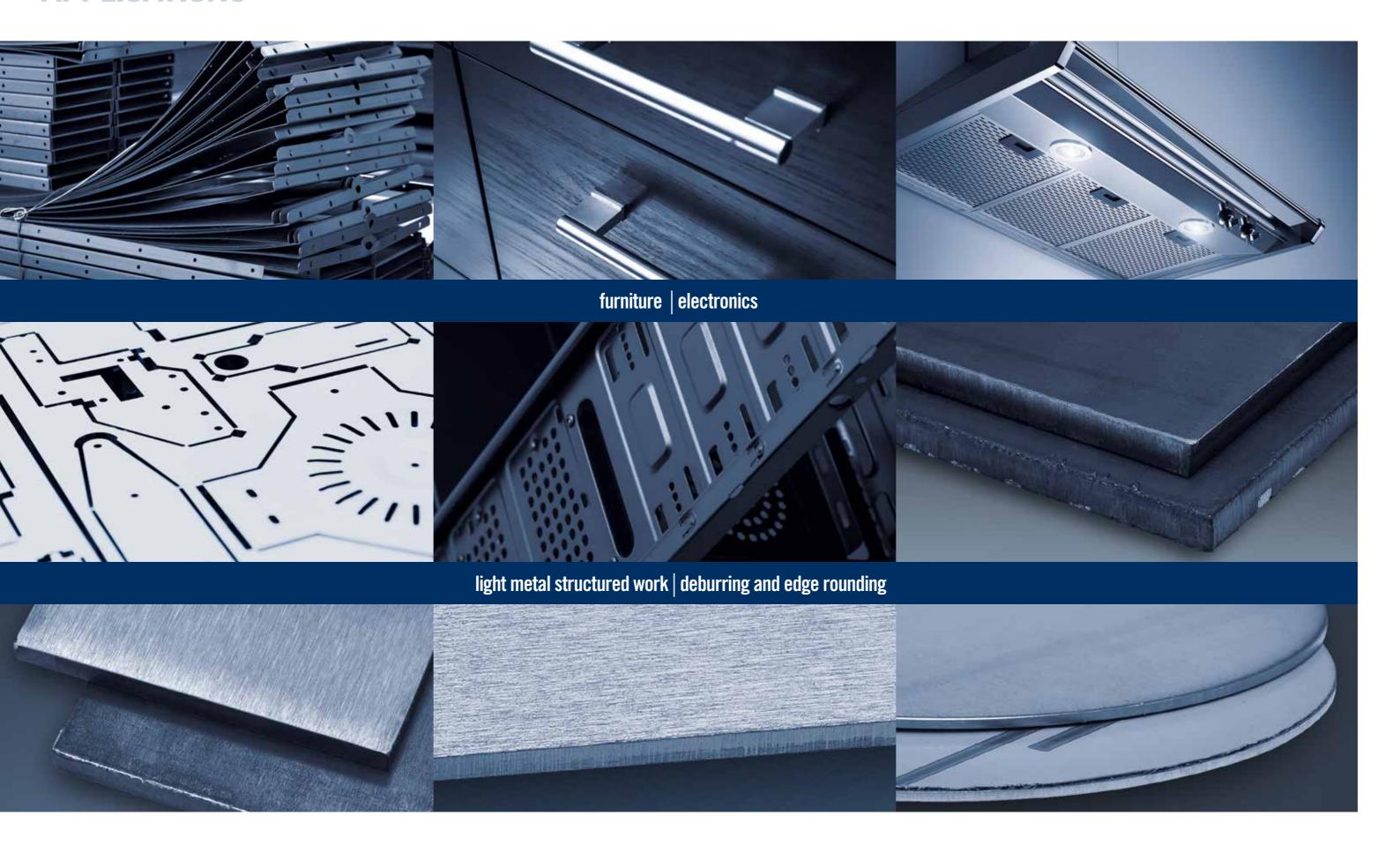




dmc m950

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APPLICATIONS



DMC M950 TECHNOLOGICAL BENEFITS

DRY DEBURRING - FINISHING MACHINE

DMC m950 is the compact deburring-finishing machine designed to meet a variety of production requirements for diversified machining. The machine allows to better satisfy all dry deburring and satinising requirements of metallic surfaces thanks to the several customising machine configurations and the technical features of the working units.



KEY BUYER BENEFITS

- + "On fly" abrasive belt centering: the oscillating system for the belt tensioner roller works with an extremely precise and reactive "background suppression", to guarantee always the proper belt centering with rotation speed up to 40 m/s.
- + **5 seconds to replace a vertical brush:** the "Quick lock" conical couplings allow you to quickly set up the machine for any type of application, while ensuring maximum locking safety.
- + Long is better: belts with 2620 mm length for longer lifetime. Longer abrasive belts improve the cooling of the abrasive grains, thus facilitating the detachment of the processing powders. A longer belt has a 43% longer lifetime, requires less replacements and therefore less downtime.
- + Simple and safe to use for every application: the complete range of devices and advanced technological solutions allow to satisfy the different production needs for small batches, such as deburring, oxide removal from edges and surface finishing.



LONG BELTS: 2620 MM LENGTH FOR GREATER FINISHING AND PRODUCTIVITY

Longer belts improves cooling of the abrasive grits reducing the adhesion of dust. An extended belt length lasts longer, requires fewer replacements and consequently less machine downtime.



QUICK LOCKING SYSTEM QUICK ABRASIVE DISCS REPLACEMENT SYSTEM

The quick disconnecting spindle system allows the operator to rapidly set the machine up for any kind of application, providing at the same time the maximum safety of the locking system.



PHOTOELECTRIC SENSORS WITH "BACKGROUND SUPPRESSION" SYSTEM TO ALWAYS ENSURE THE CORRECT CENTERING OF THE ABRASIVE BELT

The system is managed by a very reliable and precise background suppression photoelectic sensor.

DMC M950 STANDARD ACCESSORIES

R – CONTACT ROLLER UNIT

The machine is available with "R" contact roller with large diameter (220 mm) in all working positions, to ensure a perfect deburring or finishing task:

Oil and heat resistant rubber coated roller (with hardness ratings from 20 to

- Wide possibility of vertical adjustment of the roller to equip the unit with very thick abrasive cloth belts.
- Pneumatic ON/OFF to control work positioning
- Oscillating cleaning blowers for the abrasive belt (option)



MOTOR INVERTER

Motors are controlled by inverters for both contact roller units and oscillating discs to adjust the working speed to suit the application and specifications of the material being processed. The working parameters can be saved on in the machine display and can be easily recalled for a rapid set-up of the machine.



DT - OSCILLATING UNIT WITH VERTICAL DISC BRUSHES

The versatility of the "DT" unit allows a wide range of applications depending on the type of abrasive tool used (steel wires, nylon wires, abrasive cloth strips supported by abrasive pad inserts, abrasive cloths and others) according to the technical features of the materials to be processed and the desired machining results. The oscillating movement, combined with the main motor high power controlled by inverter, allows to reach all the surfaces to be processed, even the most difficult points as in case of complex cuts, slots and holes in order to ensure a high finish on the workpiece.

According to the tool used, you have the possibility to obtain:

- Smoothing and rounding of sharp edges
- Removal of burrs from holes
- Removal of oxide from thermal cut edges



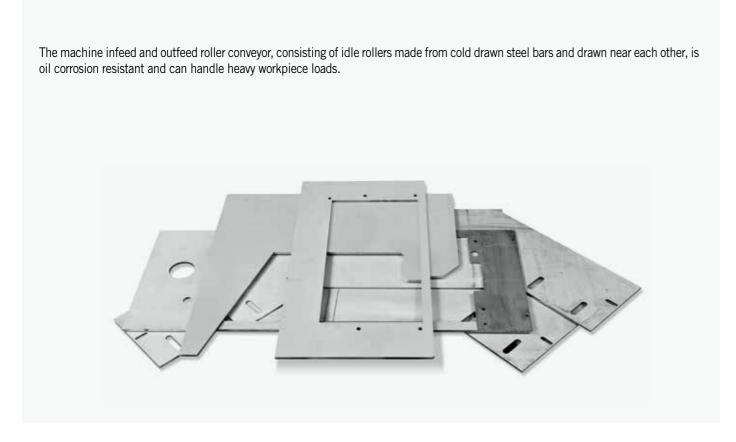
DMC M950 STANDARD ACCESSORIES





The complete range of working units along with advanced technological solutions make the DMC m950 RDR machine extremely safe and simple to use. In a single pass through the machine, you have the possibility to:

- remove burrs from cutting
 efficiently remove sharp edges while creating a radius
 smooth and radius the edges of holes, even of a small diameter
 efficiently remove oxide generated from thermal cutting, whether on the external perimeter of a piece or from
- achieve different finishing effects





DMC M950 OPTIONS



Rotating blower unit on a timer for an excellent surface cleaning of the machined pieces leaving the machine. Unit activation is done directly from the control and touch panel and can be saved together with the other machining parameters.

PIECE CLEANING BLOWER



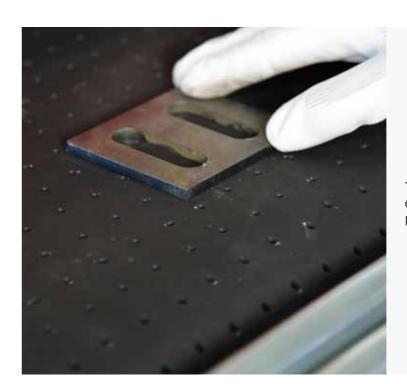
OUTFEED BRUSH UNIT

External unit with abrasive cloth brush roller, oscillating transversally with respect to the direction of travel of the conveyor.

The oscillating movement of the roller gives a more even and consistent finish:

• synchronised rotation between the roller and direction of the conveyor belt

- manual adjustment of the roller's working position



The natural rubber mat with flat profile and high adhesion effect, together with the vacuum of the worktable, allows the processing of small and thin workpieces.

DMC M950 SOFTWARE

All the machine management software is proprietary, developed specifically by CMS engineers and perfected with feedback provided by its customers. The result is an extremely simple and reliable user interface, able to perfectly fulfill the requirements of the most demanding operators.

HYDRA CONTROL MAIN FEATURES:

- Management of working thickness
- Speed management of conveyor belt, abrasive belts and brushes rotation
- Working height adjustment of the disc units
- Cascade automatic starting of main motors
- Timed activation of cleaning blowers for abrasive belts and unloaded workpieces
- Operational report (working hours / running hours)
- Machine trouble-shooting and fault diagnosis of the electronic boards
- Histograms graphics for tracking abrasive belt wear (opt)

O1 DEBURRING 0.0 m/mix 2

HYDRA V-PAD CONTROL PANEL, STANDARD DEVICE ON THE MACHINE.

The Hydra V-Pad control is used to set all the operating parameters on the touch screen.

Features:

- touch screen standard 10.4"
- 120 configurable working programs by the operator
- real time monitoring of correct machine operation

CONSOLLE WITH INTEGRATED PC "EYE-M" AND HYDRA-PC MONITORING (OPTION)

Device connected to the machine with adjustable gluing arm and fitted with fanless Industrial PC (PC Panel) and IP53 protection rating to withstand the more onerous environments. The 21.5" touch colour display ensures advanced control of the machine parameters and a simplified interfacing outwards thanks to a LAN network connection.

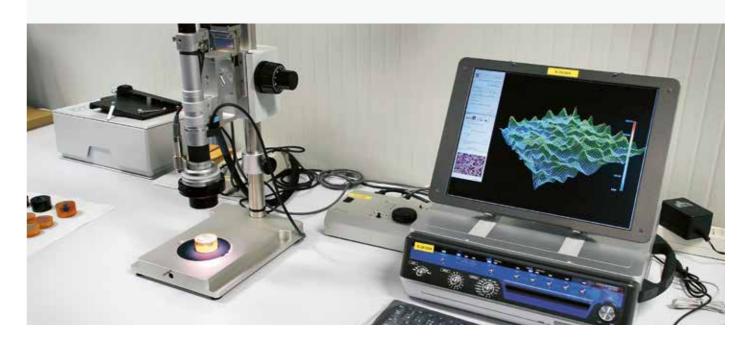
KEY SPECIFICATIONS:

- storage of up to 1999 work programs
- production report
- machine alarms management and fault diagnosis with integrated manual for easy identification
- integrated digital instructions and maintenance manual
- LAN network connection.

In conjunction with the remote customer service, the device offers an industrial and advanced solution in line with industry 4.0 technological requirements.



Excellent structure designed to carry out research on abrasive materials and materials processed by flexible abrasive machines, but also for finishings on innovative materials like Corian®, inert materials, quartz, polyurethanes, mineral wools, and fibre-cement etc. The operating unit is run by highly qualified personnel and is equipped with sophisticated instruments for capable of analysing the materials to be processed and the various types of abrasive. Thanks to the numerous demonstration machines, it can carry out any process testing to rapidly provide customers with detailed information on the best way to tackle any problem concerning a process in which a flexible abrasive machine is used, and achieve the new finishes requested by the market.



DMC M950 TECHNICAL DATA



DMC M950: TECHNICAL DATA	
NUMBER OF OPERATING UNITS	2 - 3
WORKING WIDTH	950 mm
MIN / MAX STANDARD WORKING THICKNESS (MOBILE WORKTABLE)	0,5 ÷ 170 mm
MIN / MAX STANDARD WORKING THICKNESS (FIXED WORKTABLE)	0,5 ÷ 200 mm
SANDING BELT DIMENSIONS	950 x 2620 mm
FIXED HEIGHT FROM THE GROUND	900 mm
CONVEYOR BELT SPEED	0,5 ÷ 10 m/min

The technical data can vary according to the requested machine composition. In this catalogue, machines are shown with options. The company reserves the right to modify technical specifications without prior notice; the modifications do not influence the safety foreseen by the CE Norms.



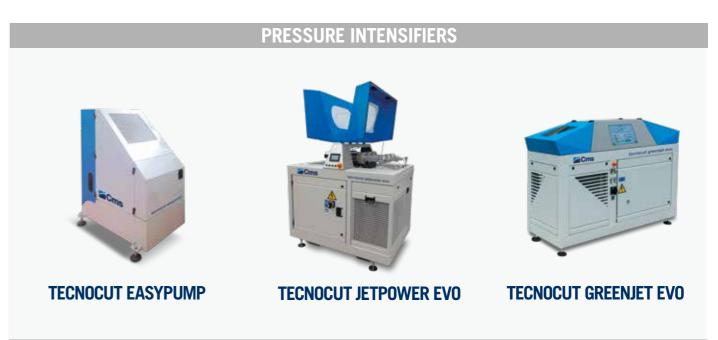
Maximum noise levels measured according to the operating conditions established by EN 1870-13:2012 Acoustic pressure in process 89 dbA (measured according to EN ISO 11202:2010, uncertainty $K=4\ dB$) Acoustic power in process 103 dbA (measured according to EN ISO 3746:2010, uncertainty $K=4\ dB$)

Even if there is a correlation between above mentioned "conventional" noise emission values and average levels of personal exposure over eight hours of operators, these last also depend on the real operating conditions, duration of exposure, acoustic conditions of the working environment and presence of further noise sources, this means the number of machines and other adjacent processes.

THE RANGE OF CMS METAL TECHNOLOGY

FOR METAL AND TECHNICAL ARTICLES PROCESSING









WET DEBURRING-FINISHING MACHINES



