

dmc eurosystem md

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.



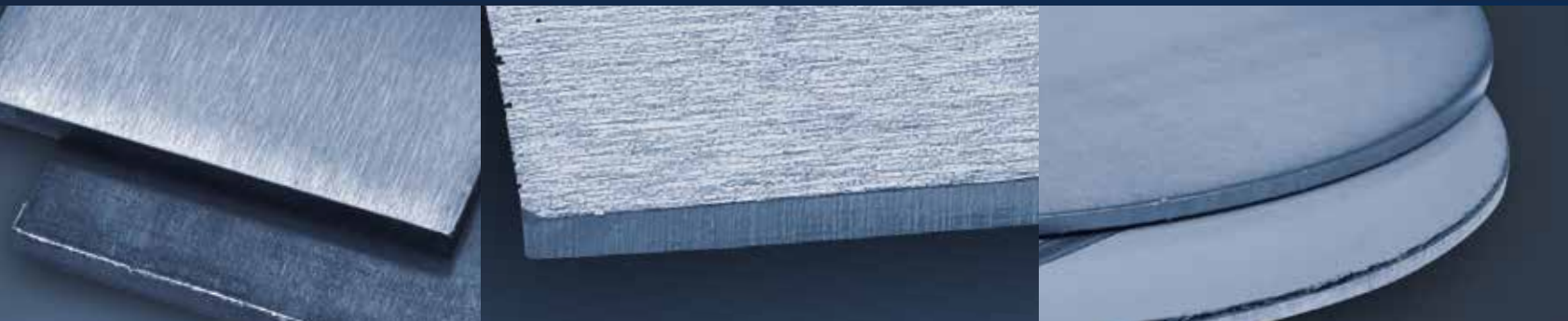
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APPLICATIONS



automotive | food industry | industrial ventilation



metal structures | metals processing

Genial.

Reliable.

Efficient.

Adaptable.

Technological solutions.

GREAT machines for metal processing.

Dry deburring-finishing machine

DMC EUROSISTEM MD

TECHNOLOGICAL BENEFITS

DRY DEBURRING-FINISHING MACHINE

DMC Eurosystem md dry deburring finishing machines combine both top quality machining and system flexibility to meet a wide variety of production requirements. Based on a rich package of standard features and countless devices, this machine is the ideal solution for mid-sized modern and dynamic manufacturing companies.

- **SAFETY**
High adhesion effect conveyor belt combined with vacuum of work table allows the processing of small and thin workpieces.
- **USER-FRIENDLINESS**
Management and storing of working programs through color touch screen “Hydra V-Pad” control panel.
- **MODULAR STRUCTURE**
Flexible working unit placement offers solutions for any production requirement.
- **RELIABILITY**
High efficiency power transmission through the use of Poly-V drive belts (on working unit drive motors).
- **PRODUCTIVITY**
Abrasive belts length 2.620 mm for long life and working width 1.350 mm for wide or multiple machinable pieces.
- **VERSATILITY**
Quick tool change systems and extractable discs unit for fast replacement of abrasive discs.

KEY BUYER BENEFITS

- + **Up to 4 operating groups for today's and tomorrow's needs.** Frame structure from 2 to 4 operating groups configurable to solve a wide range of dry applications. The versatility of the empty module allows the future installation of a new group, expanding the production capacity of the machine.
- + **Wide radius: up to 2 mm edge rounding.** Double row of 17 counter-rotating vertical brushes able to offer unparalleled results of edge breaking and oxide removal (from thermal cutting). The group is fully extractable for a complete tool change in less than 2 minutes.
- + **Long-Life mechanic drive belt:** multi-groove poli-V belt with self-tensioning system for an extremely powerful, efficient and silent transmission, independent of the abrasive belt used, even in the most demanding working conditions.
- + **Soft touch: external groups to improve the quality of worked pieces.** The abrasive cloth roller with a 200 mm diameter and lateral oscillation allows to soften the surface roughness for a more uniform finish over the entire surface. The group of timed rotary blowers allow optimal cleaning of the machined pieces.



STANDARD ACCESSORIES



ROLLER UNIT

A wide range of contact rollers are available to meet any specific deburring or finishing application:

- diameters of 250 and 320 mm
- helical grooving (for cooling)
- oil and heat resistant rubber coatings
- high motor powers up to 22 kW

LONG BELTS 2620 MM

for greater productivity and finishing quality

WIDE RANGE ADJUSTMENT OF THE ROLLER WORKING POSITION

Allows the ability to equip the unit with very thick abrasive cloth belts and non-woven abrasive drums

POLY-V BELT

Efficient and silent power transmission

AUTOMATIC DRIVE BELT TENSIONING

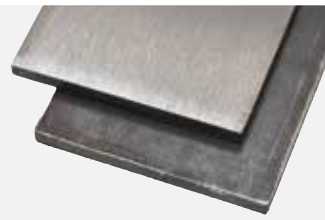
Maximum available power delivery

DIGITAL READ-OUT

For quick and accurate positioning



PRIMARY BURR REMOVAL



OXIDE REMOVAL



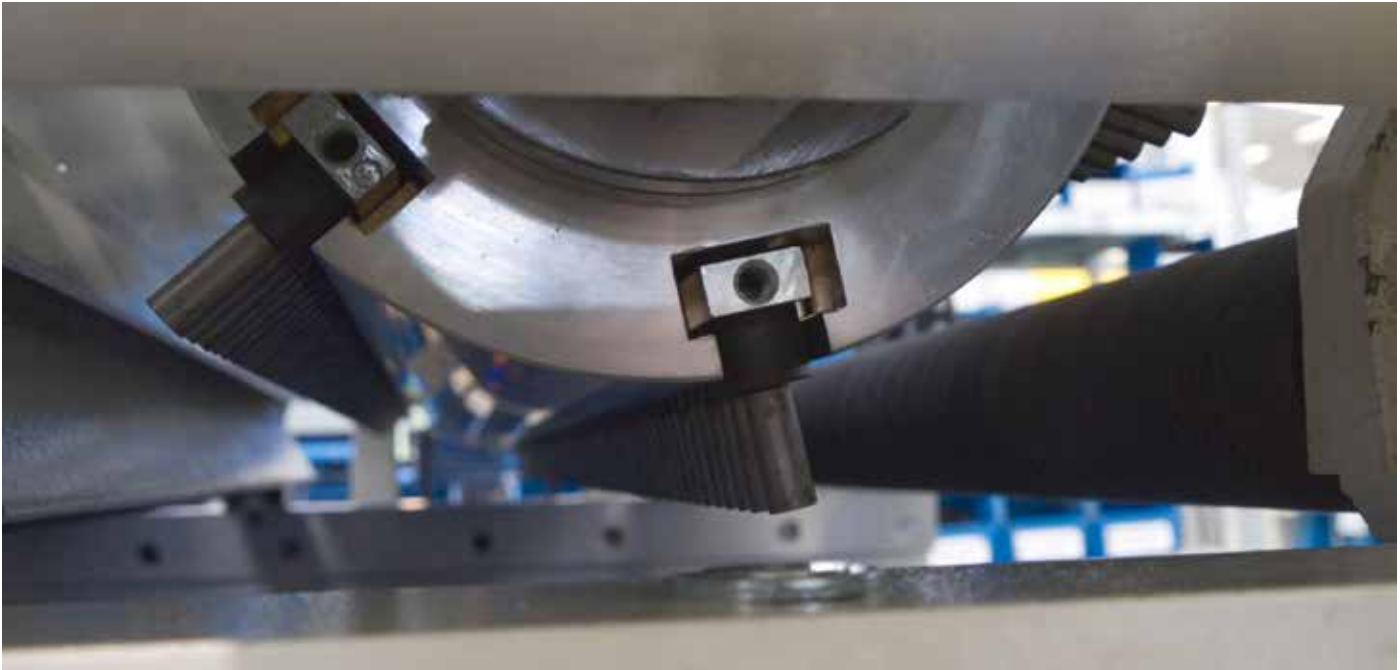
DEBURRING ON VINYL-COATED MATERIAL



SATINIZING-FINISHING PROCESSING

THE HAMMERBOLT GROUP

The working unit consists of flexible and replaceable bolts that remove slag with a continuous oscillation, ensuring a high-quality removal process. In this way, the configuration flexibility of the DMC machines is increased, to cover a wide range of processing and finishing in a more compact structure.



ADVANTAGES

- +400% average increase in productivity compared to manual slag removal
- -30% reduction in electricity consumption compared to the configurations with contact rollers with grinding belts;
- Constant processing uniformity regardless of the characteristics of the manufactured item and the size of the slag
- Rapid machine set up thanks to the easy extraction of the hammered pin carrier strips;
- Greater sturdiness and durability over time compared to cup brushes with the same hammer bolts



TECHNICAL SPECIFICATIONS

- Roller available with diameters of 220 and 250 mm
- 120 oscillations/minute at a steady speed
- Tool extraction for fast replacement
- Input and output pressure rollers for greater hold on the pieces while machining
- Pneumatic On-Off for automatic enabling or exclusion

STANDARD ACCESSORIES

POSITIONING ACCURACY AND STORING IN WORKING PROGRAM
Always updated programs.

INVERTER DRIVEN MOTORS FROM 15 KW
Power, speed and production flexibility for any operation

LATERAL OSCILLATION OF WORKING UNIT ADJUSTED BY INVERTER (OPT)
Allows the operator to choose the best speed combination depending on the specific type of operation or finish required.

LATERAL EXTRACTION OF WORKING UNIT
Easy and fast tool change and maintenance operations

DOUBLE ROW OF COUNTER - ROTATING DISCS
High machining efficiency



DISCS UNIT DT17

The double row discs unit can be equipped with different types of cup brushes with a 130 mm diameter, for each specific process such as edge rounding and edge oxide removal. Thanks to the intermediate pressure roller between the two rows of discs (patent pending), it is guaranteed to pull parts with dimensions starting from 270 mm, ensuring maximum process uniformity and repeatability.



EDGE ROUNDING



OXIDE REMOVAL



DISCS UNIT DT15

The single row discs unit can be equipped with different types of cup brushes with an 85 mm diameter, for each specific process such as edge rounding and edge oxide removal, after thermal cutting (laser and plasma). Thanks to the small size of the working tools, the presence of pressure rollers before and after the working group, ensure pulling parts with dimensions starting from 160 mm and maximum process uniformity and repeatability.

STANDARD ACCESSORIES

NOT WOVEN ABRASIVE DRUM UNIT SB/200

The non-woven abrasive drum unit, equipped with a 200 mm diameter drum, reduces surface ridges and roughness, creating a better finish on surfaces.



SATINIZING EFFECT



GSI/200 INTERCHANGEABLE BRUSH UNIT

External unit suitable for a 200 mm abrasive cloth brush to improve the surface quality after the finishing process or a brush to remove the metal dust from the surface of the workpieces after grinding. The brush can easily be extracted laterally from the housing and the quick coupling system reduces the machine setup time.

Some of the device specifications include:

- Lateral extraction and preparation with quick coupling
- Lateral oscillation of the brush controlled by inverter
- Fine tuning of the working position
- Input and output pressure roller
- 5.5 kW motor for even the most difficult applications
- Dust extractor hood

Some of the options include the possibility of installing a 7 kW inverter controlled motor and pneumatic On/Off system for rapid positioning of the unit working.



STANDARD ACCESSORIES



QUICK TOOL CHANGE FOR DISC UNITS

The quick disconnecting spindle system allows for fast setup of the machine for any machining requirement, ensuring at the same time the maximum safety of the locking system.



AUTOMATIC CONVEYOR BELT CENTERING SYSTEM

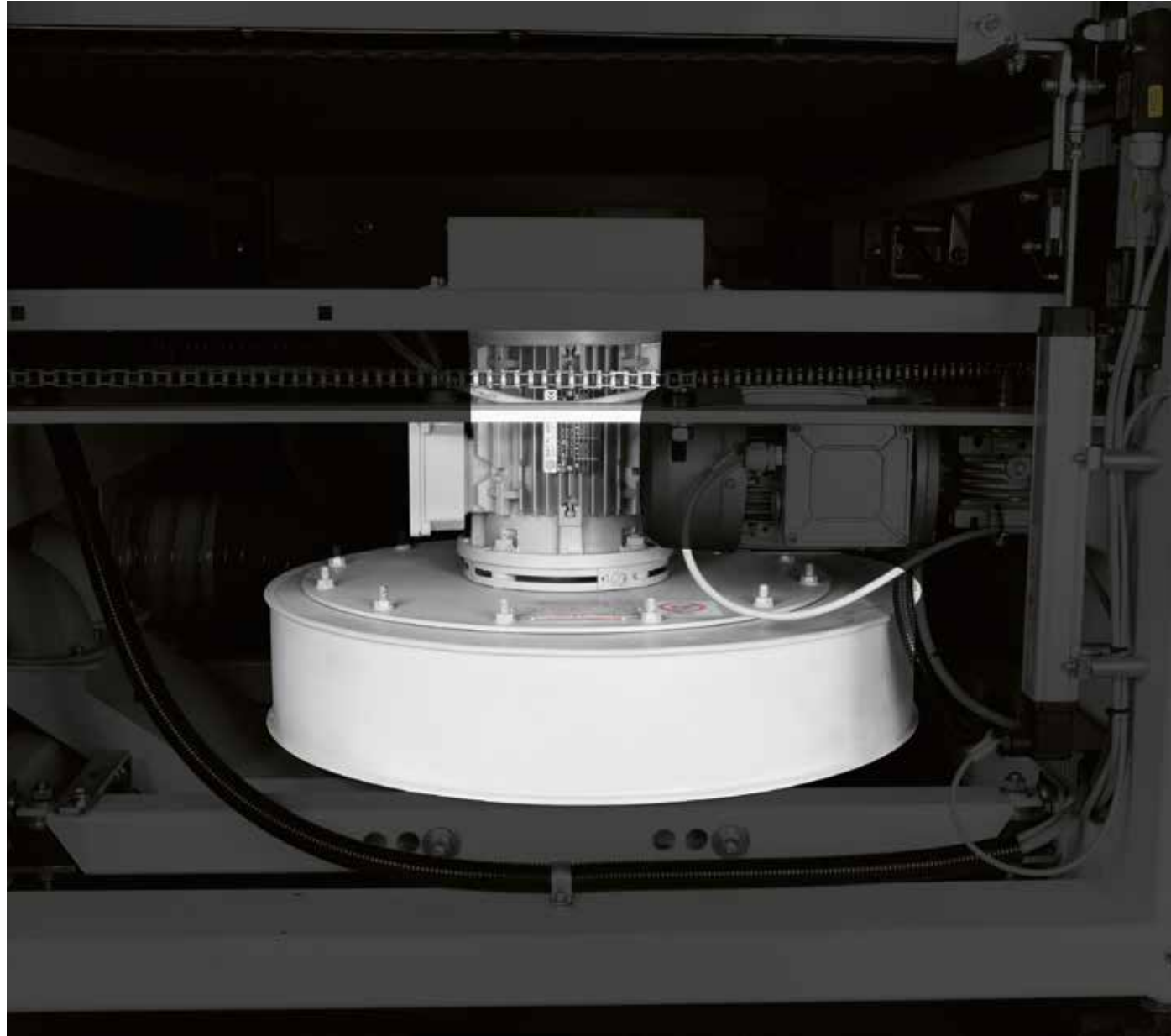
An electro-pneumatic system keeps the feed belt in the proper position and in the best condition at all times without any operator intervention.



ABRASIVE BELT TRACKING SYSTEM

The system is managed by a very reliable and precise “background suppression” photoelectric sensor ensuring the correct positioning of the abrasive belt.

OPTIONS



INTEGRATED ELECTRIC FAN

The electric fan pump positioned under the worktable allows for a reduced machine footprint and, most importantly, reduces noise emissions.



FLAT PERFORATED FEEDING MAT

The natural rubber mat with a flat profile and high adhesion effect, together with the vacuum table, allows the processing of small and thin workpieces. The machine infeed and outfeed roller conveyor, consisting of idle rollers made from cold drawn steel bars and drawn near each other, is oil corrosion resistant and can handle heavy workpiece loads.

DMC EUROSISTEM MD

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 troubleshooting and fault diagnosis of the electronic boards
- Histogram graphics for tracking abrasive belt wear (opt)

CONSOLE WITH INTEGRATED PC "EYE-M": ADVANCED REPORT AND 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 color 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.



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

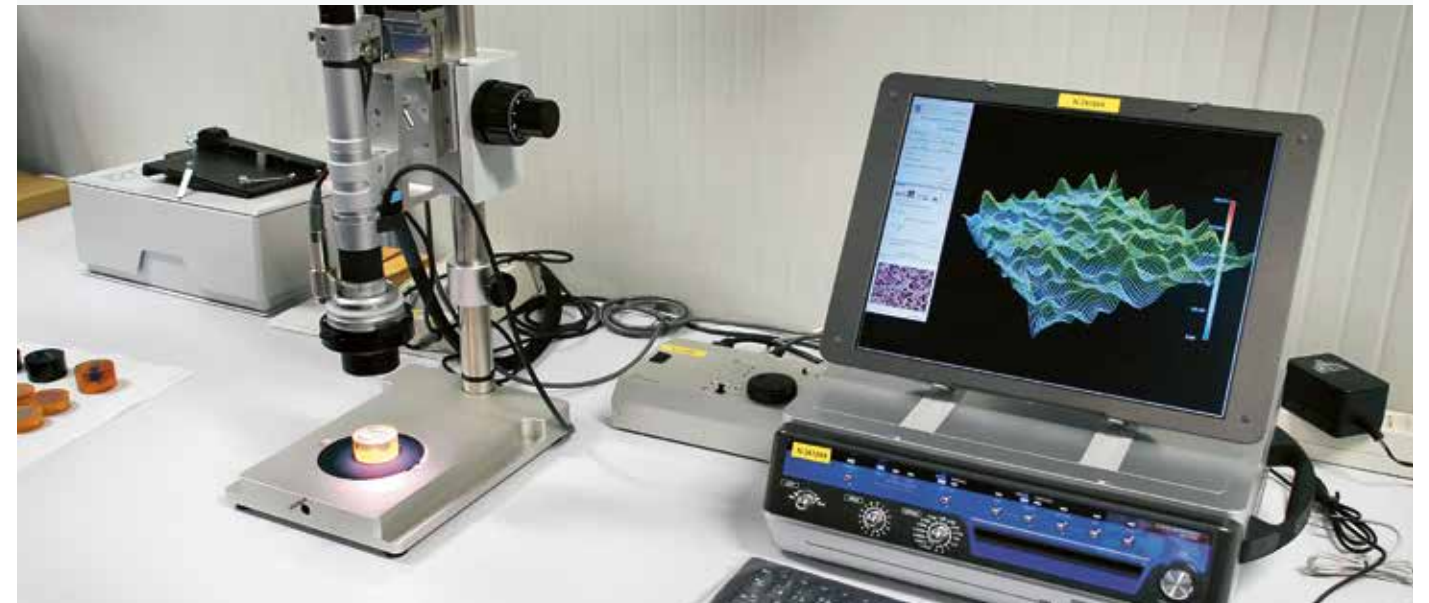
The Hydra V-Pad control is used to set all the operating parameters on the touch screen.

Features:

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

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 EUROSISTEM MD

TECHNICAL DATA



DMC EUROSISTEM MD: TECHNICAL DATA	
NUMBER OF OPERATING UNITS	2 - 3 - 4
WORKING WIDTH	1350 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	1370 x 2620 mm
FIXED HEIGHT FROM THE GROUND (OPT.)	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 though there is a correlation between the above-mentioned “conventional” noise emission values and average levels of personal exposure over eight hours for operators, the latter also depend on the actual operating conditions, duration of exposure, acoustic conditions of the working environment, and the presence of further noise sources, which means the number of machines and other adjacent processes.

THE RANGE OF CMS METAL TECHNOLOGY

FOR METAL AND TECHNICAL ARTICLES PROCESSING

WATERJET CUTTING MACHINES



TECNOCUT SMARTLINE



TECNOCUT PROLINE



TECNOCUT AQUATEC



TECNOCUT WATERSPEEDY S

PRESSURE INTENSIFIERS



TECNOCUT EASYPUMP



TECNOCUT JETPOWER EVO



TECNOCUT GREENJET EVO

DRY DEBURRING-FINISHING MACHINES



DMC M950



DMC EUROSYSTEM



DMC METALSYSTEM

WET DEBURRING-FINISHING MACHINES



DMC M950 WET



DMC TOP METAL



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