



MARKING SYSTEMS



GENERAL BROCHURE

Impact



Types



Pin Stamp



Rolling Marking



Laser

MACHINE BUILDER FROM 1948

AUTOMATOR INTERNATIONAL Marking Systems:

IMPACT MARKING

Impact and roller marking machines available as manual, pneumatic, electro-pneumatic models for permanent marking

HOT MARKING

Hot marking for products such as leather, plastic, paper, wood, cloth, with or without colour

MULTI PIN MARKING

Highly sophisticated and very fast computerised systems

SINGLE PIN MARKING

Versatile and technologically advanced systems for marking text or logos in an arc, angle, or straight line, via a PC

READING AND TRACKING

Reading via a camera and processing of the matrix OCR computerised marking

TAG MARKING

Wide range of manual and computerised systems

LASER MARKING

Laser systems using Nd Yag lamp, Diode or CO₂ source to mark any material and shape

ELECTRO-CHEMICAL MARKING

Etching process for permanent identification of metal surfaces through an engraved stencil

HYDRAULIC MARKING

Hydraulic systems to mark steel chassis, bars, railings, beams

COMPUTERISED DAISY WHEEL MARKING

Computerised wheel to mark without deformation and noise

SCRIBE MARKING

Computerised drag marking machines to mark by "scratching" the surface, without causing any deformation or noise

SPECIAL APPLICATIONS

Project and realisation of special systems for marking, identifying, tracking

READING AND DECODIFICATION



datamatrix code

The Automator brochures collection





Automator International srl presents its wide range of special and standard machines for marking, identifying, numbering, ... all of which leave a permanent product identification.

The use of the highest quality materials, technologically advanced solutions, pre- and after- sales service are just some of Automator International strengths; which make it possible for us to meet both our customers' needs and the demands of modern production requirements.

The future for Automator International srl is a marriage of innovation to our 55 years of experience in the marking field.

From types and hand punches to pneumatically and mechanically operated machines; from numbering heads to computerised

systems and sophisticated technological solutions, Automator International srl has reached an enviable position of leadership all over the world, including such countries as Japan and USA. Our highly professional staff and the attention to the detail of each of our client's needs are the touchstones of our commercial policy, that have been adopted from the very start and define our motto "there are no limits in time and space".



MANUALLY OPERATED IMPACT PRESSES

The bench mounted impact presses are available in three different sizes, depending on the impact force required, ranging from 5 kN to 30kN, and even up to 65kN. Easy to operate with high productivity yet low initial cost, they are spring actuated bench units designed for a wide range of marking applications.

All our models present the following advantages:

- No deformation of the surface to be marked
- Maximum precision and sensitivity
- Consistent marking depth, even on irregular shaped workpieces
- Impact force, adjustable from 0 kN to the maximum of each model
- Easy loading and unloading of the components
- High rate of production
- Wide range of marking accessories, such as types and type-holders, special dies, numbering mechanisms etc

These machines can also be used for bending, forming, riveting and certain other non-marking operations.

Available models:

MB 15 - MB 20 - MB 32

Mod. MB 32



PNEUMATICALLY OPERATED IMPACT PRESSES

The pneumatic impact presses are available in three different sizes, depending on the impact force required; ranging from 5 kN to 35kN, and even up to 75kN. Easy to operate with high productivity yet low initial cost, they are pneumatically control spring actuated bench units designed for a wide range of marking applications.

Thanks to the double-acting air cylinder that actuates the ram and increases the rate of operation, the pneumatic impact presses can easily be integrated into production or assembly lines.

As stand alone units, the machines are usually operated using twin safety buttons, to meet CE regulations. These machines can also be used for bending, forming, riveting and certain other non-marking operations.

Also available are the impact mechanisms by themselves, Mec15/19, Mec20/21 Mec32/35

Available pneumatic models:

MB 19, MB 21, MB 35



Mod. MB 35

PNEUMATICALLY OPERATED IMPACT UNITS

These compact pneumatic units are of modular design to provide maximum power in the smallest space. Ideally suited for incorporation into production or assembly lines. The double-acting air cylinder that actuates the impact ram and increases the rate of operation, makes these units especially suitable for integration into special purpose equipment. A wide range of marking accessories, such as types and type-holders, special dies and numbering mechanisms are available for use with these units.

Available models:

MB 19VPN - MB 21VP - MB 35VP



Mod. MB 35VP

PNEUMATIC AND MANUAL RACK & PINION PRESSES

These mechanical presses, with a range of different diameters from 25mm and 36mm up to 60mm, are available either for manual or pneumatic operation. As stand-alone presses, the pneumatic models are supplied with twin security buttons, to meet CE regulations. Offering extreme precision and sensitivity, these machines are suitable for pressing, bending, straightening,...

Manual models:

MB 15S - MB 20S - MB 32S

Pneumatic models:

MB 19P - MB 21P - MB 35P



**Mod.
MB 20S**

PNEUMATIC PRESS MB125

Stand-alone pneumatic press, with pressure adjustable up to 850 kg and fitted with a 125mm diameter piston, precision guided.

Offering extreme precision and sensitivity, this press can be used for pressing, bending, straightening,...



**Mod.
MB 125**



**Mod.
MB 21P**

Mod. MB 21UP

HOT MARKING MACHINES

Available either for manual or pneumatic operation, the hot marking machines are equipped with an adjustable thermostat to regulate the temperature to meet the requirements of the material to be marked.

Suitable for marking leather, paper, plastic, wood, fabric, these machines are offered for use either with or without ribbon feed systems.



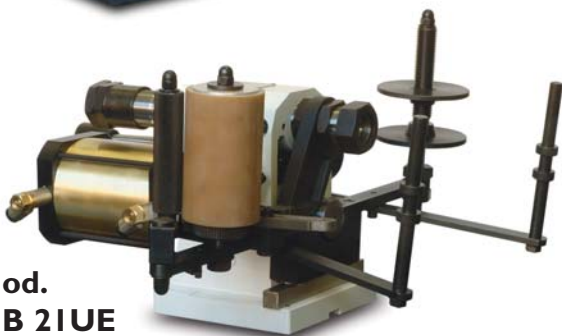
MB 20E, MB 21E
MB 21UE

Mod. MB 20E



Mod. MB 21E

Mod. MB 21UE



ROLLER MARKING MACHINES

Model MB 71UE

The electrically operated roller marking unit model MB 71UE is specially designed for integration in production processes or assembly lines for marking components with flat, concave, round, cylindrical surfaces. A motor moves the slide, which can be fitted with different marking accessories, such as type-holders and types, special dies, numbering heads.



Model MB 41N

Manually operated roller marking machine for use on diameters from 8 to 65mm. The machine can be fitted with:

- S1R mini mandrel support for hollow hollow components
- S2R mini support for round and cylindrical components



Model MB 71N

Manually operated roller marking machine for marking, knurling, graduating of cylindrical, conical and flat parts. The spring washers fitted under the table even out the differences in diameter to achieve a consistent depth of mark.

Model MB 71CE

Electrically operated roller marking machine for continuous marking along the length of tubes, bars, hexagonals etc. A specially engraved marking roller of 60mm diameter or conical typeholders are the most suitable marking dies with which the machine can be equipped. Production speed rate: 6Mt/Min. It is also possible to mark on opposite sides of the bars at the same time.



Models MB 76N, MB 76E, MB 76EP

Manual, electric and electro-pneumatic operated roller marking machines, capable of producing clean, well defined marks with adjustable depth of indentation. They combine the traditional benefits of roller marking with improved performance and innovative design features. With a simple yet robust construction, these machines have a stress-relieved frame to provide maximum rigidity. The head, made from spheroidal graphite iron, is fitted with an easily accessible stroke adjustment, up to 180-190mm. Mandrel support is supplied with the machine and can be fitted in either of two fixed positions. Consistent marking depth, even on irregular shaped components is achieved thanks to the spring washers.

Three different models are available:

- **N:** manually operated with a lever to move the slide
- **E:** see characteristics of MB 71E
- **EP:** see characteristics of MB 71EP



Model MB 41E

- Electric version of MB 41N.
- Motor for connection either to 380V 3-phase 50 Hz or 110 single phase 60 Hz.
- TG table with the electric cabinet inside
- Marking of round components with diameters between 8 and 65 mm.

Model MB 76E90° and MB 76EP90°

Roller marking machines with a twin push button safety system, suitable for marking parts with a maximum external diameter of 600 – 650 mm.

Base plate supplied with various holes to take the two adjustable bearings, to suit the dimensions of the diameters of the parts to be marked.

Consistent marking depth, even on irregular shaped components, is achieved thanks to the spring washers.

Two models are available:

E - electric model:

with a 380V 3-phase motor to actuate the marking slide (see MB 71E)

EP - electro-pneumatic:

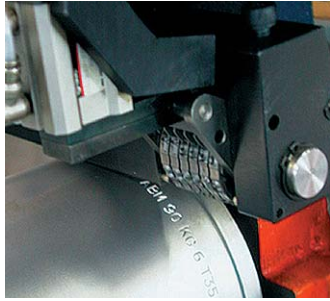
with a 380V 3-phase motor to actuate the marking slide and a pneumatic piston to move the component up to 22mm (see MB 71EP)



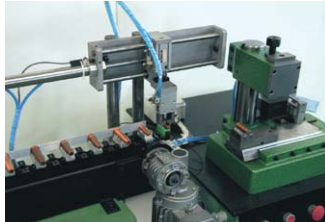
Model MB 71E

Electrically operated floor mounted machine for marking, knurling, graduating of cylindrical, conical and flat components. Consistent marking depth, even on irregular shaped components is achieved thanks to the spring washers. Roller marking machine with a twin push button safety system to actuate the marking slide. Wide range of fixturing available to suit most components.





Detail of a part that has been roller marked.



Special application using MB 41E.

Model MB 71EP

Electro-pneumatically operated roller marking machine, floor mounted, for marking, knurling, graduating of cylindrical, conical and flat components.

380V 3-phase motor moves the slide while a piston raises and lowers the table. Consistent marking depth, even on irregular shaped components, is achieved thanks to the spring washers.

The roller marking machine is fitted with a twin push button safety system to actuate the marking slide.

A PLC is provided with four marking programmes. Wide range of fixturing is available to suit most components.



MARK PISTOL SINGLE SHOT

The mark pistol is suitable for marking large, bulky items which, because of their size, cannot be moved to a marking machine. Single shot pistol with cartridges of different strengths, from light to very heavy. The type-holder for the mark pistol, is manufactured from steel, and available with one or two lines, and has been designed to withstand the force

of the marking shot.. An internal floating support allows the types to follow irregular surfaces of the parts to be marked.

Available character height in mm.

6 8 10 12

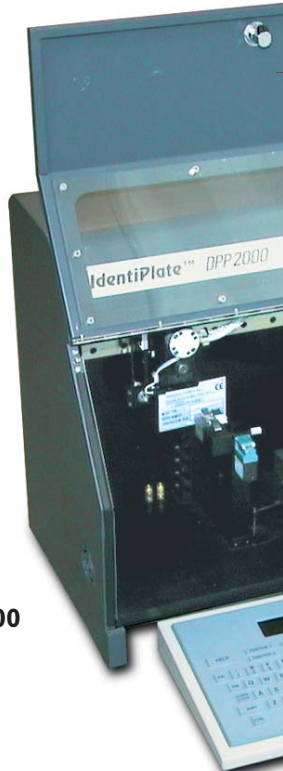


TAG MARKING MACHINES

A wide range of models to mark tags of different dimensions are offered enabling the technologically and economically best solution to be found.

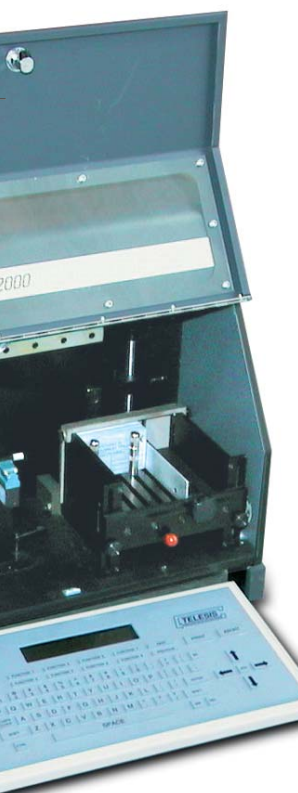
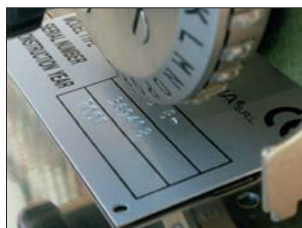
From the manual hand-operated model to the most sophisticated systems, with an internal micro-processor and serial port RS 232, the tag marking machines can cover any need. Speeds of up to 3 characters/second can be reached, depending on the model chosen.

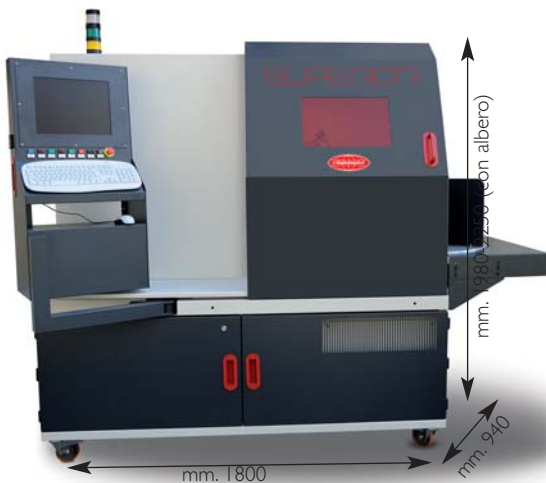
Mod. DPP 2000





Mod. MB 8





Superior



LASER MARKING SYSTEM

Automator International srl presents its wide range of laser markers, which are divided in three main groups: Fibra (YVO₄, Uv. Green light), Yag and CO₂. Thanks to their standard characteristics, the systems are extremely versatile and can cover various and different marking requirements. A quality laser source with high beam reflectivity coated mirrors, a sophisticated guidance unit with an extremely refined lens, a user friendly software package allowing the creation of patterns and logos, and newly designed covers are the main characteristics of Automator International laser markers. There are six different models: Superior - with a 800x800mm base plate; Rex; Integra - for easy integration into production processes or assembly lines; Regina, Opera, Lux and a Plotter.



Rex



Opera

62 YEARS OF EXPERIENCE

Automator International srl prides itself on 62 years of experience in the marking field, with unique wealth of ideas, solutions and knowledge. The main markets in which we have been operating are: automotive, aerospace, mechanics, plastic, industry ...

WIDE RANGE OF MODELS

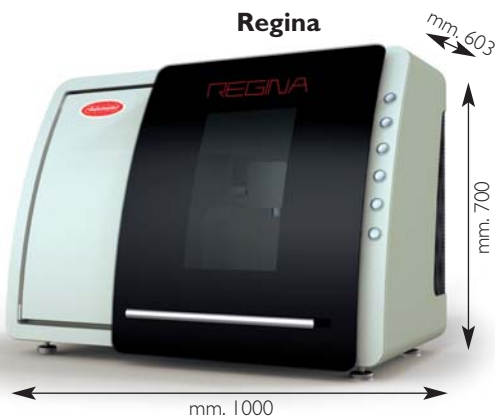
Automator International srl produces a wide range of marking machines and systems, with complementary accessories. Alongside the traditional mechanical and pneumatic machines and the electronic pin systems, we have developed Nd Yag lamp, diode pumped and CO₂ laser markers, with different covers to meet the specific needs of our customers. All Automator International lasers can be equipped with automatic or manual Z axis, X-Y tables, Theta Axis and Rotary tables at 2-4-6-8 positions.



Yag: Standard, Compact



Fibra: YVO₄, Verde, UV



THE MORE SUPERCOMPACT LASER

LUX models are supercompact lasers, authentic innovations, which Automator has developed for the integration in production lines and factory-automated applications. Marking start and stop, emergency, control of the shutter are all signals for remote control.



Electric and electronic panel, chilling circuit and laser mother board are miniaturized and integrated into a single block.

Lux

LASER PLOTTER CO₂ FOR MARKING WIDE SURFACES

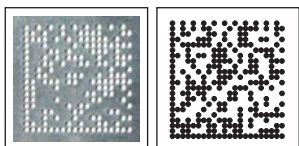
Finally, marking and cutting wide surfaces are not any more a problem! New Automator Co₂ plotters, with 60W or 80W power, can mark and cut many materials up to 900x600mm and 1600x1200mm dimensions, with the best relation between the newest technology and flexibility, between quality and price. Standard plotter dimensions 1500x1100x1100mm



Plotter

MARCATURA DATAMATRIX DATAMATRIX READING AND DECODIFICATION

The datamatrix code is a new industrial bar code system, it is a two-dimensional square which can store from 1 to about 2,000 characters. DataMatrix is used to encode product and serial number information in restricted areas. Different from the traditional bar code which requires very good definition of the white and black bands, 2D codes can be easily read on any industrial product, even if mistakes or blanks are present. Automator International has developed software able to mark the 2D code with computerized marking systems and lasers. This is complemented by different



models of hand-operated and fixed readers. It is possible to read, decode and evaluate the percentage of blanks and mistakes, issuing data that the customer can evaluate.

SINGLE PIN AND MULTI PIN MARKING



SINGLE PIN MARKING SYSTEM

Mod. TMP 1700.

The most widely used permanent pin-marking system in the world, compact and easy to use. The 63 x 38mm marking window satisfies most basic product identification needs. It is an excellent choice for many factory-automated or on-line processes and for handheld or bench use.



SINGLE PIN MARKING SYSTEM

Mod. TMP 3200.

The TMP3200/470 Single Pin Marking System features a large 100 x 150mm marking window, and marking speeds up to six characters per second. Well suited for both bench top and factory-automated applications, its simple, yet robust belt-driven dual rail, X/Y platform yields high quality characters and low maintenance operation.



SINGLE PIN MARKING SYSTEM

Mod. TMP 6100.

The TMP6100 is the most versatile Pin Marking Head. It is easily integrated into either on or off-line applications. Since the marking pin can be positioned anywhere in the generous 152 x 304mm marking window, the TMP6100 can mark any character height, style or number of lines desired. Its robotic design allows clear access to the marking window for loading and unloading of parts.



SINGLE PIN MARKING BENCH SYSTEM

Mod. TMB 460

The BenchMark 460 is a fully programmable, compact and ergonomic marking system for parts too large or heavy to be carried to a marking station. Its hand-held marking head is lightweight (1,7Kg), while providing a generous 25 x 100mm marking window. An electromechanical marking pin eliminates the need for any air supply.



SINGLE PIN MARKING BENCH SYSTEM

Mod. TMB 320.

The BenchMark 320 is an extremely versatile yet economically priced benchtop marking system. It offers a big 100 x 150mm marking window, large enough to satisfy almost any application. Its unique marking arm design is extremely convenient for parts loading and unloading as well as marking pattern design. The system is self-contained with compact controller and rugged extruded aluminum mounting post and base.



MULTI PIN MARKING SYSTEM

Mod. TMP 4200/420.

The unique TMM4200 Multiple Pin Marking Head can be equipped with up to four marking pins in 25 for very high speed marking, yet weighs only 2.0kg. Its light weight, compact ergonomic design, plus optional pistol-grip handle make the TMM4200 the ultimate hand-held permanent marker.



MULTI PIN MARKING SYSTEM

Mod. TMM 7200.

The TMM7200 is an extremely heavy duty multiple pin marking system configured on a "per project" basis to provide optimum solutions for individual applications. The TMM7200 is the right choice for the deep penetration marking required for large character sizes, or when marking especially rough surfaces. The flexible TMM7200 can be equipped with up to 21 marking pins, allowing it to print 21 characters in 1.5 seconds.



MULTI PIN MARKING SYSTEM

Mod. TMM 5100.

Mark up to six characters/second with the TMM5100/420 Multiple Pin Marking System. Its lightweight, compact design and minimal footprint are ideal for hand-held, stand-alone or completely integrated, factory automated operations. A variety of pin sizes/configurations are available to mark character 1-16mm on a wide range of materials.



SOFTWARE

Merlin software, with its state-of-the-art graphical user interface, makes marking pattern design quick and easy. "WYSIWYG" (what you see is what you get) interface provides a to-scale image of the

pattern as it's created. Just "click & drag" for immediate adjustment to field size, location or orientation.

CONTROLLER TMC 420 & TMC 090

The TMC420 (317x203x74mm) is a versatile, compact system controller that can be used with a wide range of Automator Marking Heads. The TMC420 is fully self-contained and requires no Personal Computer.

Other features include a 4-line LCD display and rugged rubber keyboard. With an RS232/485 serial port and eight discrete inputs/outputs, the TMC420 is easily integrated with factory automated applications.



TMP090 (290x260x75mm) is used in connection with a PC on Window 2000 or XP platform and with a TMP6100, TMP1700 or TMP3200 marking head.

One RS232/485 and one RS232 serial port and discrete I/O capabilities with spare I/O are available for customer-specific needs.

Optional external box with separate driver to control third and fourth axis (Z and rotary).

SCRIBE MARKING SYSTEM

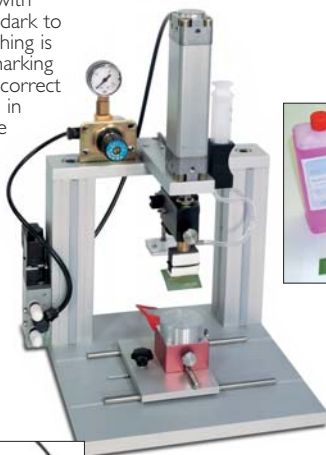
The powerful, extremely heavy-duty SC3500/420 and SC5000/420 are the right choice when deep, low noise marking is required. It is especially well-suited for VIN (Vehicle Identification Number) marking applications.

Powerful, rugged marking head drive mechanism for deep scribe marking in a windows of 100x150mm and 63 x 190mm



ELECTRO-CHEMICAL MARKING SYSTEMS

A wide range of models, from manual automatic units for integration in production processes for marking hardened and tempered metal or thin-walled parts. Different low-current voltages permit marking various metals with colouring from dark to light shades. Etching is realised by a marking head, using the correct electrolytic fluid in contact with the workpiece through an engraved stencil.



TYPES, TYPE-HOLDERS, PUNCHES, NUMBERING HEADS, MICRO CENTRE PUNCHES



STEEL TYPES

Manufactured to ISO 9000:2000 quality system using the best alloy steel and held to very tight tolerances. Automator International types provides the perfect answer for all batch and general purpose marking. Hardened and tempered to 58-61 Hrc, C scale to give maximum useage, the types are available either in handn font sets or individually.



The types can be:

- Sharp faced
- Multi-dot
- Mini stress
- Low Stress
- Flat faced
- Lower case

Available character height in mm.

1 1,5 2 2,5 3 4 5 6 8 10

The box composition (with or without the type-holder and shank) is:

- 100 various types
- 20 spacers
- Tweezers and an allen key

PUNCHES AND DIES

Punches and dies of any shape and dimension can be supplied, to reproduce perfectly logos or designs. Made from best



quality steel to give optimum life, 15 operations and the final ISO control of the hardening process ensure clearest definition and tightest tolerances to produce a quality mark on your product.



Available character height in mm.

1 1,5 2 2,5 3 4 5 6 8 10 12 15

TABLES



Model T
Table with height variable from 710 to 790mm and adjustable feet. Suitable for MB 15/19/20/ 21/32/40N

Model TG
Cabinet style table with wood or metal top 600 x 600mm. Suitable for MB 32/35/71N/71E/71CE

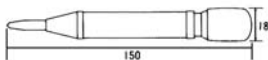


TYPEHOLDERS

For use with the Automator interchangeable steel types and dies, Automator International produces a wide range of different sizes of type holders to suit most marking applications. With one, two or three lines, the type-holders have a M12 tapped hole into which the shank of the impact press is fixed. Dove-tails for roller marking machines and hand shanks complete the accessories for type-holders.



MICRO CENTRE PUNCHES – THE SMALLEST HANDY MARKING MACHINE



The micro centre punch has a small impact mechanism, similar to that used by the impact presses, that generates a force from 0 to 50 Kg. max. Available in either plastic or metal, the micro can be fitted with a A point or with an engraved punch of 2,5mm character height.

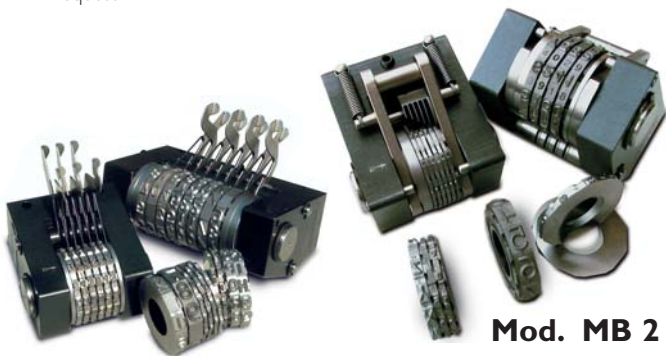


The engraved punches are manufactured to ISO 9000:2000 using the best quality alloy steel and to tight tolerances, hardened and tempered to 58-61 Hrc, C scale, to give maximum life. They are available individually, or in sets of figures or letters or in set of symbols.

Punches of 3 mm character height or with two engravings per punch can be supplied on request.

	1	2	3	4	5	6	7	8
A	□	♥	△	⊗	♠	○	△	⊗
B	□	⊓	△	∇	⊕	⊗	⊖	⊙
C	⊕	⊖	⊗	⊘	⊙	⊚	⊛	⊜
D	⊕	⊖	⊗	⊘	⊙	⊚	⊛	⊜
E	⊕	⊖	⊗	⊘	⊙	⊚	⊛	⊜
F	⊕	⊖	⊗	⊘	⊙	⊚	⊛	⊜
G	⊕	⊖	⊗	⊘	⊙	⊚	⊛	⊜

Set of symbols for the micro centre punch.



Mod. MB 14

Mod. MB 2

Character height for numbering head in mm.

1 1,5 2 2,5 3 4 5 6 8 10

NUMBERING HEADS

Serial numbering of metal, plastic and other materials is easy achieved using Automator International heads, which are offered in two versions: automatic serial numbering (Model MB 2) and manual indexing using levers (Model MB 14).

The numbering heads can solve virtually any marking problem, and they are made of extremely robust design to the tightest tolerances.



www.automator.com

Send us an e-mail to be putted in contact with our
nearest specialist in marking



n. 2768



n. IT-28229



MARKING SYSTEMS

AUTOMATOR INTERNATIONAL s.r.l.
Via Meucci, 8 - 20094 Corsico (MI) - Italy
Tel. + 39-0248601445 r.a. - Fax + 39-0248601503
info@automator.com - www.automator.com