COLUMN-MOUNTED SYSTEMS
Standalone dot peen marking stations

DOT PEEN

COLUMNS
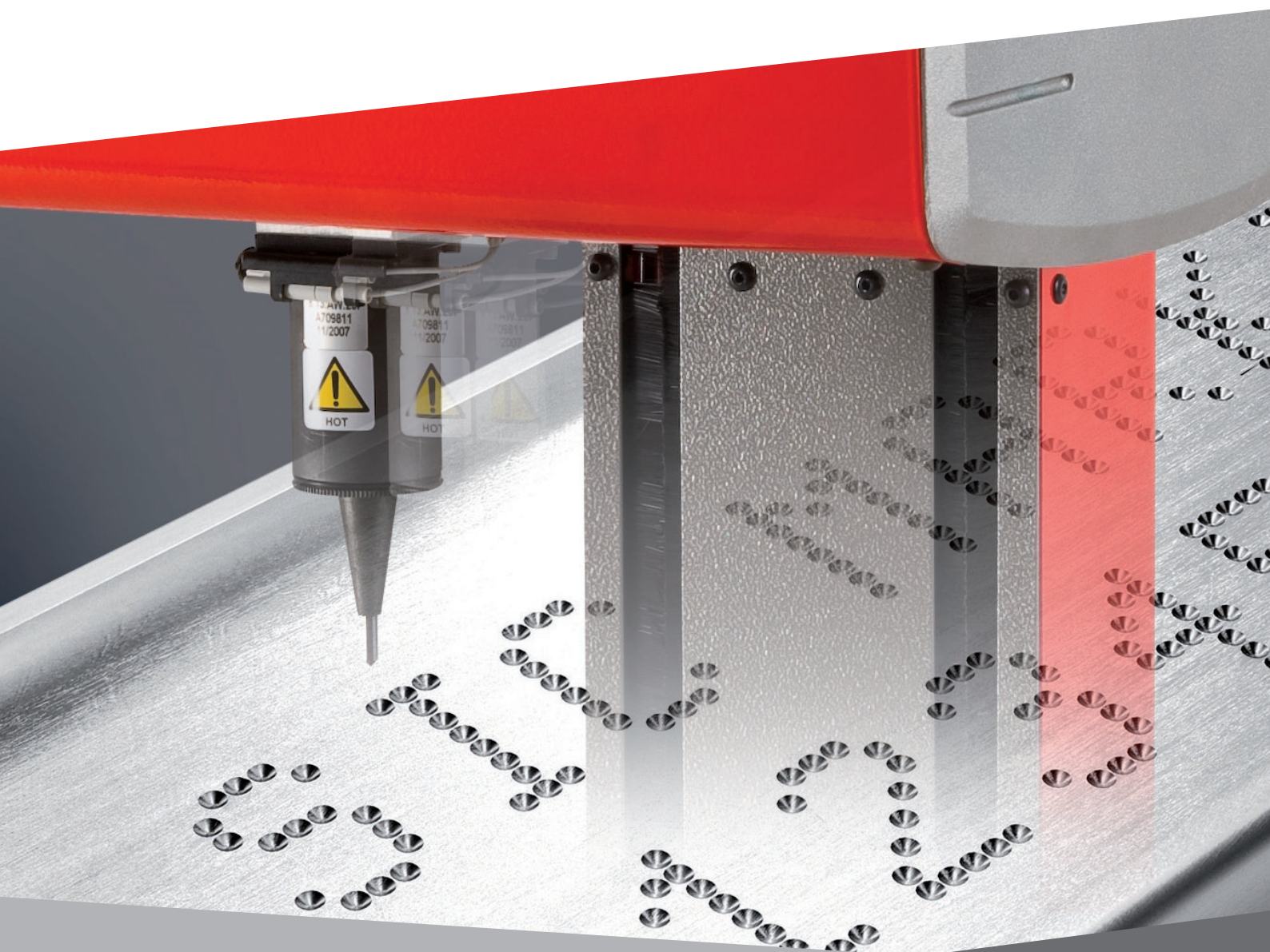
e10 RANGE

e10-c153
e10-c303
e10-c153 z a

SIC
MARKING

DOT PEEN TECHNOLOGY : FAST MARKING ON ALL MATERIALS !

Dot peen marking is achieved with an electromechanically fired carbide stylus assembly against the surface of the workpiece.

This type of marking (text, digits, logo, 2D datamatrix code) is made of a succession of dots. Each dot is created by the impact of the stylus on the surface. The force is given by a controlled pulse through an electromagnet, in order to punch the magnet toward the surface. A spring returns the stylus assembly to the start position, waiting for the next pulse. Frequency can vary depending on the force selected and the speed of X and Y axis movement.

SIC Marking dot peen technology is unique by the fact that the electrical current is measured between each pulse in order to control the impact consistency. In addition, X and Y axis accuracy enables quality marking of 2D datamatrix codes.
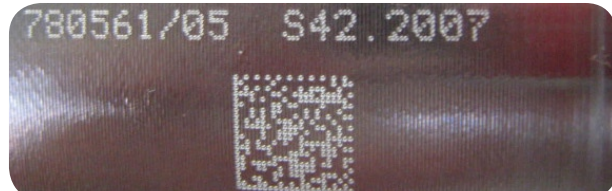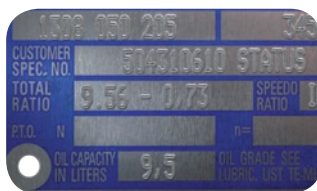
COLUMNS

In the range of stand-alone marking stations, those column mounted units are perfect for any type of material, from plastic to hardened steel up to 62 Hrc. With their extreme accuracy, speed and robustness, the column-mounted machines are perfect for all types of dot peen marking.

Their wide marking windows, LED lighting and Autosensing function make them a reliable, accurate and multipurpose marking system. Electromagnetic marking technology can fit with parts of various shapes and surface conditions (flat surfaces, concave, convex, circular, raw material ...) and only needs an electrical source of energy.

HIGHLIGHTS ....

■ Speed and accuracy
• Precise and accurate guides (0.02mm)
• Speed : up to 3000 parts/day

■ Robust and reliable
• Designed for industrial environment
• Cast aluminum base
• Mechanic and stylus assembly designed for intensive use

■ Wide range fo options
• Rotary axis
• Support plate
• Specific marking window

■ High performances
• **100% electromagnetic technology (no air supply required)**
• Wide tolerance between stylus and part
• Powerful integrated software
• Marking on all types of materials up to 62 HRC
• Wide marking window
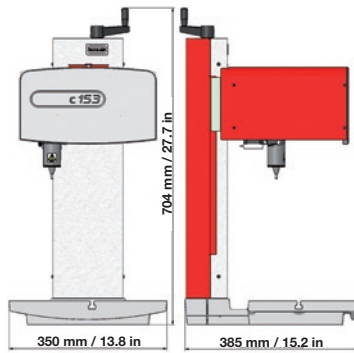 (300 x 150 mm / 11.8 x 5.9 in for c303)

■ Low cost of use
• No consumables
• Reduced maintenance
• Low electrical comsumption (300 w)

SUITABLE WITH QUALITY STANDARDS

■ DT05-89
■ XP Pr EN9132
■ AQG SPEC 2000
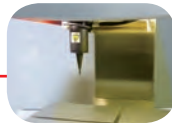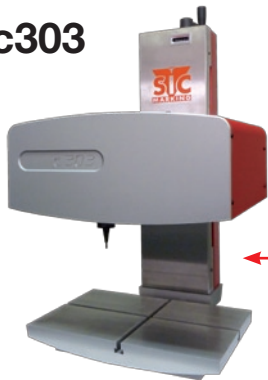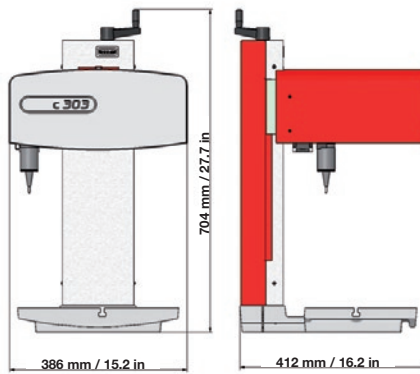■ ISO/IEC 16022
■ UID
■ DATAMATRIX ECC 200
...

c153

704 mm / 27.7 in

350 mm / 13.8 in   385 mm / 15.2 in

- **SPEED and ACCURACY**
- Ideal for Datamatrix codes
- Robust cast aluminum base
- Integrated counter
- LED lighting

c303

704 mm / 27.7 in

■ LED lighting

386 mm / 15.2 in   412 mm / 16.2 in
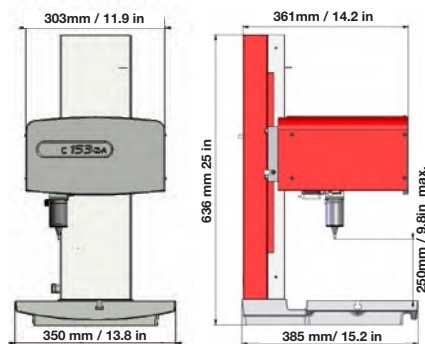
- **LARGE MARKING WINDOW**
- Ideal for Datamatrix codes
- Robust cast aluminum base
- Integrated counter
- LED lighting

c153 z-A

Aerospace standards
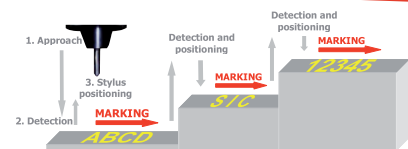
303mm / 11.9 in   361mm / 14.2 in

636 mm 25 in   250mm / 9.8in max.

350 mm / 13.8 in   385 mm/ 15.2 in

- **AUTOSENSING SYSTEM for automatic surface detection**
- Ideal for Datamatrix codes
- Automatic tuning of the stylus/part distance
- Motorized column with integrated brake
- LED lighting

1. Approach

2. Detection

3. Stylus positioning

Detection and positioning

Detection and positioning

MARKING

MARKING

MARKING

12345

STC

ABCD

Autosensing
Integrated probe for consistant distance between stylus / part. Ideal for Data Matrix marking

MECHANICAL TECHNICAL FEATURES

	e10 c153	e10 c303	e10 c153 z-A
Marking window	160 x 100 mm / 6.3 x 3.9 in	300 x 150 mm / 11.8 x 5.9 in	160 x 100 mm / 6.3 x 3.9 in
Weight	28 kg / 61 lbs	30 kg / 66 lbs	30 Kg / 66 lbs
Stylus	Carbide (several optional lengths available)		
Column stroke	Up to 270 mm / 10.6 in (other dimensions in option)		Up to 250 mm / 9.8 in (other dimensions in option)
Column tuning	Manual / Counter		Motorized / Autosensing function
Z axis moving speed	-		Up to 100 mm/sec / 3.9 in/sec.
Lighting	LED		
Start/Stop Button box	Included		

e10

Ideal for column range

e10 R

Standard Characteristics

- Color screen
- USB port - Easy transfer of marking files
- Connectivity - Current standards communication
- Fully programmable
- Sand-alone operation (no PC required)
- Cutting-edge microprocessor: quick start and smooth browsing
- Marking history and self-diagnosis functions (maintenance help, configuration and statistics)
- Various marking options (DataMatrix, angular, circular, alphanumeric, logos, etc.)
- Industrial membrane keyboard
- Fully enclosed controller IP40 (no opening, no fans)
- 100% compatible with previous machine range

e10 R specific features

- Reduced size (can be easily integrated)
- 2 possible configurations: connectors can point upwards or downwards
- Adapted for vertical mounting in electrical cabinet
- Kit for mounting on DIN rails (optional)

■ **Color screen**

■ **USB connection on the front panel:** import/Export marking files - Keyboard external plug

■ **Full connectivity :** compatible with different communication protocols

ELECTRONIC TECHNICAL FEATURES

	e10	e10 R
Dimensions (d x l x h)	322 x 380 x 112 mm / 12.7 x 15 x 4.4 in	112 x 380 x 222 mm / 4.4 x 15 x 8.7 in or 140 x 380 x 222 mm / 5.5 x 15 x 8.7 in with Rail DIN Kit (option)
Weight	5 kg / 11 lbs	
LCD screen resolution	480 x 272 pixels	
Keyboard	Qwerty integrated, membrane overlay	
Power	300 Watt	
Power supply	Single phase, 85 to 260 VAC, 50 to 60 Hz	
Number of controlled axis	2 (3rd and 4th axis optional)	
Operating temperaure	From 5 to 40°C / 40 to 105°F	

SOFTWARE

Memory	7110 Ko	
Text	Incrementation, date codes	
Logos	Download from PC/USB key	
Data Matrix	Up to 348 characters, 48 x 48 dots	
Fonts	4x6, Arial, Comic, Comic_B, Courier, OCR, OCR_BOLD, OCRA	
Style	Angular, radial, inverse, mirror	
Character size	From 0,1 mm to 99 mm (restricted by marking window size)	
Impact force	9 adjustable levels	
Depth	Up to 0,5 mm (depending on material marked)	
Resolution between dots	0,05 mm / 0.002 in	
Work shift management	10 shifts/24h	
Password	3 security levels	
Historical function	Exportable Excel file	
Maintenance assistance	Self-diagnosis	
Software	17 languages	

COMMUNICATION

Ports	RS232, RS422, USB (RS485 Profibus and TCP/IP Ethernet in option)	
Inputs/Outputs	8/8	
External keyboard input	USB	
External output	5V – 0,5A et 48V – 3A	
Soft on PC	Marking files creation, controller/PC or USB key transfer, historical function	

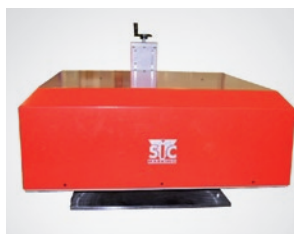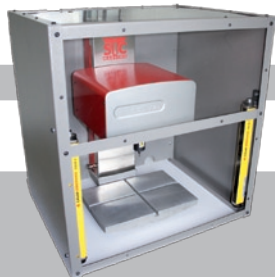## MACHINES

Rotary axis

Plate Holder

Specific marking window
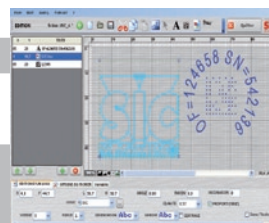
Data Matrix reader

Fixed-mount camera

Box enclosure with light curtain

Bar-code reader

Database

WINSIC software
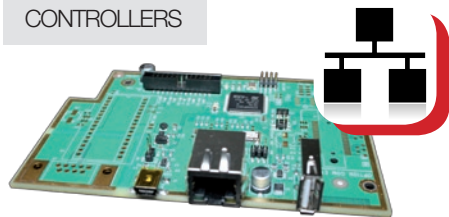
Stylus and guides

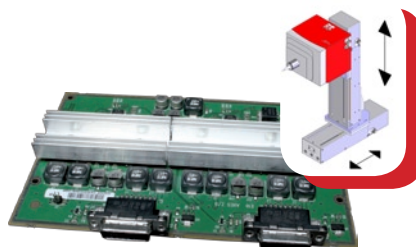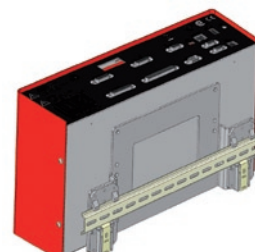**Cycle start pedal**

Tag feeder

CONTROLLERS

Ethernet card

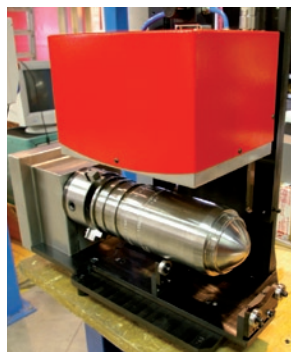**Card for controlling 3rd and 4th axis**

Kit for mounting on DIN Rail

APPLICATIONS

Tag feeder system

Heavy D axis

Mark today
Identify tomorrow