

# Electromagnetic micro-percussion marking

QUALITY / PRECISION



**X-range** **XF 510m**

Micro-percussion  
Electromagnetic 



**Speed**

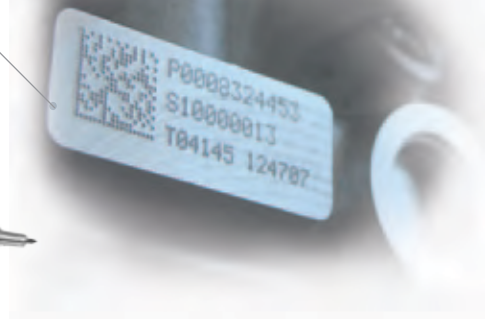



**High precision**

**Versatility**



**Data Matrix code  
in less than 4 sec!**



### Safety and protection

- Data Matrix™ ECC200
- 5x7 font DT05-89
- ATA Spec2000
- UID
- SAE AS9132
- NASA-STD-6002
- MIL-STD-130
- AIAG B-17, AIAG B-4
- ISO/IEC 16022
- AIM-DPM...



### User's benefits

- Meets global quality specs
- Reduced integration costs
- Optimized production
- Flexibility
- Local technical support

High precision marking solution for traceability and identification of any part

#### PRECISE

##### Indent permanent marking

Micro-impacts create **durable marks**, without stressing the part and without any burrs.

##### On any component

Text, serial number, date, logo, 2D code..., the **high amplitude** stylus of the XF510m range enables **marking parts of any shape and material**: raw, machined, flat, convex, concave...

##### Meets the criteria for "Excellent"

Conceived to comply with **the most demanding quality norms** (aerospace, automotive, defense, nuclear...):

- highly rigid mechanics: to ensure **quality and repeatability** of the marks
- **high-end guides**: dots are perfectly aligned.
- **high performance** marking stylus: optimized management of the position and force of each impact

Ideally suited to mark **Data Matrix™ codes** (ECC200, UID...) and **5x7 font**.

#### HIGH PERFORMANCE

##### XF510m new generation

**Time-saving cycle**: 2X speed, backward and forward marking, origins can be adjusted close to the mark.

**Innovative electronics**: speed, ease of use and connectivity (RS232, USB, Ethernet, Input/Output board...)

##### Versatile

The stylus produces the desired marking result:

- Fitted with a **powerful electromagnet** it can mark any material (up to 62 HRC).
- **From very light to deep marking**, software control allows fine tuning.

##### Economical and environmentally respectful

**Direct Part Marking (DPM)**: no sticker, ink or other additives

**No consumable**: stylus point can be resharpened.

**Safety**: no harmful product, no additional protection required, micro-impacts are not hazardous for the operator.

#### INDUSTRIAL AND RELIABLE

##### Easy to integrate

**Lightweight, fast and compact**: ideal for integration on production line or control station

**Interactive**: it allows data sending / receiving and flexible control (linked to a PC, PLC or on its own...).

**Electromagnetic energy**: no need for compressed air, very silent process

##### Unfailing traceability

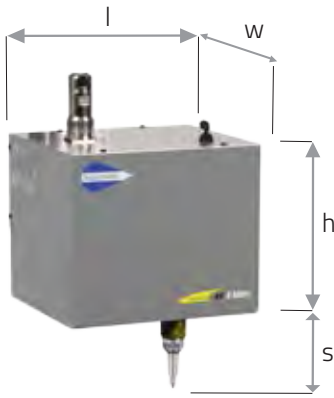
**Robust and easy to use**, it can be integrated for operation in any position.

**User-oriented conception**: simple mounting (2 M8 holes), data saving, quick connect components for **easy maintenance**

**Reliable**: acting as **marking expert** and supplier to the largest industries worldwide, **Technifor** has a proven track record on many applications and in the harshest environments.

"Premium quality in short cycle time"

## Technical characteristics



	XF510Cm	XF510Sm
l	158 (6.2")	231 (9")
w	102 (4")	195 (7.7")
h	166 (6.5")	192 (7.5")
h+S	260 (10.2")	286 (11")
	4,7 kg (10.4 lb)	9,1 kg (20 lb)

Dimensions in mm

- Integrable marking heads
  - Cord orientation: vertical or horizontal (90° adapter)
  - Carbide stylus points: 60° - 90° or 120° angle depending on the application
- (TIF, 2D, 3D drawings, integration guides... available on request)

Marking areas: 50 x 20 mm (1.9 x 0.8")  
100 x 80 mm (3.9 x 3.1")  
200 x 80 mm\* (7.9 x 3.1")

\* Larger areas available on request

$\geq 0.5$  mm (0.02") by step of 0.01 mm (0.0004")

## UC500m control unit



3,9 kg (8.6 lb)

l x w x h  
240x180x150  
(9.4x7.09x5.9")

- RS232, Ethernet TCP/IP (Telnet) connections and Input/Output
- USB drive for logos, fonts, files... import/export
- Communication with customer environment: data reception, link to databases, information exchange, etc.
- Flexible control: linked to a PC, PLC or on its own
- Program and documentations available in more than 15 languages
- External keyboard (provided)



## T05 integrated marking program

- User-friendly with icons and pop-up help
- Large 5.7" backlit screen with graphic preview
- Multiple marking data management: texts, logos, variables, date and time, counters, serial numbers, 2D codes, etc.
- Flat, angular, radial marking, etc.
- Memory capacity over 1 000 marking files

## Environment and power supply

- Power: 360 W
- Power supply: 90-230 V AC
- Functioning temperature: +5 to +45°C (+41 to +113 °F)



## Safety and protection

The machine conforms to the following directives:

- "Machinery" 2006/42/EC
- "Electromagnetic compatibility" 2004/108/EC
- "Low voltage" 2006/95/EC
- "WEEE" 2002/96/EC
- Directive 2002/95/EC (RoHS)

## Accessories



Motorized Z axis with surface sensing



Standard and robotic cords (3 m, 6 m, 10 m, 15 m)



Protective boot and protective mobile shutters



Part rotation device DMC



Height setting device (± 22 mm)



Column frame



UC500 rack (5U 19"), start panel, footswitch pedal



Data Matrix™ code reader



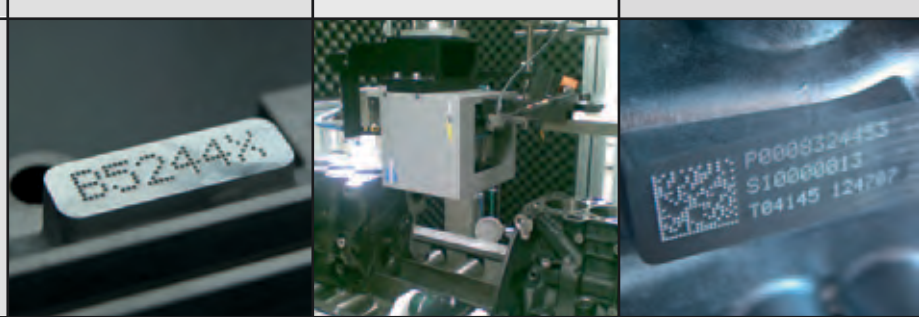
90° adapter



Windows® T500W marking software

## Applications

XF510m: marking precision and versatility in a robust and easy to use solution



### + Identity

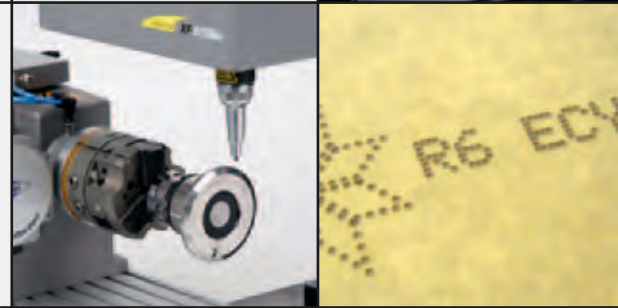
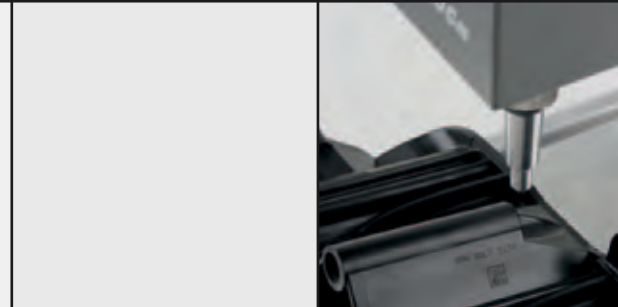
Distinguish parts with a logo, a reference, a serial number, a date, a code...: **mechanical part, electric casing, electronic connector, bearing, tool...**

### + Traceability

Mark each part directly with a unique identification code that can be read throughout its lifetime: Data Matrix™, QR code: **turbine blade and shaft, engine part, transmission, gearbox, casing, sensor, tube...**

### + Safety

Protect from counterfeiting with a durable mark, improve quality and safety of the manufacturing process, ensure stock reliability: **chassis, frame, lock and key, armament part, aerospace component...**



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