

THE BEST MICRO EROSION  
TECHNOLOGY

# SARIX

3D  $\mu$ EDM Milling

## SX-200

### HIGH PRECISION AND HIGH CAPACITY MICRO EROSION MACHINE

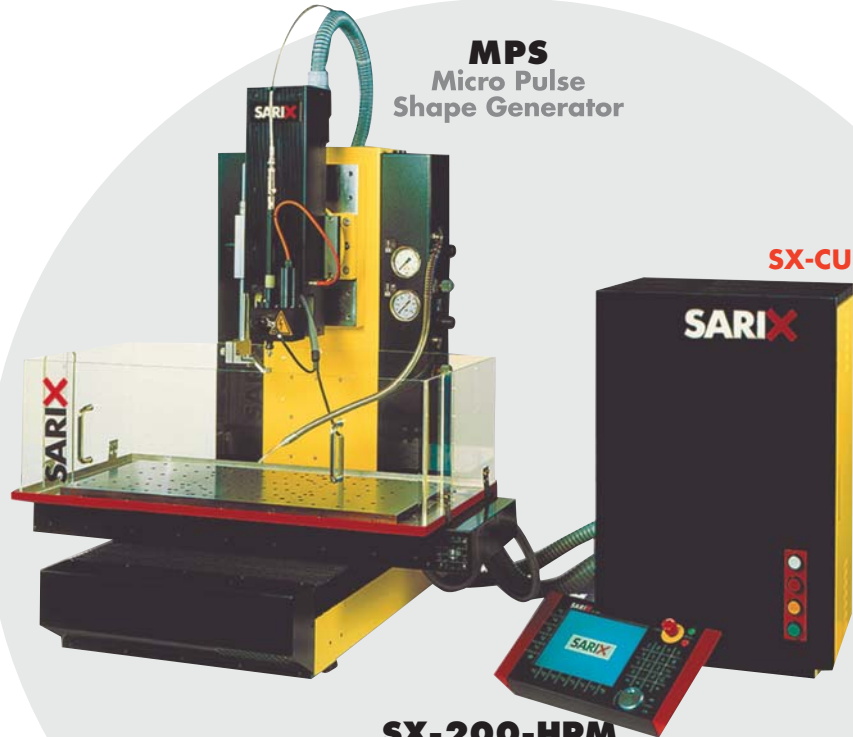
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3D  $\mu$ EDM

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**MPS**  
Micro Pulse  
Shape Generator



**SX-200-HPM**  
AUTOMOTIVE  
TEXTILE  
MICRO MOLDS  
MICRO MECANICS  
AEROSPACE  
MEDICAL  
MICRO ELECTRONIC

- The capacity of the **SX-200** machine brings new innovative "multi-axis-motion" as the **3D high precision Micro-machining**.
- The multi-axis CNC allows the indexing of complex work pieces where the performance of the **Micro EDM Machining** is requested.
- "High production capability concept" through an efficient Multifunct Micro Machining machine with; slide W-axis (Z2), C-indexing spindle, A/B positioning indexing axis and multiple hole sequence process...
- **SX-MMI**, "On-board", easy and user friendly unlimited programming and editing software.
- The high performance **SARIX Micro Pulse Shape EDM** generator **SX-MPS**, with its associated Technology opens up new opportunities for smaller, deeper and more precise perfect holes.
- **Micro EDMing** machining technology with solid and tube electrode from **45 Microns** to 3.0 mm.
- **Micro Holes**, high Precision Micro holes and shape holes down to **20 Microns**
- High surface finishing capability down to Ra 0.1 and Ra 0.05 with the **Micro Fine Pulse Shape** generator **SX-MFPS**.
- High precision positioning accuracy up to  **$\pm 1$  Micron**.
- Automatic axis positioning control with depth control.
- High precision Automatic electrode refeeding spindle with dielectric or air clamping control for continuous production.
- **High Speed Micro EDM drilling** Technology with breakthrough-detection device.

## TECHNICAL SPECIFICATIONS

<b>Machine</b>	<b>SX-200 HPM</b>
<b>Type</b>	High Precision
<b>Work table mm</b>	L 700 I 300
<b>Travel X axis mm</b>	350
<b>Travel Y axis mm</b>	200
<b>Travel Z axis mm</b>	200
<b>Travel W (Z2) axis</b>	150
<b>Z axis feed rate mm/min</b>	600 max
<b>X-Y axis feed rate mm/min</b>	600 max
<b>Precision of positioning</b>	±2.0 µm
<b>Resolution</b>	0.1 µm
<b>Table load/weight</b>	~ 50kg
<b>Net weight</b>	~450kg
<b>Dimensions mm</b>	L 950 I 850 h 1300

	<b>SX-MPS</b>	<b>SX-HPS</b>
<b>Generator</b>	<b>MICRO PULSE SHAPE</b>	<b>HIGH PULSE SHAPE</b>
Freerun voltage	60 ÷ 255 V	fixed voltage
Frequency	1 ÷ 250 pos.	1 ÷ 100 pos.
Current pulse	1 ÷ 200 pos.	1 ÷ 200 pos.
Dimensions mm	135 x 110 x 500	
<b>Control Unit</b>	<b>SX-CU</b>	
Power supply	230 V / 50 Hz	
Nominal power	650 VA	
Dimensions mm	450 x 400 x 690	
<b>Dielectric Unit</b>	<b>SX-DA</b>	
Capacity	25 liters	
Dielectric	deionised water or oil	
Dimensions mm	500 x 780 x 650	

Our specifications are subject to any change, giving you a continuous technological advantage

## TYPICAL CONFIGURATION SX-200 Micro EDM Drilling

- **SX-200-HPM** machine including **SX-MPS**, Micro Pulse Shape Generator
- **SX-CU**, CNC Control UNIT with **SX-ICON**, Software Icon Editor for free programming
- **SX-KBS**, Knowledge Base - Data Base- software
- **SX-PL**, Multi-axis-erosion software X-Y-Z axis with extended planetary-orbiting functions
- **SX-DA**, Dielectric unit with conductivity and temperature control for mass production (for deionised water or dielectric oil)
- **SX-HP**, High pressure flushing unit 70 bars
- **SX-ROT**, High precision rotation axis with 3R Macro chuck
- **SX-PG**, Precision guide holder

## SX-CU CNC CONTROL UNIT

- **SX-CU**, controller with enhanced Automatic Configuration, unlimited program capacity
- Unlimited program capacity; number, length and calls
- **Free and unlimited Micro EDM technology settings**
- **SX-MMI**, "On board" friendly user editing and programming capability
- High quality 8.4" TFT color display, 3.5" floppy disc Ethernet connection
- Virtually up to 16 axis CNC control within 4 axis on simultaneous motion
- Standard X,Y,Z and rotation speed axis control (W,A,B,C...optional)

## OPTIONS

- **SX-MFPS**, Micro Fine Pulse Shape generator for Micro Fine Machining with ultrafine finishing
- **SX-HPS**, High Power Pulse Shape generator for higher stock removal
- **SX-A344-L series**, High precision rotating spindle with Automatic electrode refeeding and wear compensation with through flushing function
- **SP 06 & SP 08** collets for SX-A344 automatic spindle down to **45 Microns**
- **SP-MDC**, Multi diameter automatic refeeding collet 0.2-1.0 mm
- **SX-W**, CNC Programmable W-backslide axis (Z2) for guide holder height position
- **SX-C-RHP**, High Precision Rotating and indexing C axis
- **SX-TH**, "Tilting Head" device for SX-A344 Rotating spindle with the SP08 collet type
- **SX-DNC**, Sequencer software for unlimited programmable number of holes
- **SX-AB100C**, High precision single or double indexable and programmable A/B-axis, designed for submerged conditions
- **SX-MDH**, Micro Deep Hole drilling device - depth ratio 100-150 time
- **SX-ARIANNE**, Wire grinding device for the automatic production of Micro electrode for Micro holes and shape holes down to 10 Microns
- **SX-EAD**, Electrode Automatic Distributor device

## ACCESSORIES

- **SP 01**, High precision collet with centering device
- **SP 02**, High precision collet
- **SG 01**, High precision ceramic guide
- High precision solid carbide electrodes down to 45 Microns
- High precision solid carbide electrodes and tubes
- Brass & Copper single holes and coreless electrodes tubes
- Tooling, fixtures, microscopes, instruments, filters...  
Special shaped and complex form according your drawing...

