

THE BEST MICRO EROSION
TECHNOLOGY

SARIX

NEW SX-50-Drilling

MICRO EROSION DRILLING MACHINE

Fast simple hole - start hole - precision hole drilling

MPS

Micro Pulse
Shape Generator



SX-50-Drilling

AUTOMOTIVE
TEXTILE
MICRO MOLDS
MICRO MECANICS
AEROSPACE
MEDICAL
MICROELECTRONICS

- PERFECT ROUND HOLES
- CONCENTRIC & ACCURATE HOLES
- HOLE TAPER CONTROLLED
- NO ANGLE LIMIT
- NO BURNING EFFECT
- NO MATERIAL ALTERATION
- WITHOUT ENTRANCE AND EXIT DEFORMATION
- HIGH PRODUCTIVITY QUALITY
- HIGH QUALITY SURFACE
- HIGH PRECISION FINISHING

3D μ EDM

IF YOU NEED
THIS TOP
PERFORMANCE
WITH REDUCED
MACHINING
TIMES, WITHOUT
MATERIAL
ALTERATION,
CALL SARIX
OR
VISIT US

@
WWW.SARIX.COM

SARIX SA
6616 LOSONE
SWITZERLAND
TEL. +41 91 785 81 71
FAX +41 91 785 81 77
www.sarix.com

- The capacity of the **SX-50** machine complete the range of the SARIX machines and brings effective cost reduction on the conventional hole drilling issues.
- The simple **SX-CNC** allows with several options the evolution of the machine configuration upto multi-axis motion.
- **"High production concept"** for complex drilling tasks through efficient multiple hole drilling sequences and multi-layer drilling.
- **SX-MMI**, "on-board", easy and user friendly unlimited programming and editing software, direct drilling macros, "on board" self-learning drilling technology.
- The high performance **SARIX Micro Pulse Shape EDM** generator **SX-MPS**, with its associated Technology opens up new opportunities for faster, deeper, smaller and also precise 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** with Electrode Wire Shaping device (*).
- High surface finishing capability down to Ra 0.1 and **Ra 0.05** with the **Micro Fine Pulse Shape** generator **SX-MFPS** (*).
- Automatic axis positioning control with hole depth control.
- High precision Automatic electrode refeeding spindle with dielectric through flushing for continuous production (*).
- **High Speed Micro EDM drilling** Technology with breakthrough-detection device (*).

(*on option)

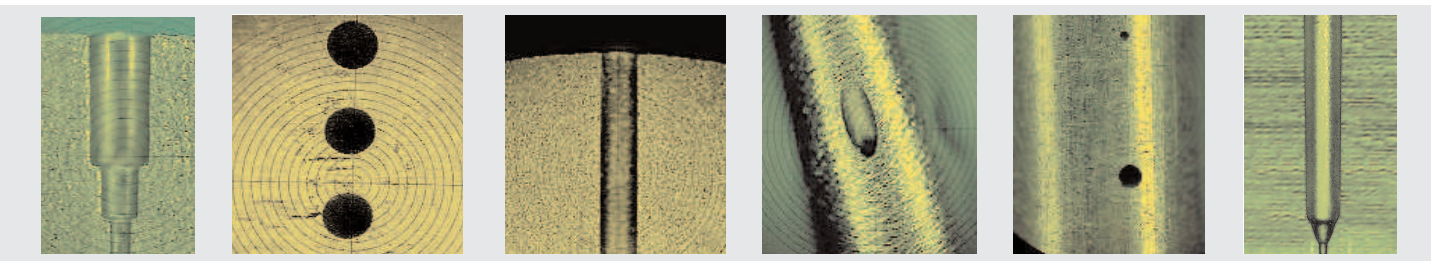
TECHNICAL SPECIFICATIONS

Machine	SX-50-Drilling	
Type	PM, Precision Machine	
Work table mm	L 510 I 270	
Travel X axis mm	200 (250 mm *)	
Travel Y axis mm	150	
Travel Z axis mm	150	
Z axis feed rate mm/min	600 max	
X-Y axis feed rate mm/min	600 max	
Precision of positioning	± 10 µm (± 2µm *)	
Resolution	0.1 µm	
Table load/ weight	~ 20 kg	
Net weight	~175 kg	
Dimensions mm	L 700 I 800 h 1200	

(* option)

	SX-MPS	SX-HPS
Generator	MICRO PULSE SHAPE	HIGH PULSE SHAPE
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	
Control Unit	SX-CU	
Power supply	230 V / 50 Hz	
Nominal power	650 VA	
Dimensions mm	450 x 400 x 690	
Dielectric Unit	SX-DA	
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



In the region where avant-garde technology has made EDM history.



SX-50 Micro EDM Drilling TYPICAL CONFIGURATION

- **SX-50-Drilling** machine including **SX-MPS**, Micro Pulse Shape Generator **SX-CU**, CNC Control Unit with **SX-ICON**, Software Icon Editor for free programming **SX-MMI**, integrated "On board" user friendly, for manual and automatic use and editing, visual programming capability **SX-KBS**, Knowledge Base - Database- software
- **SX-DA**, Dielectric unit with conductivity and temperature control for mass production (for deionised water or dielectric oil)
- **SX-HP**, High pressure dielectric flushing unit 70 bars
- **SX-ROT**, High precision rotating axis with 3R Macro chuck
- **SX-PG-MS**, Manual height sliding precision guide holder

SX-CU CNC CONTROL UNIT

- **SX-CU**, controller with enhanced Automatic Configuration
- Unlimited program capacity; number, length and calls
- **Free and unlimited Micro EDM technology settings**
- High quality 8.4" TFT color display, USB port and Ethernet connection
- Virtually up to 16 axis CNC control within 4 axis on simultaneous motion (*)
- Standard X,Y,Z and rotation spindle axis control (Axis W,A,B,C... *optional)

(*) OPTIONS

- **X and Y axis** linear glass scale for precision of positioning down to +/- 2 microns
- **SX-MFPS**, Micro Fine Pulse Shape generator for Micro Fine Machining with ultrafine finishing down to Ra 0.05 micron.
- **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 or 0.5-1.5 mm
- **SX-C-ROT**, High Precision Rotating and indexing C axis
- **SX-TH**, "Tilting Head" device for SX-A344 Rotating spindle with the SP08 collet type
- **SX-AB100C**, High precision single or double indexable and programmable A/B-axis, designed for submerged conditions
- **SX-MDH**, Micro Deep Hole drilling device - diameter/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 changer and distributor device

ACCESSORIES

- **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...