



# Broken Tap Remover

## STPR-800C



• New Arrival

With the rapid development of automation equipment, high demand of products' precision and extensive usage of difficult-to-cut materials in machining, tools broken into workpieces has heavily affected the defective rate of products. The common methods of removing broken taps and drills are smashing items by hand, screwing them out after welding, or even acid corrosion and flame cutting, which contribute to low efficiency and damage to workpieces.

Model STPR-500C/800C Portable EDM innovated by our company can fast remove broken taps, drill, drift, screw, plug gauge, etc., without damaging to the workpiece, easily process on workpieces at any size, especially for large one. At the same time, Desktop EDM is created, which is much more convenient to clamp, more accurate to locate, and widely used to remove broken taps in mass on small workpiece, process non-precision hole, mark, etc.

Item	Model	STPR-500C	STPR-800C
Input Voltage (V)		AC110/220V 50/60Hz CE	AC110/220V 50/60Hz CE
Input Power (W)		500	800
Secondary Output Voltage (V)		10-70	10-70
Max Processing Depth (mm)		60	60
Electrode Holder Diameter (mm)		1-10	1-10
Max Process Depth of Spindle Servo (mm)		80	80
Max Processing Speed (mm/min)		1	1
Working Liquid		Tap water	Tap water
Power Box Size (mm)		L380xW160xH300	L380xW160xH300
Size of Working Head (mm)		230x62x375	230x62x375
Package Size (mm)		498x308x392	498x308x392
Net weight (kg)		14.3	14.3

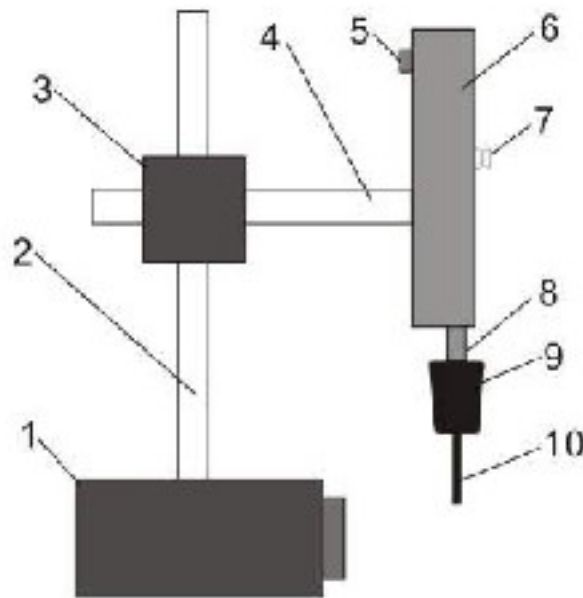
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Work head parts:



- 1. Magnetic Base 2. Bar 3. Cross connector 4. arm
- 5. Principal Axis Servo Input Interface 6. Principal Axis Unit
- 7. Depth Setting Locking Screw (Only for C Type)
- 8. Depth Ruler 9. Electrode Chuck 10. Electrode

Power Box Parts:



Diagram for Operation Operation Panel of Power Box

- 1. High-Frequency Power Switch 2. Pulse Grading 3. Pump Switch
- 4. Principal Axis Servo Switch 5. Reset Button (Just For C Type)
- 6. Principal Axis Servo Adjusting Button 7. Current Stepping Switch
- 8. Current Meter 9. Power Switch 10. Fuse Block 11. Power Input Socket
- 12. Water pump output socket 13. High-Frequency Positive Terminal
- 14. High-Frequency Negative Terminal 15. Spindle Servo Output Interface

Functions and Features

Model STPR Portable EDM abide by the principle of spark erosion to remove broken tools, no direct contact, thus, no external force and damage to the workpiece.

Excellent Structure: it is convenient to carry due to small size and light weight, and shows its special superiority for large workpieces. Working head is separated from the machine, and can rotate in any direction, which is helpful for complex machining.

Convenient Operation: The magnetic base can be adsorbed on workpieces to finish processing easily.

Accurate Positioning: Cross clamp (optional) or jig can be installed on desktop workbench, which is convenient for fast clamping and precise positioning, and is suitable for batch processing.

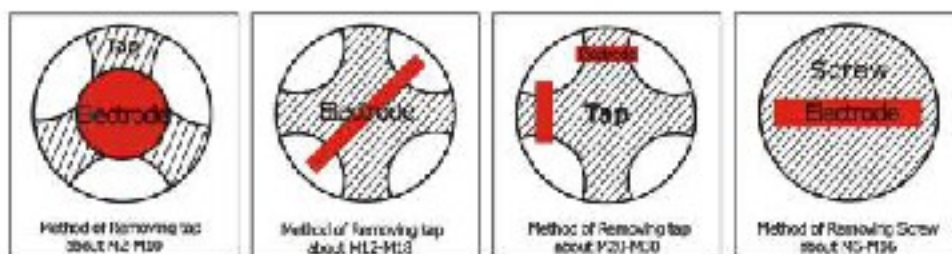
Easy Maintenance: MCU Controller and Function modularization are utilized to guarantee the stable performance and easy maintenance.

Wide Processing Range: broken taps and drills (conductive material) above Ø3mm (Ø3mm is included). Fast and easily remove broken taps, drills, studs, drifts, screws, plug gauges, etc., without damaging to the work piece. The machine also could process non-precision small holes (starting hole for wire cut edm) on quenched steel and hard alloy.

Usage Skills

Selection of electrodes: (take taps and screws for example)

Select electrodes with proper shape and size according to the size of broken items. The material of electrodes should be brass wire, brass bar, copper tubing, etc.



Reference Table of Current and Stepper Selection:

Cross-Sectional Area Of Electrode	Current Adjustment Switch	Stepper Switch
< 1mm <sup>2</sup>	Two Off (Low)	Off
1-3mm <sup>2</sup>	One On, One Off (Middle)	On
> 3mm <sup>2</sup>	Two On (High)	On

Broken Tools	Size	Electrodes Recommended	Remarks
taps	M3	Ø1.5	For the electrodes, the shorter, the better. (there will be less jitter with short electrode.)
taps	M4	Ø2.0	
taps	M6	Ø3.0	
taps	M8	Ø4.0	
taps	M10	Ø5.0	
taps	M12	Ø6.0	
taps	M14	7x2	
taps	M16	8x2	
taps	M20-30	10x2 sheet electrode	
screws	M3-20	Method Recommended: drill a groove, and remove screws with a slotted screwdriver.	