

NO MORE HEADACHE !

Fast, low cost, high performance,
JOEMARS TR100 BROKEN TAP REMOVER,
your most reliable partner!



Features:

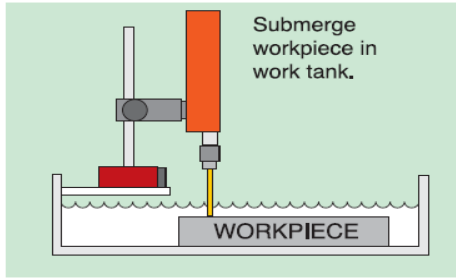
- ❖ **Light, small, portable, and compact design** allows the TR100 tap remover to be moved and used anywhere in the shop.
- ❖ **High speed and efficiency at a low cost.**
- ❖ **Simple set up and operation allows easy removal of taps anywhere.**
- ❖ **Power source choices:** 100V/110V/120V/200V/230V/240V, 1PHASE, 50HZ/60HZ
- ❖ **Dielectric:** Machine uses ordinary tap water as dielectric liquid.
- ❖ **Electrodes:** Uses any brass rod or tube as an electrode.
- ❖ Small size and magnetic base allow machining even on large work pieces.
- ❖ **Removes taps** with no damage or stress to the work piece.
- ❖ **Additional applications** include cutting tungsten carbide or any other conductive material.

Machining Functions:

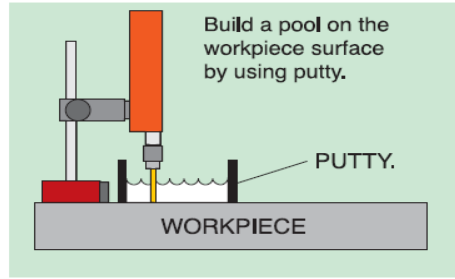
- ❖ **Auto Feed**
- ❖ **Depth setting** (stops at a specific depth)
- ❖ **Selectable arcing timer**
- ❖ **Auto retract**
- ❖ **Swiveling work head**
- ❖ **Alarm messages:** depth arrival, arcing, over-temp.

MACHINING APPLICATIONS:

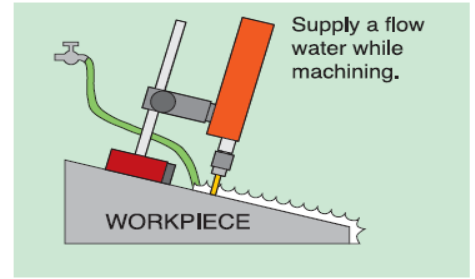
SMALL WORKPIECE



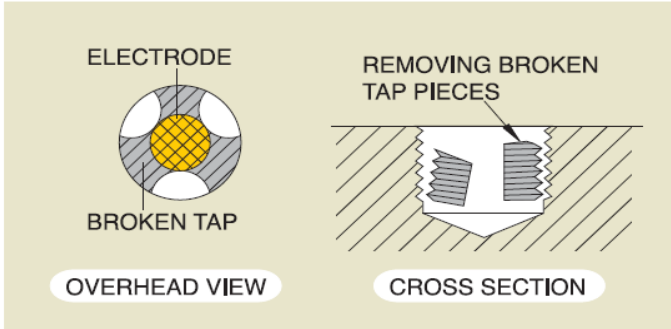
LARGE WORKPIECE



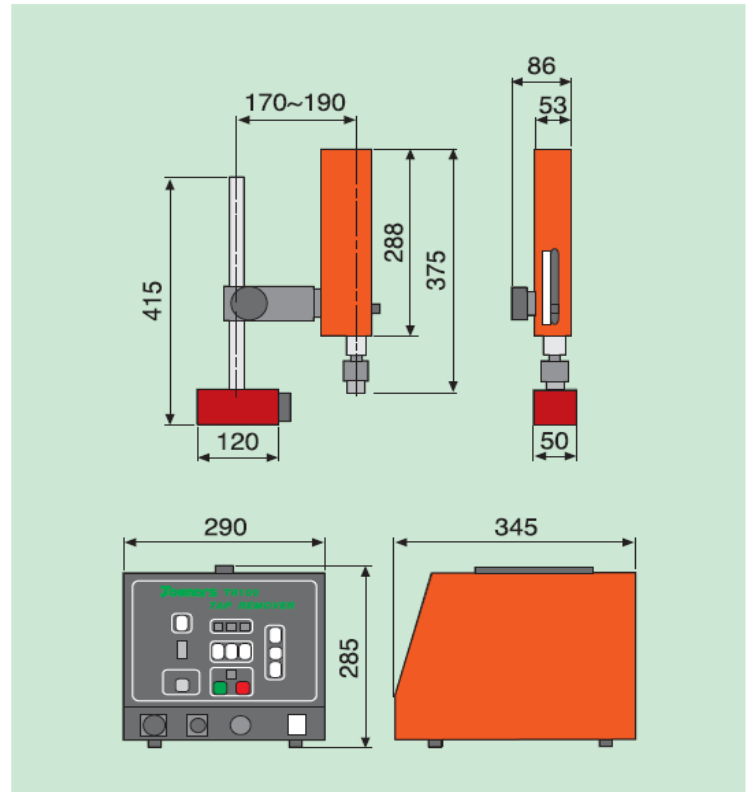
NON-VERTICAL MACHINING



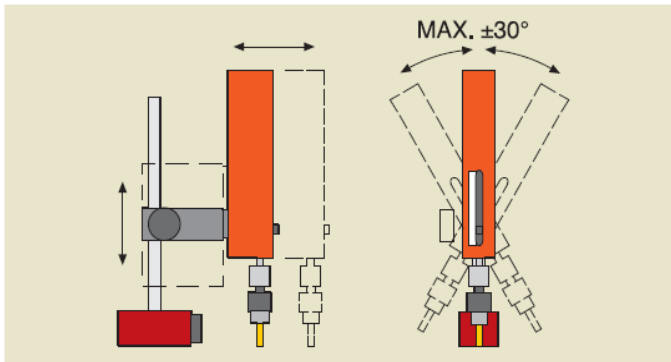
HOW TO REMOVE BROKEN TAP:



DIMENSIONS:



WORKHEAD SWIVEL:



Included Equipment:

1. Generator
2. Machine Unit
3. Chemical Clay
4. Chuck Handle
5. Brass Electrodes
 - 1.5mm x 4PCS
 - 2.0mm x 2PCS
 - 2.5mm x 2PCS
 - 3.0mm x 2PCS
 - 4.0mm x 1PC
 - 5.0mm x 1PC
 - 6.0mm x 1PC

SPECIFICATIONS:

GENERATOR:
Weight: 17Kgs
Dimensions: 290X345X285 mm
MACHINE UNIT:
Weight: 6Kgs with magnetic stand
Dimensions: 53X70X375 mm
Electrode Holder : Max. $\varnothing 6.5$ mm

* All specifications & design are subject to change without notices.



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TR100 Drill Time & Wear Testing Results:

The test results below were found to give end users an estimate of 'worst case scenario' drilling times and wear when drilling into a solid block. Testing was done using hot rolled steel with 2mm, 4mm, and 6mm electrodes. Driller Z depth was set to drill 15mm and stop. Part was submerged under 1 inch of water with no additional flow. As you will see in the 4mm tap burning test at the bottom, drilling times and wear are significantly better when burning on a tap or end mill where flushing conditions are improved. Adding water flow over the work piece and changing settings can also increase cutting performance from the base line tests shown below.

- ❖ **2.0mm Test:** Z-Axis set to 15mm (.590") – Solid Steel Block, Submerged
 - **Finished Hole Depth:** .240"
 - **Time:** 4:41
 - **Wear:** 60%
 - **Settings:** Low, 6s Arc Timer

- ❖ **4.0mm Test:** Z-Axis set to 15mm (.590") – Solid Steel Block, Submerged
 - **Finished Hole Depth:** .335"
 - **Time:** 9:06
 - **Wear:** 43%
 - **Settings:** Med, 6s Arc Timer

- ❖ **6.0mm Test:** Z-Axis set to 15mm (.590") – Solid Steel Block, Submerged
 - **Finished Hole Depth:** .375"
 - **Time:** 16:23
 - **Wear:** 36%
 - **Settings:** High, 6s Arc Timer



Tap Test:

- ❖ **4.0mm Test:** Z-Axis set to 15mm (.590") – Hardened Steel ¼-20 tap, Submerged
 - **Finished Hole Depth:** .435"
 - **Time:** 4:40
 - **Wear:** 26%
 - **Settings:** Med, 6s Arc Timer

Based on the test results above, when compared to drilling into a solid block the drill time and wear were significantly reduced when drilling on a tap. The increased flush rate through the flutes of the tap greatly increased cutting performance on all sizes of electrodes.

