

ELECTRO ARC's patented process\* removes broken-off taps and drills in seconds . . .



. . .without damage or distortion to the workpiece!

Photos above & left show how the Electro Arc process cuts only the center out of a broken tap. And because the cut is continuously flushed with coolant, not even the tap's threads are heated up. Once the center is cut out, the tap's cutting flanges are easily broken out of the hole.



An Electro Arc "Q" type disintegrating head in action, shown without the protective shield normally used to contain coolant and debris.

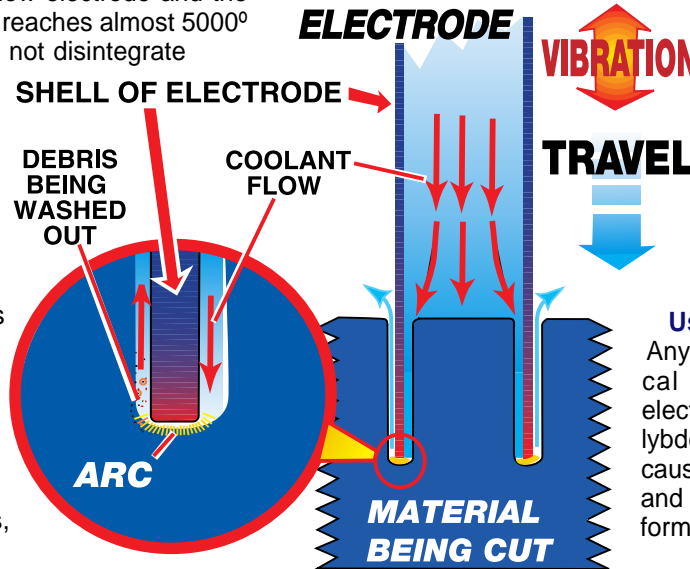
## ELECTRO ARC has perfected the fastest and most efficient disintegrating circuit available anywhere.

The Electro Arc disintegrator head makes and breaks an arc between the tip of the hollow electrode and the metal to be cut. The arc at the tip reaches almost 5000° Centigrade, but that in itself does not disintegrate metal.

Coolant, flowing through the electrode bore at 90 psi, creates a thermal shock that reduces the heated material to powder and washes it away at a much faster rate than, for example, EDM ionization.

The Electro Arc circuit works without dielectric fluid, solid-state components, sine phasing, or the need to regenerate supplied electrical power. Therefore, the Electro Arc design completely eliminates such problems as component deterioration, power generation loss,

polarity welding, and parts replacement – without causing material spatter.



### A clean cut with no damage to the workpiece

Because the high temperature arc between the electrode and workpiece is continuously quenched by the pressure coolant, there is no annealing of material around the hole. The hole created by the arc takes the same shape as the electrode used.

### Use any conductive material

Any tubing material that conducts an electrical current can be used as an electrode. However, ELECTRO ARC molybdenum electrodes are recommended because their high melting point, low erosion, and high conductivity deliver maximum performance.

Here's how fast it works:

Typical Cutting Speeds	
BROKEN TAPS ONE-INCH DEEP	REMOVAL TIME
0-80 to 10-32	LESS THAN 1 min
1/4"	1 min
5/16"	1-1/2 min
3/8"	1-3/4 min
1/2"	2 min
5/8"	3-1/2 min
3/4"	4 min
1-1/2" x 3" depth	18 min*

\*using a 3/4" disintrod

Any size tap can be removed

## Electro Arc Disintegrators offer:

- Heavy-duty machine tool modular construction
- Fast cutting, easy set-up, cost efficient, virtually maintenance free

## BENEFITS to you:

- Reclaim expensive parts quickly, easily
- Reduce labor cost — jobs finished in seconds instead of hours
- No waiting for parts to be returned from outside sources
- Portable, flexible, and affordable
- Immediate repairs on work of all types
- Eliminate production overruns and late deliveries
- Scrap reclamation

\*ELECTRO ARC is the only holder of both AC and DC original patents on disintegration.