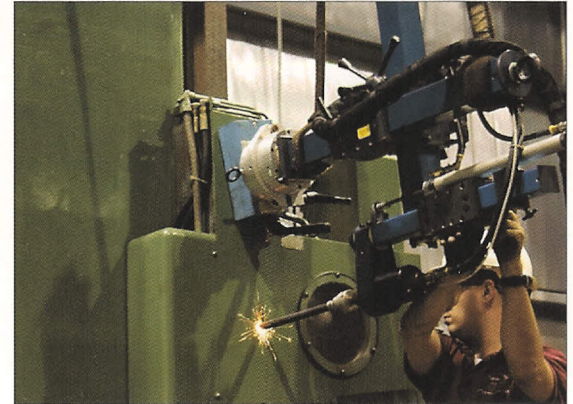




## Stud Disintegration MDM

Orbital Tool Technologies continues to employ state-of-the-art technology through our metal disintegration machines (MDM), which are considered some of the most powerful units available anywhere in the world.

Orbital Tool Technologies can completely remove a three-inch diameter stud, 5-1/2" deep, in less than 4 1/2 hours with no damage to the housing. Pins, studs and bolts of all shapes and sizes and made of any metal manufactured in the world today can be removed safely and effectively utilizing the OTT MDM process.



### Stud Disintegration - Overview

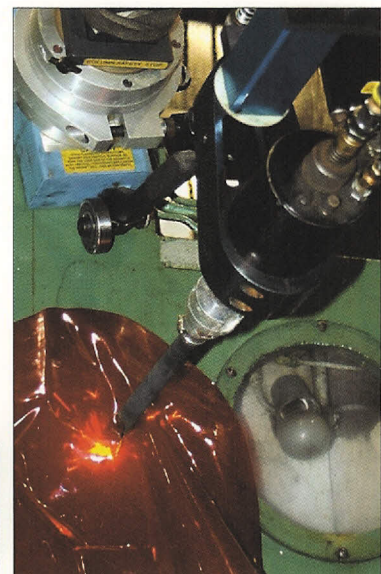
OTT's MDM Stud Disintegrator removes galled studs in about 40% less time than traditional methods. It's not only much faster - it's much safer to work with and won't damage bore threads or housings.

Portable and easy to use in the field, the MDM machine has a vibrating, low voltage, electrode that rapidly "eats away the stud," so it can be easily removed. Operating at ambient temperature, there is none of the usual heat build up and physical damage caused by traditional methods. The MDM process can be used on rounds, square stock or hex stock, and bolts of virtually any size.

### Benefits

The MDM Stud Disintegrator has a track record of success in thousands of extractions worldwide and is the most effective extraction tool in the world.

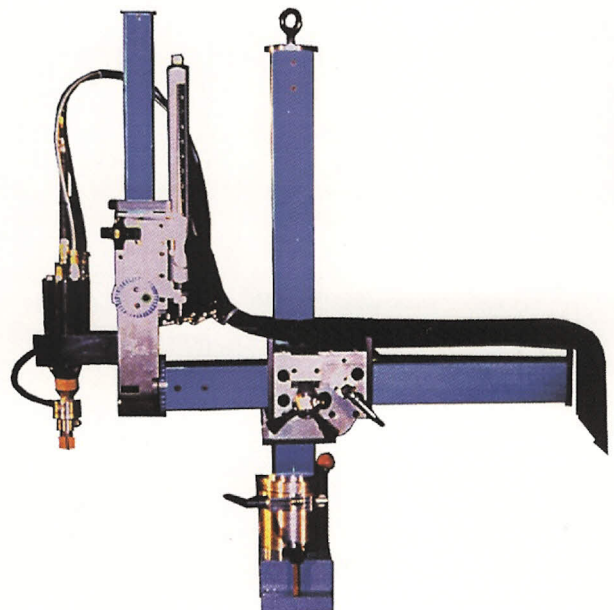
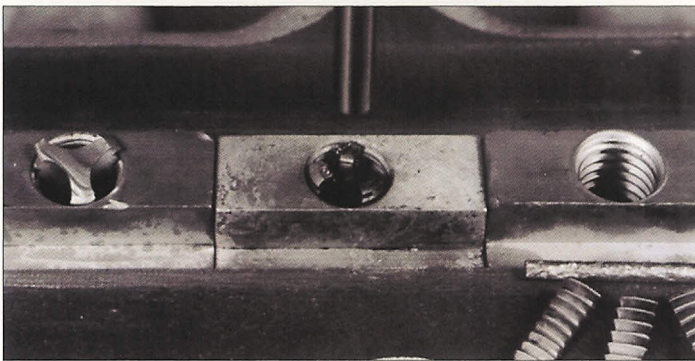
- Slashes delay times by 40% or more
- Improves worker safety
- Reduces related damage
- Cuts servicing costs
- Portable and versatile



## OTT Stud Disintegration - How It Works

Using graphite, moly, copper or aluminum, depending on the type of burn required, the machine becomes a high energy, low voltage, thermal shock-producing source. The electrode in the machine vibrates up and down 3,600 times a minute. Each time the electrode touches the piece to be burned, an arc is struck. The arc has a point of contact temperature of approximately 5,300 degrees Fahrenheit. A constant supply of fresh water is pumped down through the electrode causing a thermal breakdown of the molten metal, and at the same time flushing the thermally shocked metal back out the discharge hole. The discharged pieces are normally less than 10 microns in size (smaller than a grain of sand). The water also acts as a heat exchanger, i.e. the only portion that gets hot is the small area where the tip of the electrode makes contact, unlike drilling where heat from the bit transfers to the matted portion. The MDM maintains everything at ambient temperature, except what needs to be removed.

Orbital Tool Technologies can remove any size stud or bolt, or burn any configuration, from 40 thousandths of an inch to three inches in diameter in one pass. Larger studs can be removed or holes made using multiple passes. On average, the MDM is about 40% faster than conventional drilling, and even glazed or hardened studs or bolts can be removed with no problem using the MDM.



For more information, please email us at [ott@orbitaltool.com](mailto:ott@orbitaltool.com), or give us a call at 1-800-607-2838 to arrange a visit to one of our locations for a demonstration of the MDM technology.

**Our Business Revolves Around You**

Belvidere, IL

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