

Choose Your Wire with Six Criteria

SST LAB

bedra
topas® H.E.A.T.

H.E.A.T.



topas H.E.A.T. was originally developed by bedra for Makino machines with a H.E.A.T. generator but has since proven itself to be highly suitable on a variety of EDM machines. It's ideal for substantial productivity and increases in cutting speeds with applications that feature tall or stepped workpieces as well as with poor flushing conditions. It also performs extremely well by providing dramatically increased cutting speeds in nickel alloy and aerospace applications.

It is manufactured in Germany by bedra and sold exclusively by Single Source Technologies.

topas H.E.A.T. EDM wire features a CuZn20 (80% copper, 20% zinc) core with a zinc-rich brass double-layer coating. The high copper content of the brass core provides the benefits of highly efficient energy transfer which allows for higher cutting power and speed. The zinc enriched, patented double-layer coating promotes efficient cutting and its porous nature assists in flushing which helps prevent wire breaks.

It is manufactured to a tensile strength of 800 N/mm² and features a minimum elongation of 1%. It comes in .010"/0.25mm and .012"/0.30mm diameter on a wide variety of spools.

Straightness

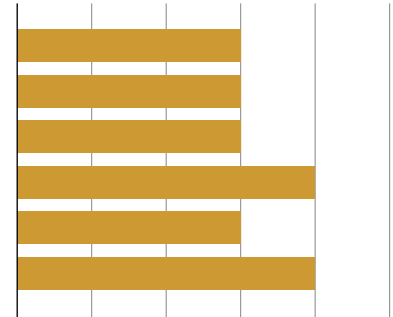
Strength

Cleanliness

Performance

Cut Quality

Cost



Straightness

A key factor in the reliability of automatic threading. Critical for older machines, not as critical for newer machines with wire annealing capabilities. Straightness is tested at both one meter and 300mm utilizing a custom designed fixture.

Strength

Primarily a measure of the wire tensile strength. However, in the case of Compeed wire, the ability to resist breakage under extreme conditions.

Cleanliness

A combined rating with respect to powder and residual lubricant or paraffin on the surface of the wire. This property is tested in a custom designed cleanliness testing machine as well as passing the wire through an actual pre-guide, power feed and guide assembly which mimics actual machine conditions.

Performance

The cutting speed potential relative to brass wire. Machine settings optimization may be required to attain the performance potential.

Cut Quality

The measured surface finish Ra and Rz resulting from an actual rough and multiple skim test cut.

Cost

Relative to standard brass wire

Primary Usages



Aerospace



Precision Machining



Tool & Die



Molds



General Machining



Medical



Production EDM