

ABSTRACT

AN ELECTRO-DISCHARGE MACHINING TOOL AND A METHOD OF USING THE SAME

5 An electro-discharge machining (EDM) device comprises a housing, an erosion
electrode, a ground electrode, and a dielectric inlet. The housing is configured to be
positioned on a surface of a workpiece and proximal to a fastener to be eroded. The
planar erosion electrode is positioned at least partially within the housing, with the
erosion electrode being movable relative to the housing in a first axis. The first axis is
10 substantially normal to a longitudinal axis of the fastener.

The ground electrode is conductively connected to the fastener. The dielectric inlet is
configured to deliver a dielectric fluid to a region between the erosion electrode and the
fastener.

15 [Figure 1]