

MCC BOLT CUTTERS

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I recently had the occasion to visit Matsuzaka Casting Company (MCC) located in Tsu-shi, Mie-Ken, Japan and observe the manufacturing techniques used to make their bolt cutters. MCC currently exports approximately 10,000 pairs of bolt cutters to the United States annually under their name. MCC also manufactures bolt cutters under the names of ten other companies which are sold in the United States. The company representative declined to name those companies but did agree to future identification if it became important during a particular examination.

There are many steps in manufacturing bolt cutters but I will only describe those steps that affect the cutting surface. The completed blades, except for the cutting surface, are placed in jigs and the cutting surface is cut with a milling operation. The milling head contains a series of eight tungsten carbide cutters. One thousand blades is considered one days production run and the cutters are sharpened or replaced at the end of each production run. After the cutting edge is produced they are removed from the jigs and by conveyer belt dropped into a tumbler (about 250 at a time). While in the tumbler, the blades are pressure blasted with steel shot approximately .024 inches in diameter at the rate of 120 kilograms per minute to smooth the rough edges. After the tumbling operation the blades are then sent through a hardening process and assembled. The blades are not tested and the only time they are ground is when all the burrs were not removed during the tumbling and blasting process.

This manufacturing process must mix the blades to such a degree that it would be very unlikely that an examiner would ever see consecutively made bolt cutters on a case as defense attorneys may sometimes argue. Since I was unable to obtain consecutively made bolt cutters, I obtained tests from three pairs of bolt cutters that were made during the same production run. Intercomparisons of these tests disclosed individual characteristics so different that there would be no possibility of misidentification.

The following information is provided to assist anyone wanting to contact MCC U.S.A., Inc.: MCC U.S.A, Inc., 820 South Santa Fe Avenue, Los Angeles, California 90021-1764; TX: 213/623-3382. CALIF - Toll Free 1-800-MCC-6009; FAX - 213/623-1081.

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