Spot Welding Electrodes: EcoCut

The customer manufactures automotive spot welding electrodes made from copper. They use a Daewoo Puma MS running with a ChipBlaster coolant pump to produce their products.

Looking for improvements, the customer needed to reduce cycle time, increase tool life, and lower the cost of production.

The **EcoCut** tooling reduced cycle time and increased tool life for the customer.



Case Study Solutions

		Measure Previous Tooling		EcoCut		
Product: Objective: Industry: Part: Material: Hole Ø: Hole Depth:	EcoCut Decrease cycle time Automotive Spot welding electrodes Copper 0.025" (0.635 mm) 0.625" (15.875 mm)		Solid carbide drill • Hole Ø: 0.3750" (9.525 mm) • Depth: 0.710" (18.034 mm) • Cycle time: 3 sec • Tool life: 7500 parts Carbide bar • Hole Ø: 0.4375" (11.113 mm) • Depth: 0.710" (18.034 mm) • Cycle time: 19 sec • Tool life: 9500 parts	Turning/facing tool • First Pass • Hole Ø: 1.50" (38.100 mm) • Depth: 0.650" (16.510 mm) • Second pass • Hole Ø: 0.625" (15.875 mm) • Depth: 0.025" (0.635 mm) • Cycle time: 1.2 sec • Tool life: 11,500 parts	First pass • Hole Ø: 0.3150" (8.001 mm) • Depth: 0.710" (18.034 mm) • Cycle time: 4.5 sec Boring pass • Hole Ø: 0.4375" (11.113 mm) • Depth: 0.710" (18.034 mm) • Cycle time: 6 sec	Turning operation • Hole Ø: 1.50" (38.100 mm) • Depth: 0.650" (16.510 mm) • Cycle time: 7.8 sec Final pass • Hole Ø: 0.625" (15.875 mm) • Depth: 0.025" (0.635 mm) • Cycle time: 0.2 sec
		Tool Life	11,500 parts		50,000 parts	
	Cycle 47.2 sec		2 sec	18.5 sec		

