

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.



		Measure	Previous Tooling		EcoCut	
Product:	EcoCut		Solid carbide drill	turning/facing tool	First pass	
Objective:	Decrease cycle time		• Hole Ø: 0.3750"	• First Pass	• Hole Ø: 0.3150"	Turning operation
Industry:	Automotive		• Depth: 0.710" • Cycle time: 3 sec	Hole Ø: 1.50"Depth: 0.650"	Depth: 0.710"Cycle time: 4.5	Hole Ø: 1.50"Depth: 0.650"
Part:	Spot welding electrodes		• Tool life: 7500 parts Carbide bar	• Second pass • Hole Ø: 0.625"	sec	• Cycle time: 7.8 sec
Material:	Copper		• Hole Ø: 0.4375"	• Depth: 0.025"	Boring pass • Hole Ø: 0.4375″	Final pass • Hole Ø: 0.6250"
Hole Ø:	0.025"		• Depth: 0.710" • Cycle time: 19 sec	• Cycle time: 1.2 sec • Tool life: 11,500	Depth: 0.710"Cycle time: 6 sec	Depth: 0.025"Cycle time: 0.2 sec
Hole Depth:	0.625"		• Tool life: 9500 parts		,	,
		Tool Life	11,500 parts		50,000 parts	
		Cycle	47.2 sec		18.5 sec	

