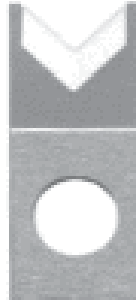


Creep Feed Grinding in the Automotive Industry



Part Data

Work Piece: Automated wire strippers for automobile wiring harnesses
Operation: Creep feed grind knife form with no burr
Material: A2, D2, M2
Hardness: 59-61 Hrc
Surface Finish: 16 Rms

Wheel Data

Size: 10" x 5/8" x 3" (254mm x 15.9mm x 76.2mm) 2 wheels per pack
Hermes Spec: EKT 120 G 16 V35HZ P44 XO 35 m/s
Competitors Spec: 29A 120 H18 VPMF 35 m/s

Truing Data

Dressing Device: Rotary diamond disk used for two axes profile generation

Machine Data

Blohm Three axes Precimat with 10 HP
Coolant 140 psa coolant nozzle using Houghton 795 @ 3% concentration

Process Parameters:

Using a wheel speed of 7200 SFM and a depth of cut of 0.300 in a down cut mode. The competitors' specification limited the process to a five inches per minute grinding feed rate. Using Hermes' new creep feed bond grinding wheel the x axis grinding feed rate was optimized to ten inches per minute with 20% spindle power consumption.

BCH10

For internal use only



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