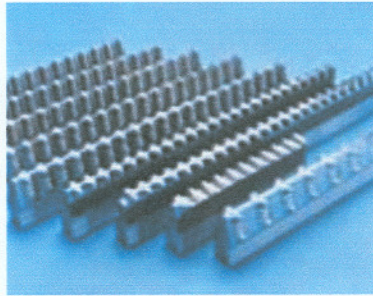


Creep Feed Grinding



Part Data

Work Piece: Broach grinding
Operation: Continuous dress creep feed grinding (CDCF)
Material: M2 Part length 28"
Hardness: 61 Hrc

Wheel Data

Size: 20 x 1 x 8 2 wheel set
Hermes Spec: ERT 80/2 H 16 V35 HZ P44 XO
Competitors Spec: 53A 60 E 25 VCF2

Truing Data:

Dressing Device: Rotary diamond roll

Machine Data

Blohm Profimat 412

Process Parameters:

Total stock removal of 0.030 – 0.040 of an inch using continuous dress creep feed grinding to grind the broach body and neck area. Competitor was limited to 50 inches per minute grinding feedrate with 50 millionths per revolution infeed of the rotary dressing roll. Hermes product achieved 70 inches per minute grinding federate with the dressing reduced to 20 millionths per revolution infeed of the rotary diamond roll. 40% increase of grinding feedrate while reducing abrasive wheel use by 30%.

BCH16



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