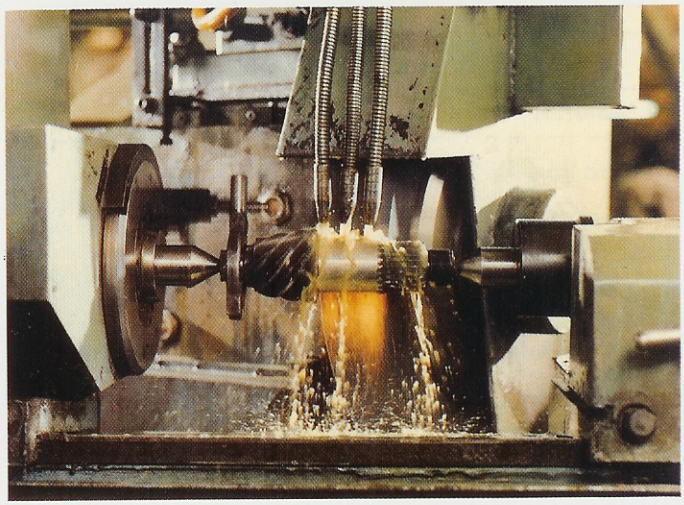
CUMI

Cylindrical Grinding



Cylindrical grinding is a process of grinding to include all outside grinding of round work even though the finished part is not always a true cylinder. The work may be, for instance, conical in shape or it may consist a special form grinding with the face of the wheel dressed to an irregular shape.

Requirements in cylindrical grinding vary from fast stock removal to ultra smooth finishes.

CUMI'S versatile range covers for this application

Brown Aluminium Oxide (A) for Alloy steel both Hard and Soft
Mixed Aluminium Oxide (DA) for Low grindability Alloy steel
White Aluminium Oxide (AA) for Tool Steels & HSS
Black Silicon Carbide (C) for Non-ferrous metals & Non-metals
Green Silicon Carbide (GC) for Tungsten Carbide.

Bond - Vitrified, Resinoid

Operating Speed - 33, 45 & 60 mps (6,500 to 12,000 SFPM)

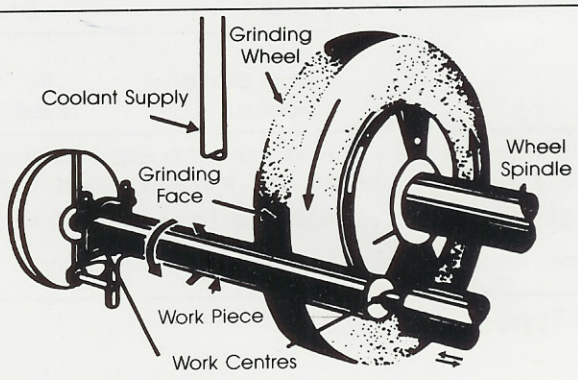
Type of wheels - 1,5,7 and Special Sketch Wheels.

Machines: HMT, Parishudh, MKL, Landis, Studer, Cincinnati, Warner Swasey, Churchill, Newall, WMW

Guidelines for wheel selections

Things to Consider : 1. Roughing or Finishing
2. Traverse or Plunge
3. Stock removal
4. Requirements of finished part

a. For Roughing use coarse grit and soft grade. Grade differences often depend on part size.
b. For finishing, use finer grit and medium grades and light pressures. Surface finish can be controlled by varying the traverse rate or by increasing the amount of dwell time.
c. For Traverse grinding, establish a setup of work RPM with a good even infeed rate and a spark out period to produce the surface finish required.
d. For light stock removal, use a finer grit and soft or a medium grade J-K and slow traverse rate to obtain higher surface finish.
e. For good surface finish on the job use a fine grit 60-80 and medium grade J-K. if surface finish is not critical, use 46-60 grit J or K and it is possible to change the surface finish by changing the traverse rate. In plunge grinding the surface finish will be controlled by the grit size and amount of spark out.



Cylindrical grinding of a shaft with Type 5 Wheels