

3M™ Cubitron™ II Vitrified Wheels for Outer Diameter Grinding

Outer diameter grinding ranks among the most frequently used grinding processes in the automotive industry, in general mechanical engineering or in the automotive supply industry.

Application examples:

- Bearing industry
- Drive shafts
- Bolts
- Fuel injection needles
- Machine components
- Valves
- Other



The advantages at a glance:

- Up to 1.5–10 times higher material removal rate Q'_w
- Up to three times faster cycle time per part
- Up to 1.5–3 times higher service life between two dressing cycles
- Half the dressing amount
- Perfect surfaces at maximum material removal capacity

Recommended operating parameters

Cutting speed (v_c)	40–50 m/s
Material removal rate	6–12 mm ³ /mm/s

Examples for frequently used specifications

Please get a recommendation as to the appropriate specification for your application from our local sales office.

	Applications	Product Code	Specifications
Main specifications	Stainless steels, chrome-plated, thin-walled materials, grinding of high shoulders, eccentric grinding, high material removal rate	92 VJ	93DA80/80 H15VPMF601W
	Universal applications, case hardening or heat-treated steel, induction hardened steel, cast iron		93DA80/80 H8V601W
Special specifications	Roughing, coarser surfaces		93DA60/60 H8V601W
	Finishing, finer surfaces		93DA120/120 H8V601W
	Soft materials coarse		93DA60/60 K5V601W
	Soft materials normal		93DA80/80 K5V601W
	Soft materials fine		93DA120/120 K5V601W

Investment appraisal: OD grinding of guide rods

Operating Parameters	Competitors	3M™ Cubitron™ II 92 VJ
Grinding wheel dimensions	500×80×203.2 mm	500×80×203.2 mm
Machine-hour rate in EUR	100	100

Performance Results	Competitors	3M™ Cubitron™ II 92 VJ
Maximum material removal rate	55 mm ³ /mm/s	12 mm ³ /mm/s
Dressing cycle (number of workpieces)	1	3
Total grinding time in minutes	04:50	02:45

Productivity Result	Competitors	3M™ Cubitron™ II 92 VJ
Reduction of grinding time per workpiece	–	43%
Reduction of dressing costs as factor	–	3



Abrasive Systems Division
 3M Center, Building 223-6N-02
 St. Paul, MN 55144-1000
 1-855-809-1710
3M.com/us/precisiongrinding

For more information, please contact us at 1-855-809-1710.

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