



Abrasives for Crank Shaft Industry



INTRODUCTION

CUMI is the global manufacturer of Crankshaft grinding wheels for grinding entire range of crank shafts used in various industries like.

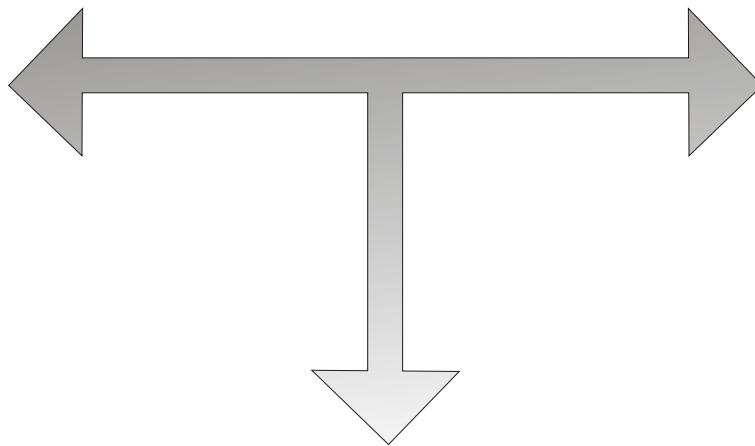
1. Light and Heavy commercial vehicles
2. Motor cars
3. Two wheelers
4. Generators
5. Ship building.

Crankshaft Grinding

CUMI's Crankshaft Grinding wheels are made using special, high performance bond systems in an unique manufacturing process, tailored to suit each market segment. This manufacturing technology coupled with the application engineering expertise offered, makes CUMI's crankshaft grinding wheels highly cost effective. Besides optimizing grinding efficiencies, the wheels also provide better surface finish and perpendicularity. CUMI also specializes in making Sandwich wheels with harder sides and soft centers, ideal for grinding crankshafts of differential hardness in diameter and fillet radius. CUMI makes crank wheels for Engine re-building industry and these wheels are used for re-grinding crankshafts with the traverse grinding method and available in standard sizes.

Industry Segments

- ▶ Auto OEMS
- ▶ Auto Ancillary
- ▶ Defense
- ▶ Replacement Market



CRANK SHAFT

Grinding Wheel Application

- ▶ Journal Grinding
- ▶ Shank Grinding
- ▶ Pin Grinding
- ▶ Flange Grinding

Types of machines

- ▶ Single wheel Mounting
- ▶ Twin wheel mounting
- ▶ Multi wheel setup (Gang Grinding)

Used by OEM's on machines	Used in replacement market on machines	
Naxos union	Zanrosso	Prince
Landis	Tos	Berco
Newall	Churchill	Amc
Gendron	Vannorman	Rex
Norton	Lampco	Ribbon
Toyada	Schledum	Schou
Fortuna	Landis	Norton
Saimp	Storm vulcan	Bjm

Crankshaft Grinding

Product Range

Abrasive Type	Diameter	Thickness	Grit	Speed	Hardness	Structure	Type of Bond
A	600 - 1200	25 - 50*	46 - 80	33 / 45	I - O	4.5 & 7	V10, V45, V10X, V45X
DA	600 - 1200	25 - 50*	46 - 80	33 / 45 / 60	I - O	4, 5 & 7	V10, V10X, V45, V5X, V2018, V223, V2020, V500
AA	600 - 1200	25 - 50*	46 - 80	45 / 60	I - O	4, 5 & 7	V45, V223, V2020, VK5, V500
AA	600 - 1200	25 - 50*	46 - 80	45 / 60	I - O	4, 5 & 7	V45, V223, V2020, V500
CUMISA	600 - 1200	25 - 50*	46 - 80	60	I - O	5 & 6	VCAE, VSAE, V2020, V500

* Upto 75 mm for replacement market

Type of Material / Speed	Starting Recommendations		
	33 mps	45 mps	60 mps
Forged Steel-Soft	A463 N5 V10 A543 L5 V10X	A463 K5 V2018 A543 K5 V45	DA60 J5 V2018
Forged Steel-Hard	A463 L5 V10 A543 K5 V10 DA543 K5 V2020 V2018/V2020/	A463 L5 V45 A543 J+5 V45 A543 K5..... TDV524	DA543 J5 V2018 Da601 J5 V2018 1CUMISA601 TDV765
Cast Iron	DA463 M5 V10	DA463 L5 V45 DA543 K5 V45	DA543 J+5 V2018 DA543 K5 V2020
Nodular Iron	AA463 L5 V8	AA463 K5 V2018 AA543 K5 V2020	AA60 CM17 VK5 AA60 J5 V2020
SG Iron	DA543 K5 V524 DA463 L5 V15	DA601 K5 V2018 DA463 L5 V45	DA801 K+5 V223 DA601 J+5 V2018 AA60 CM17 VK5 AA463 CM27 VK5 1CUMISA 601 TDV765 3CUMISA80 L6 V807 1CUMISASOL L6 V500 / 60

Crankshaft Grinding

Benefits

- High stock removal
- Lower cycle time / higher productivity
- More parts / dress
- Longer wheel Life
- Good / consistent surface finish
- Better dimensional accuracy
- Cooler cutting - burn free / crack free components
- Reduction in grinding cost

Features

- Good form retention
- More parts / dress
- Better cutting action

