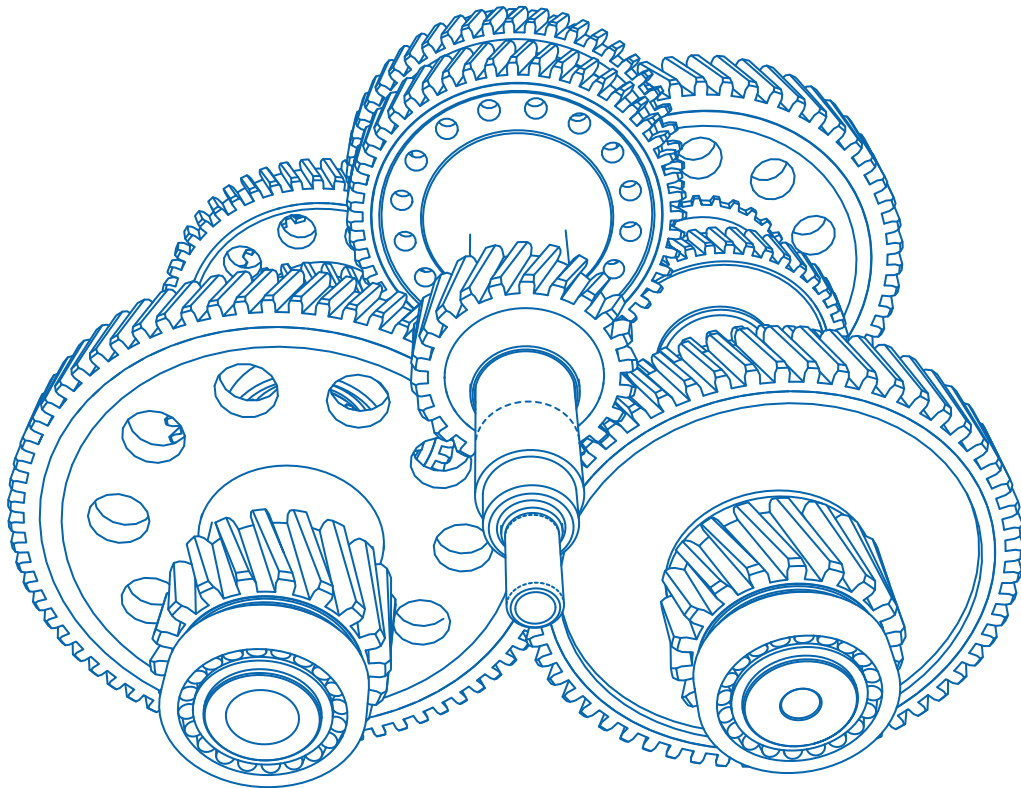




ABRASIVE SOLUTIONS



**TRANSMISSION
INDUSTRY**

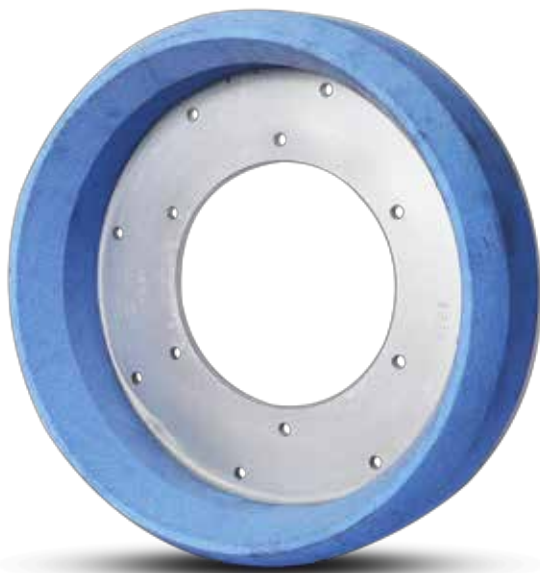


Bevel Gear Grinding Wheels



Bevel Gears enable efficient power transmission at intersecting angles, making them indispensable in automotive, industrial, aerospace, and marine systems. Precision-ground using cup or cylindrical grinding wheels, they ensure smooth and accurate operation in critical applications like differentials, machinery, and wind turbines.

CUMI's advanced grinding wheels deliver precise gear profiles, superior material removal rates, and extended wheel life. Engineered for durability and consistency, they guarantee optimal performance in bevel gear and pinion manufacturing processes.



Key Features :

- Microcrystalline grains ensure high stock removal, reduced cutting energy, and self-sharpening.
- Advanced bond system enhances grain adhesion, cooler cutting, and extended wheel life.
- Designed for durability and precision across diverse grinding applications.

Advantages & Benefits :

- High removal rates and shorter cycle times improve productivity.
- Controlled wear ensures longer life and consistent performance.
- Delivers smooth, scratch-free surfaces.

Product Range

OD (mm)	Width (mm)	Bore (mm)
80 - 500	50 - 150	50.8 - 203.2

Grades

Good	Better	Best
1MCA601 K7 VC500/45	3MCA601 J6 VC500/45	5MCA601 I7 VC500/45



TRANSMISSION INDUSTRY



Angular Grinding Wheels for Transmission Shafts



Transmission Shafts are essential for transferring power and torque across mechanical systems in automotive, industrial, and power transmission applications. Precision grinding ensures optimal performance and durability for efficient power transfer.

CUMI's CSA abrasive grains are engineered ceramic aluminum oxide, designed to maintain sharpness during grinding. These grains provide high cutting efficiency, exceptional durability, and extended wheel life, resulting in reduced downtime and significant cost savings.



Key Features :

- Chemically engineered ceramic aluminum oxide with a microcrystalline structure, optimizing cutting efficiency and performance.
- Precision glassy bond for enhanced rigidity, consistent results, and operation at speeds up to 60 m/s
- Lead-free, environmentally friendly components ensuring sustainable operations.

Advantages & Benefits :

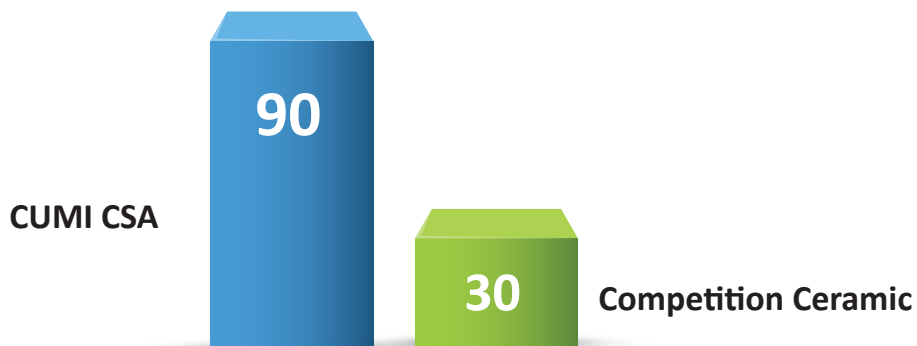
- 3X more parts/dress, minimizing downtime and maximizing cost efficiency.
- Dual-functionality wheel offering versatility with high material removal rate (MRR) for increased productivity.
- Improved overall equipment efficiency (OEE) and higher throughput, ensuring optimized production and resource utilization.

Product Range

Grain Type	Grit Size	Dia - mm	Thickness - mm	Hardness	Structure	Bond	Wheel Speed
CSA	60 - 150	400 - 760	15 - 200	H - L	6 - 12	Krystal	Upto 60m/s

Dressing Interval (mm)

Case Study of 2W & 4W Transmission Shaft



TRANSMISSION INDUSTRY



Generative Grinding Wheels



Generative Gear Grinding is a high-precision process that shapes accurate gear profiles with superior surface finishes. It uses a specialized grinding wheel designed to match the gear's profile, enabling continuous generation movements to shape gear teeth. Widely used in automotive, aerospace, and heavy machinery sectors, this method ensures gears meet strict tolerances and performance standards.

CUMI Generative Gear Grinding Wheel delivers precise tooth profiles, consistent dimensions, and superior surface finishes. Made with premium abrasives, it ensures durability, efficiency, and an extended lifespan for both small-scale and high-volume gear production.

Key Features :

- Advanced macro/micro-crystalline Aluminum Oxide grains for superior grinding efficiency.
- Integrated cooling mechanisms minimize heat generation during grinding.
- Precision glassy bond ensures rigidity and consistent results.
- Enhanced durability with extended wheel life and sharpness retention.

Advantages & Benefits :

- Reduced dressing frequency for minimal maintenance.
- Faster grinding cycles to boost productivity.
- Cost-efficient performance with consistent grinding quality.
- Optimized operations for enhanced throughput and efficiency.
- Reliable performance across various applications.



Product Range

Grain Type	Grit Size	Dia - mm	Thickness - mm	Hardness	Structure	Bond	Wheel Speed
SA, CSA, CN	60 - 120	200 - 400	80 - 250	I - K	10 to 12	Krystal	Upto 80 m/s

Grades

Gear Module	Good	Better	Best
Upto 1.5M	24R120 I12 V736/80	3CSA120 I12 V736/80	2CN120 I12 V736/80
1.75 - 2.25M	24R100 J12 V736/80	3CSA100 J12 V736/80	2CN100 J12 V736/80
2.5 - 4M	24R80 J12 V736/80	3CSA80 J12 V736/80	2CN80 J12 V736/80
Above 4.25M	24R80 J12 V736/80	3CSA80 J12 V736/80	2CN80 J12 V736/80



TRANSMISSION INDUSTRY