



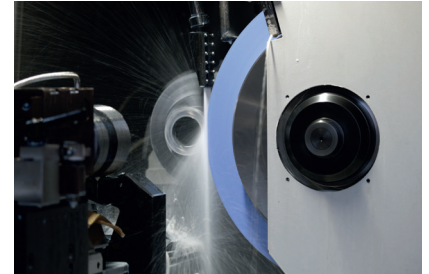
CSS ULTRA

HIGH PERFORMANCE GRINDING WHEELS
FOR EXTERNAL CYLINDRICAL GRINDING
AND THREAD GRINDING

CSS ULTRA

With the CSS ULTRA product line, TYROLIT has engineered a new wheel formulation combining the latest high-quality components and innovative bonding technology. High performance grinding is possible with these specifications because they minimize the heat generated and the forces imposed on both the tool and workpiece. Thanks to the innovative bond system of CSS ULTRA, a significant increase in grinding performance is achievable.

Application: External cylindrical grinding of automotive components.



+ Long lifetime/good profile retention: Due to the high-strength bond system, the abrasive grain can withstand much greater loads during use without breaking down prematurely.

+ Cool grinding (no burning): The high strength bond system allows for a reduction of bond content, which helps decrease friction for a cooler grind.



+ Shorter grinding time/higher productivity: With CSS ULTRA, the stock removal rate can be increased while maintaining part quality.

+ Approved up to 80 m/s: High-strength bond system is ideally suited for high speed grinding. With CSS ULTRA, peripheral speeds of up to 80 m/s can be achieved.

Example of application

Bearing industry: Grooved ball bearing inner ring 6206 – grinding of race
CSS ULTRA 1LB 610x17x304.8 CS66A120HH3VB1 80
Reduction of grinding time by 30%



Tool manufacturing industry: Taps – thread grinding
CSS ULTRA 1GEW 400x25x160 CS33A240HH3VB1 80
Reduction of dressing amount by 30%



Automotive industry: Crankshaft – grinding of bearing journal
CSS ULTRA 1KN 1065x40x305 CS33A541KK6VB1 50
Increase in lifetime by 50%



Typical components

inner ring
outer ring
spherical roller
cylindrical roller

tap
thread former

crankshaft
camshaft
gear shaft
CV joint
fuel injection components

Innovative bond system

Surface structure of CSS ULTRA in conjunction with a grit mixture made from white and sintered aluminium oxide



Surface structure of CSS ULTRA