

**COLUMBIA USA**  
INTERNAL BORE AND RACE GRINDING

[www.radiac.com](http://www.radiac.com)

**Radiac**  
Abrasives  
A TYROLIT Company



# COLUMBIA USA

COLUMBIA USA grinding wheels from Radiac bridge the technological gap between grinding wheels made of fused aluminium oxide and superabrasives. For internal bore and race grinding applications, these products of specially bonded sintered aluminium oxide develop their full potential and deliver unparalleled levels of performance. This is true for both small and large bore components with various hardened steels.

## + Precision quality for ground rings:

COLUMBIA USA reduces the grinding forces and enhances the cool grinding behavior. Even with enhanced stock removal rates and significantly longer dressing intervals, the high quality standards can still be achieved.

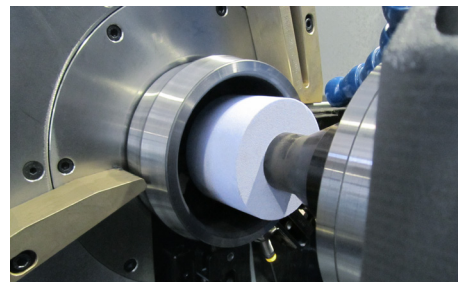
## + Optimizing economic efficiency:

Reduced grinding cycle times, longer dressing intervals and low non-productive times represent optimization potential. As internal bore and race grinding applications are often bottleneck processes, COLUMBIA USA grinding wheels enable particularly high savings.



## Application

Grinding of bores and tracks



## + Maximum process stability:

Large stock removal fluctuations can also be compensated for by the COLUMBIA USA grinding wheel. The components to be ground can be manufactured with a consistent level of process stability.

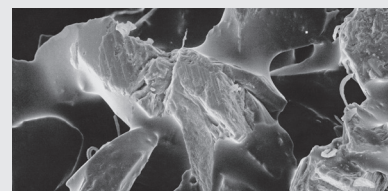
## Example of application

Internal grinding of ball bearings 6207  
RADIAC COLUMBIA USA 1 28x17x10 AH120L6VCOL 80

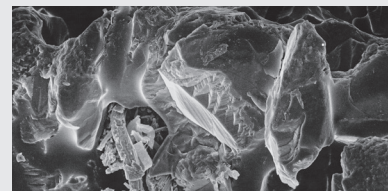
Grinding cycle time reduced by 30%



6.6x increase in lifetime



Homogenous grain abrasion with COLUMBIA USA



Arbitrary grain break-out with fused aluminium oxide

Only specially bonded sintered aluminium oxide forms defined cutting edges in the grinding process. With COLUMBIA USA grinding wheels, the wheel wear is primarily due to homogenous grain abrasion and not arbitrary grain break-out as with fused aluminium oxide.