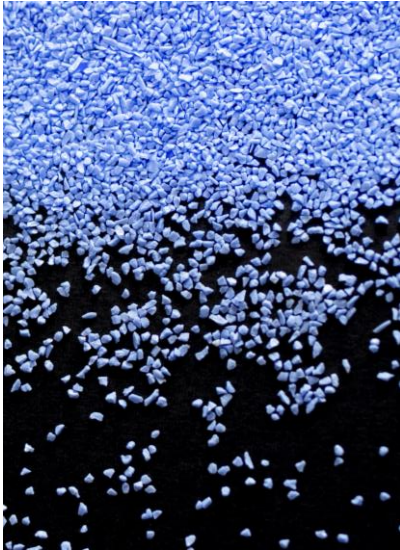


# RECERAMAX® RE

## Properties

RECERAMAX® RE is the standard version of the RECKEL microcrystalline ceramic grain. It can be used for Coated Abrasives, Bonded Abrasives, Cut-Off-wheels, Roughing-wheels as well as for Clean & Strip-Nonwoven discs.



Ceramic Grain	RECERAMAX® RE
Grain Type	microcrystalline sintered ceramic grain
Grain Profile	longitudinal & blocky
Grain Color	blue
Grit Size Range Standards	#16 - #1500 FEPA-F, FEPA-P & ANSI
Hardness Vickers (kN/mm <sup>2</sup> )	19,5 - 21
Grain Density (g/cm <sup>3</sup> )	3,85 – 3,97
Bulk Density (g/cm <sup>3</sup> )	1,6-2,0 (due to grit size)

The surface quality of RECERAMAX® RE grain has good adhesion properties for both vitrified and resin bonds. RECERAMAX® RE has good jumping properties in the electrostatic field when producing Coated Abrasives.

RECERAMAX® RE is a microcrystalline sintered ceramic grain, developed and produced with the Seeded-Gel Technology of RECKEL. The nano fine raw materials produced by RECKEL itself, guarantee that the ceramic composites of the grain creates microcrystalline structures in the manufacturing process.

These lead to a ceramic grain with high hardness and strength. This results in a high sharpness and resistance of the grain cutting edges. On the one hand, these properties results in low cutting forces, which enable workpiece-friendly grinding, and on the other hand it can be used for high-pressure grinding with high cutting forces. The maximum loading temperature within the hardening process of bonded abrasives is 1430°C.

## Availability

RECERAMAX® RE ceramic grain is available in grit size standards of FEPA-P and FEPA-F from #16 to #1500 as well as in ANSI from #16 to #220.

RECERAMAX® RE	16	20	24	30	36	40	46	50	60	70	80	90	100	120	150	180	220	240	280	320	360	400	500	600	800	1000	1200	1500
FEPA-P	x	x	x	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
FEPA-F	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
ANSI#	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x												

## Packaging

RECKEL RECERAMAX® ceramic grains come in paper bags of 25 kg. Special sizes are available on request.

## Storage

RECKEL RECERAMAX® ceramic grains should be protected from frost, heat and other extreme circumstances.

## Chemical Properties

Constantly chemical and physical tests during the whole production process of all RECERAMAX® grain types ensures its sustainable quality. All test processes are part of an internationally approved quality control.

chemical element	wt %
Al <sub>2</sub> O <sub>3</sub>	94 – 96
La <sub>2</sub> O <sub>3</sub>	1,9 – 2,3
MgO	1 – 1,4

chemical element	wt %
Y <sub>2</sub> O <sub>3</sub>	1 – 1,5
TiO <sub>2</sub>	0,9
CoO	0,01 – 0,024

## Applications

RECERAMAX® products offer our customers ceramic grain types with high efficiency. Thus a wide range of applications in different fields are approachable. Constantly opening up new market fields in close collaboration with our experts.

### Tools

#### Bonded Abrasives

- grinding wheels and rollers
- rapid-cut wheels
- grinding segments
- cutting and roughing wheels

#### Coated Abrasives

- grinding belts and sleeves
- flap-, fiber- and velcro discs
- nonwoven abrasives

### Applications

- ID and OD gear
- Crank- and Camshafts
- Bearings
- hardened precision parts
- medical parts and implants
- tubes, rods, spindles, rollers
- metal surface stock removal and finishing
- cutting and roughing
- automotive body (OEM and repair)

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