

# KeraTech



**CATALOGUE**





# Our history

With an experience of over twenty-five years combined with the commitment to constant upgrading, KeraTech consolidates its position in the production of refractory materials. The enthusiasm of experts created a solid and trustworthy company. The constant technological renovation and the assimilation of know how allowed for the company to grow and reach a leading position in the market of refractory rollers.

The company offers a wide range of products suitable for the employment in any zone of the kiln. Over the last years KeraTech has created innovative ceramic rollers with working specifications of load and chemical aggression resistance which cannot be easily found elsewhere. Furthermore, a special attention is always paid to the respect of the technical and dimensional features of the products.

KeraTech personnel met and won the challenges of the market and forestalled its natural evolution at the same time. The customer is always guaranteed a very high quality level, innovative and tailored solutions and technical assistance in all phases of the supply chain.

KeraTech has always been a reliable company, thanks to a strongly quality oriented industrial policy. The professional features of its activity are guaranteed by UNI EN ISO 9001 Quality Management Systems.

The challenge set by sustainable development further increased the sensitivity of the company towards the environment. KeraTech considers this topic to be very important and has implemented solutions which, besides being state-of-the-art technology, assure the respect of the environment in all stages of the production process in compliance with UNI EN ISO 14001 Environmental Management Systems.





**Our products**

## Keramull KM 250

Semi-technical roller. Suitable for low-medium loads. It is the ideal product in order to manufacture single and double-fired tiles.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

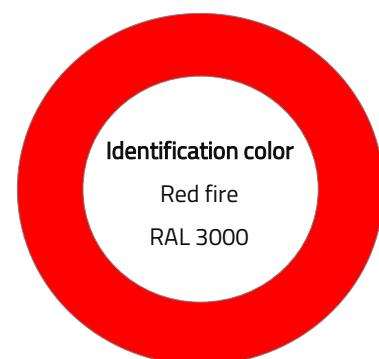
### Type

Semi-Technical

Al <sub>2</sub> O <sub>3</sub> content	77%
Bulk density	2.60 Kg/dm <sup>3</sup>
Apparent porosity	21.0%
M.O.E. 20°C	> 85 GPa
Thermal expansion 20-400°C	4.9*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	6.05*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Single firing
- Double firing
- Gres



## Keramull KM 301 AR

Very versatile technical roller characterized by a good resistance to chemical aggression. Thanks to its chemical-physical characteristics it is recommended not only for the most subjected zone to chemical aggression but also for the firing zone for medium loads.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

### Type

Technical

Al <sub>2</sub> O <sub>3</sub> content	78%
Bulk density	2.70 Kg/dm <sup>3</sup>
Apparent porosity	19.0%
M.O.E. 20°C	> 93 GPa
Thermal expansion 20-400°C	5.0*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	6.10*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Single firing
- Double firing
- Gres
- Suitable for high firing temperatures and medium loads



## Keramull KM 306 SH

High modulus of elasticity, very low porosity and a practically absent vitreous phase. The roller is suitable both for the pre-firing and firing zone, for the production of large and heavy tiles. It guarantees a correct and uniform alignment of the material inside the kiln.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

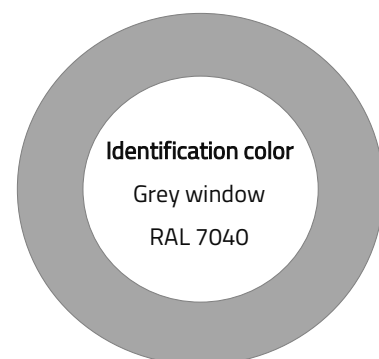
### Type

Super-Technical

Al <sub>2</sub> O <sub>3</sub> content	78%
Bulk density	2.85 Kg/dm <sup>3</sup>
Apparent porosity	16.0%
M.O.E. 20°C	> 105 GPa
Thermal expansion 20-400°C	5.0*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	6.20*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Single firing
- Grès
- Extruded tiles



## Keramull KM 25-20

Roller characterized by exceptional operational stability and versatility: very low thermal expansion coefficient, high resistance to thermal shock and chemical attack. High elastic modulus constant at all temperatures. Fit for the production of tiles up to 20 mm thickness.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

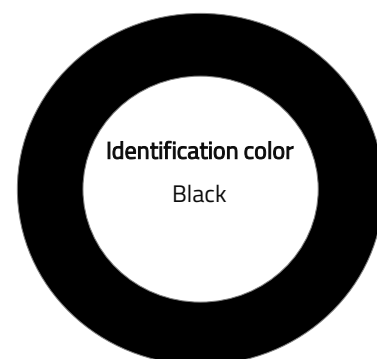
### Type

Super-Technical

Al <sub>2</sub> O <sub>3</sub> content	70%
Bulk density	2.80 Kg/dm <sup>3</sup>
Apparent porosity	17.0%
M.O.E. 20°C	> 105 GPa
Thermal expansion 20-400°C	4.5*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	5.5*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Pre-firing
- Firing
- "Semianello" (zone between the end of the firing zone and the beginning of the rapid cooling)





# Keramull KM 610 SHD

Extremely high modulus of elasticity constant at all temperature. Excellent for use in the firing zone. Fit for the production of very heavy tiles up to 30 mm thickness.

## Mineralogical composition

- Corundum
- Mullite
- Zirconia

## Type

Super-Technical

Al <sub>2</sub> O <sub>3</sub> content	78%
Bulk density	2.95 Kg/dm <sup>3</sup>
Apparent porosity	14.0%
M.O.E. 20°C	> 115 GPa
Thermal expansion 20-400°C	5.3*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	6.25*10 <sup>-6</sup> K <sup>-1</sup>

## Typical use

- Single firing
- Grès
- Extruded tiles
- Tableware



# Keramull KM RL-MU80

Roller for the slow and final cooling zone. It guarantees a very good alignment of the material. The roller can be used up to 1000°C.

## Mineralogical composition

- Corundum
- Mullite

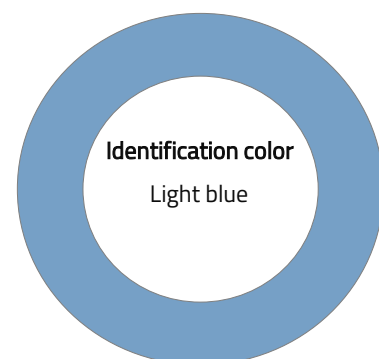
## Type

Special Products

Al <sub>2</sub> O <sub>3</sub> content	75%
Bulk density	2.70 Kg/dm <sup>3</sup>
Apparent porosity	17.0%
M.O.E. 20°C	> 110 GPa
Thermal expansion 20-400°C	4.5*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	5.5*10 <sup>-6</sup> K <sup>-1</sup>

## Typical use

- Cooling area (slow and final)
- Dryers



## Keramull KM RR-LTE

Silicon-carbide based roller, to be used in the cooling zones of the kiln. It is characterized by a high resistance to oxidation and can be used up to 1000°C. It guarantees maximum stability in the event of thermal gradients thanks to its high thermal conductivity and low expansion coefficient.

### Mineralogical composition

- Silicon carbide
- Cordierite

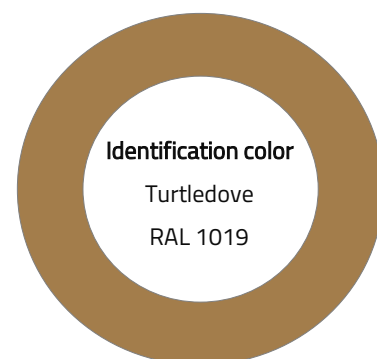
### Type

Special Products

Al <sub>2</sub> O <sub>3</sub> content	25%
Bulk density	2.40 Kg/dm <sup>3</sup>
Apparent porosity	17.0%
M.O.E. 20°C	> 55 GPa
Thermal expansion 20-400°C	2.3*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	3.15*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Cooling zone
- Excellent stability in case of high thermal gradient



## Vector

Through different peripheral speeds, this roller is capable to align the advancement of the tiles inside the kiln, before the material reaches the firing zone.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

### Type

Special Products

Al <sub>2</sub> O <sub>3</sub> content	78%
Bulk density	2.85 Kg/dm <sup>3</sup>
Apparent porosity	16.0%
M.O.E. 20°C	> 105 GPa
Thermal expansion 20-400°C	5.0*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	6.20*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- Pre-firing



## Rigato

Roller recommended for the production of very large and thin tiles.

### Mineralogical composition

- Corundum
- Mullite
- Zirconia

### Type

Special Products

Al <sub>2</sub> O <sub>3</sub> content	70%
Bulk density	2.80 Kg/dm <sup>3</sup>
Apparent porosity	17.0%
M.O.E. 20°C	> 105 GPa
Thermal expansion 20-400°C	4.5*10 <sup>-6</sup> K <sup>-1</sup>
Thermal expansion 20-1000°C	5.5*10 <sup>-6</sup> K <sup>-1</sup>

### Typical use

- According to customer requirements



# Kerasand

Aluminous grit for refractory and abrasive use. Grain size 0 – 1 mm.

## Mineralogical composition

- Corundum
- Mullite
- Zirconia

## Type

Special Products

## Chemical analysis

$Al_2O_3$	$\geq 75\%$
$SiO_2$	$\geq 17\%$
$ZrO_2$	$\geq 5\%$
$Fe_2O_3$	$\leq 0,25\%$

## Diffraction analysis

Corundum	31%
Mullite	64%
Badelleyite	5%
Glassy phase	traces



**KeraTech S.p.A.**

Via 2 Giugno 7, 34076 Romans d'Isonzo (GO) – Italia

CF 01622341202 P.IVA 00506180314

ph. +39 0481 909380 – [keratech@keratech.net](mailto:keratech@keratech.net)

[www.keratech.net](http://www.keratech.net) – [keratech@registerpec.it](mailto:keratech@registerpec.it)

