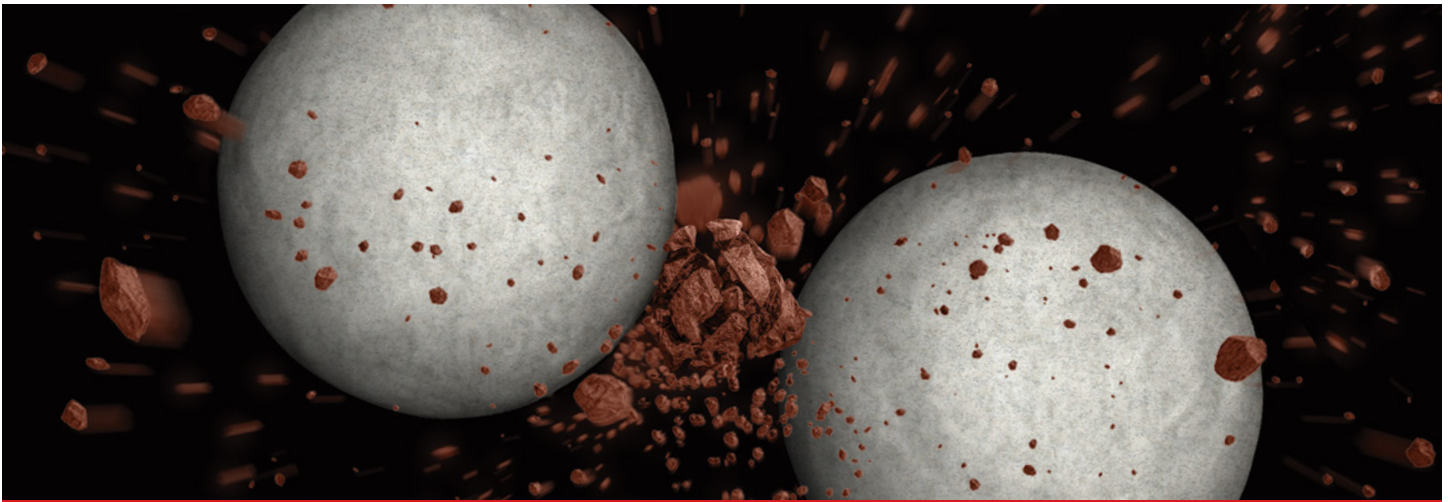


# CARBOGRIND

High-performance low-density ceramic grinding media



## Improve grinding performance and reduce costs

CARBOGRIND high-performance low-density ceramic grinding media is engineered to provide unmatched economic and performance advantages in fine grinding and ultra-fine grinding of soft and intermediate minerals in horizontal and vertical mills. Our sintering manufacturing process results in superior strength and wear resistance with a consistent particle size and shape.

### Chemical and physical properties

#### Typical sieve analysis (weight % retained)

| Sieve size (mesh) | Microns      | 260-008 | 260-010 | 260-015 | 260-020 | 260-030 | 280-020 | 280-030 | 300-020 | 300-030 |
|-------------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| (-5+6)            | (-4000+3350) | -       | -       | -       | -       | 21      | -       | 21      | -       | 21      |
| (-6+7)            | (-3350+2800) | -       | -       | -       | -       | 58      | -       | 58      | -       | 58      |
| (-7+8)            | (-2800+2360) | -       | -       | -       | 2       | 21      | 3       | 21      | 3       | 21      |
| (-8+10)           | (-2360+2000) | -       | -       | -       | 24      | -       | 54      | -       | 54      | -       |
| (-10+12)          | (-2000+1700) | -       | -       | 3       | 56      | -       | 42      | -       | 42      | -       |
| (-12+14)          | (-1700+1400) | -       | -       | 26      | 18      | -       | 1       | -       | 1       | -       |
| (-14+16)          | (-1400+1180) | -       | 5       | 64      | -       | -       | -       | -       | -       | -       |
| (-16+20)          | (-1180+850)  | 7       | 93      | 7       | -       | -       | -       | -       | -       | -       |
| (-20+30)          | (-850+600)   | 90      | 2       | -       | -       | -       | -       | -       | -       | -       |
| (-30+40)          | (-600+425)   | 3       | -       | -       | -       | -       | -       | -       | -       | -       |

Other sizes available on request.

**CARBO**

 Proudly Made in the USA

**Typical additional properties**

|                                       | 260-008 | 260-010 | 260-015 | 260-020 | 260-030 | 280-020 | 280-030 | 300-020 | 300-030 |
|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Bulk density (g/cm <sup>3</sup> )     | 1.62    | 1.62    | 1.62    | 1.62    | 1.62    | 1.67    | 1.67    | 1.78    | 1.78    |
| Apparent density (g/cm <sup>3</sup> ) | ≥ 2.6   | ≥ 2.6   | ≥ 2.6   | ≥ 2.6   | ≥ 2.6   | ≥ 2.8   | ≥ 2.8   | ≥ 3.0   | ≥ 3.0   |
| Vickers hardness* (0.5 kg)            | 800     | 800     | 800     | 800     | 800     | 960     | 960     | 1125    | 1125    |
| Mohs hardness                         | (7+)    | (7+)    | (7+)    | (7+)    | (7+)    | (7+)    | (7+)    | (7+)    | (7+)    |
| Median particle diameter (mm)         | 0.7     | 1.0     | 1.4     | 1.9     | 3.1     | 2.1     | 3.1     | 2.1     | 3.1     |

\*Standard deviation as % of median  
Data is subject to change due to continuous improvement of the product.

**Chemical composition:** Aluminum silicate

**Superior durability for longer product life**

The sintering process used to manufacture CARBOGRIND yields a high Mohs hardness for greater durability and lower density. This translates into less equipment wear during milling, reduces final product contamination and lowers process costs. It extends the product life cycle, thus reducing media consumption and lowering the cost associated with transportation, disposal and replacement of materials.

**Eliminates respirable silica dust exposure**

Using CARBOGRIND reduces HSE concerns because it is chemically inert, non-hazardous and does not generate respirable silica dust.

**Volume/cost advantages of lower density**

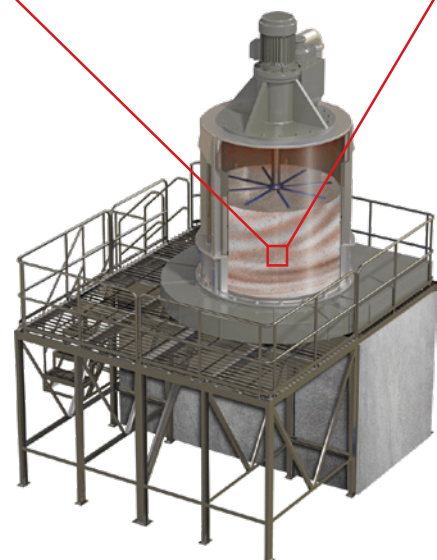
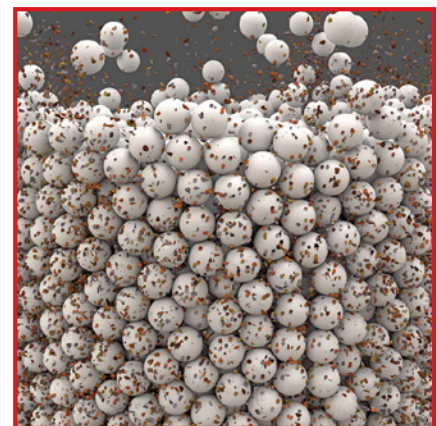
- **Lower cost per volume:**  
On a cost-per-volume basis, low-density media can be 4-10 times lower in cost versus intermediate to high-density ceramics.
- **Reduced transportation costs:**  
Lower density products provide significantly more media per pound shipped.
- **Reduced labor costs:**  
Lower density media allows more efficient mill stops and restarts without the need to offload material.

**Ideal for vertical milling**

The unique chemical composition of CARBOGRIND produces the durability and density that make it ideal for use in vertical mill operations. It is engineered to optimize grinding efficiency in the mill, reducing input energy. The light-colored media yields the desired finish when light color and brightness of the final product are critical.

**Improved grinding efficiency**

CARBOGRIND is engineered for uniform particle size and shape. This reduces wear on mechanical parts of milling equipment, resulting in lower maintenance costs and less down time.



Talk to CARBO to find out how we can help you enhance your production.

+1 800 551 3247

[carboindustrial.com](http://carboindustrial.com)



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