



**Prostal Limited.**

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## Carbon Graphite Rod



### Description:

The high purity graphite known as “black gold”. It is of the highest strength, best toughness, lightest weight, highest light transmittance and best electrical conductivity. Extruded graphite rod can be in customized size. Our supply capacity is 1000 MT per month. We are the largest factory for graphite rod in China.

Graphite rod is often used in metallurgy and machinery industries. It can be placed inside of high temperature vacuum furnace as heating material. The high temperature can reach 3000 °C. It is easy to oxidize at high temperatures. In addition to vacuum, it can be used in neutral atmosphere or reducing atmospheric situation as well.

It can be processed to different shapes, like rod, tube, ring, block, plate, pot, etc.

### Main advantages of graphite materials:

- High temperature resistance: Graphite is currently known as one of the most high temperature resistant materials. It has a melting point of 3850°C and a boiling point of 4250 °C. The loss of graphite is the smallest when it is subjected to ultra-high temperatures arc at 7000 °C for 10s, the loss of graphite is 0.8% by weight.
- Special thermal shock resistance: graphite has good thermal shock resistance, that is, when the temperature changes suddenly, the thermal expansion coefficient is small, so it has good thermal stability, in the change of temperature cold and hot, will not produce cracks.
- Thermal conductivity and electrical conductivity: graphite has good thermal conductivity and electrical conductivity. Compared with ordinary materials, its thermal conductivity is quite high. 4 times higher than stainless steel, 2 times higher than carbon steel, 100 times higher



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than the general nonmetal.

- Lubricity: graphite lubrication performance is similar to molybdenum disulfide, friction coefficient is less than 0.1. Its lubrication performance varies with the size of the scale, the larger the scale, the smaller the friction coefficient, the better the lubricity.
- Chemical Stability: At room temperature, graphite has good chemical stability, acid resistance, alkali resistance, resistance to organic solvent corrosion.

## Applications:

- Metallurgy industry
- Machinery industry

## Features

Model#	Bulk density g/cm <sup>3</sup>	Transverse strength Mpa	Compressive strength Mpa	Hardness shore Mpa9	Ash Content %	Thermal conductivity (w/m.k)
PR8340	1.75	45	80	65	≤0.03%	80
PR8500	1.78	50	95	70	≤0.03%	85
PR8510	1.8	58	110	75	≤0.03%	98
PR8650	1.82	68	138	85	≤0.01%	105
PR8710	1.85	78	145	95	≤0.01%	115
PR8790	1.92	95	145	110	≤0.01%	120

*Size of graphite can be customized.*

## Packing method

Normally packed by wooden cases. It can be customized.

