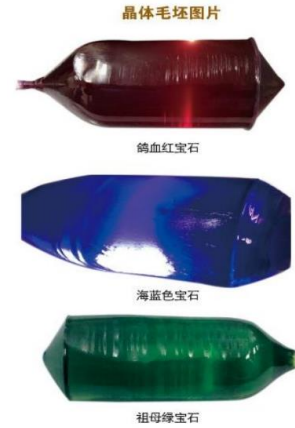


Colored Gemstone :

Colored Gemstone

Artificial colored gemstones are corundum single crystals formed by doping different types of transition metal ions into corundum. Because the doped transition metal ions absorb part of the visible light band, they present gorgeous and moving colors. Artificial colored gemstones are the same as natural gemstones. They have the advantages of high hardness (second only to diamond), bright colors (such as pigeon blood red, sea blue, emerald, etc.), high refractive index, and large dispersion coefficient. Important raw material for jewelry and decorations.



Main advantages:

Compared with natural gemstones, the colored gemstones grown by the pulling method have large size, transparent crystals, good color uniformity, and no macroscopic defects such as inclusions, clouds, and bubbles; compared with the flame method, they have larger sizes, no growth lines, and residual stress Small and easy to process.

Material properties:

molecular formula	
Lattice constant	a=4.785A, C=12.991A
growth method	Tira method
Moh's hardness	9.0
Refractive index	1.76-1.77 (visible light band)
birefringence	0.008-0.01
Chromatic number coefficient	0.018
density	4.0g/ cm ³
melting point	2050°C

Crystal blank size specification:

pigeon blood red	φ80mm×120mm
sea blue	60mm×120mm
emerald	φ40mm×120mm