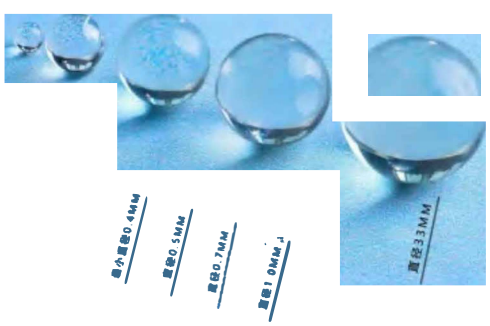
光学玻璃球 Optical glass sphere

■ 高折射率玻璃球 High index lens

我司生产光学玻璃球透镜及半球、超半球透镜，产品特点稳定及精度高，表面质量好，批次公差小于0.4 um,圆度小于0.2 um，材料种类繁多，广泛的应用于光通迅，精密仪器，医疗仪器，成像等等。经我司研发团队不懈努力，我司最小直径能做到0.4mm,最大直径能做到60mm.

Our company produces optical glass ball lens, and super hemispherical lens. The product features stability, high precision, good surface quality, batch tolerance less than 0. 4 um, roundness less than 0. 2 um, and a wide variety of materials. It is widely used in optical communication, precision instruments, medical instruments, imaging, etc. With the unremitting efforts of our R & D team, our minimum diameter can reach 0. 4mm and the maximum diameter can reach 60mm.



Our capabilities:

- Ball lens size range: D0.3mm ~30mm
- Tolerance in Diameter: +/-0.001mm
- Roundness<0.4um
- Outstanding surface finish

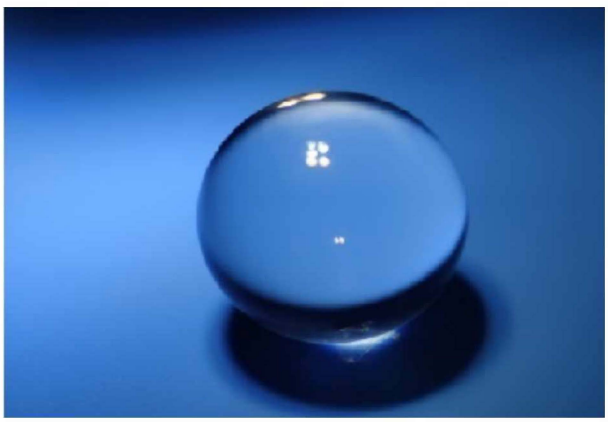
BALL LENS INSPECTION of AISO

项目名称	行业使用标准 User standard	内部标准 Standard	实测数据 Measured
圆度 Roundness	<1umm	<0. 4um	<0. 25um
直径公差 Diameter tolerance	+/-3um	+/-0. 4um	+/-0. 2um
批次公差 Lot Dia tolerance	<6um	<0. 8um	<0. 6um
表面光洁度 Surface	40/20(<Ra40nm)	20/10(<Ra25nm)	20/10(<Ra20nm)

■ 低熔点玻璃 Low melting point glass

低熔点玻璃球有熔化和软化温度低、成型好以及特殊的光学机械性能的特点，易二次模压加工，适用于非球面镜片精密模压，有利于降低批量镜片的生产成本。用于精密模压应用行业诸如数码相机、摄象机、手机等。我司可定制低熔点材料球直径0.3MM-30MM

Low melting point glass balls have the characteristics of low melting and softening temperature, good molding and special optical and mechanical properties. They are easy to be processed by secondary molding. They are suitable for precision molding of aspheric lenses, which is conducive to reducing the production cost of batch lenses. Used in precision molding applications, such as digital cameras, cameras, mobile phones, etc.



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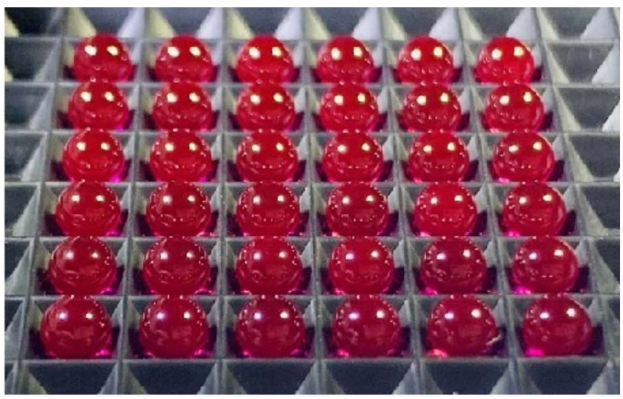
Main Types
Specification and Technical Index

Products	Diameter	Max deviation	Roundness	Diameter of blind holed	Hight of blind holed
Balls jewels	0.50~1.20	±0.00254	G15	0.40~0.80	SΦ/2
	1.20~8.00	±0.00254	G5	0.80~5.00	
	8.00~12.00	±0.00254	G10	3.00~7.00	
Surface	Surface roughness: Rz0.1, Surface quality S/D: 40/20				

■ 红宝石、蓝宝石 Ruby，sapphire

红宝石，蓝宝石，白宝石晶体是刚玉类宝石中的一种，主要特点耐磨、高硬度、耐腐蚀、磨擦系数小，是精密仪表、机械、轴承的理想材料； 蓝宝石玻璃透红外和化学稳定性好，也被广泛地应用于红外线军用装备的方方面面，比如远红外线瞄准镜、夜视摄像机等。

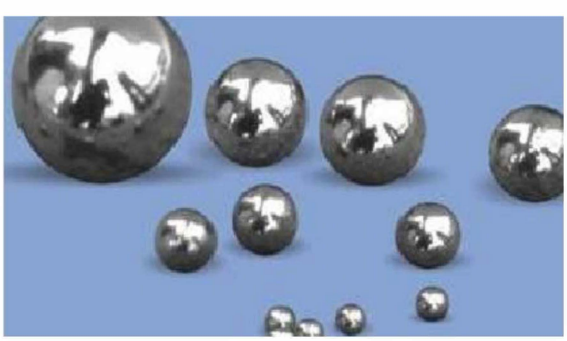
Ruby, sapphire and sapphire crystal is one of corundum gemstones. It is mainly characterized by wear resistance, high hardness, corrosion resistance and small friction coefficient. It is an ideal material for precision instruments, machinery and bearings; Sapphire glass has good infrared transmission and chemical stability. It is also widely used in all aspects of infrared military equipment, such as far-infrared sight, night vision camera and so on.



■ 硫系玻璃球 Chalcogenide glass ball

硫系玻璃球具有较小的热差系数和较宽的光谱透过率,适合模压成型,加工效率高可以精密模压，比金刚石车削提高10倍以上，原料成本是锗单晶的1/3。在红外镜头中的应用越来越广泛。 硫系玻璃球可广泛的用于红外监控、测温、医疗、探测、制导等领域。

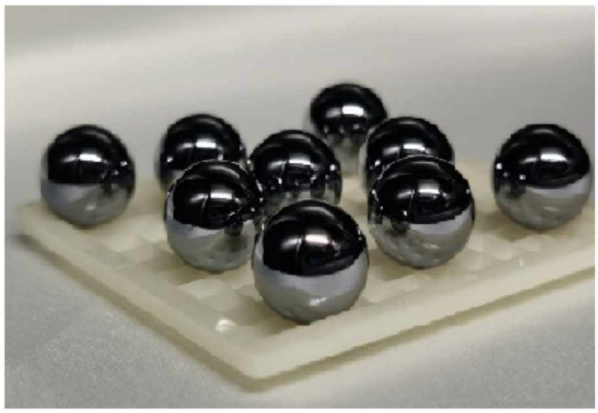
Chalcogenide glass ball has small thermal difference coefficient and wide spectral transmittance. It is suitable for molding. It has high processing efficiency and can be precision molded. It is more than 10 times higher than diamond turning. The raw material cost is 1 / 3 of that of germanium single crystal. It is more and more widely used in infrared lens. Chalcogenide glass balls can be widely used in infrared monitoring, temperature measurement, medical treatment, detection, guidance and other fields.



■ 单晶硅 Monocrystalline silicon

单晶硅是综合性价比优良的红外光学材料，用来制作红外光学镜片，主要应用于热成像系统、前视红外、移动传感器等高技术领域。

Monocrystalline silicon is an infrared optical material with excellent comprehensive cost performance. It is used to make infrared optical lenses. It is mainly used in high-tech fields such as thermal imaging system, forward-looking infrared, mobile sensor and so on.



■ YAG 晶体 YAG Crystal

YAG晶体是目前综合性能最好的固体激光材料，具有高增益、低阈值、高效率、低损耗、热导率和抗热冲击性好的特性，适合多种激光工作模式（连续、脉冲、Q开关、锁模、倍频等），广泛应用于工业、医疗、军事和科研领域。

YAG crystal is a solid-state laser material with the best comprehensive performance at present. It has the characteristics of high gain, low threshold, high efficiency, low loss, good thermal conductivity and thermal shock resistance. It is suitable for a variety of laser working modes (continuous, pulse, Q-switch, mode locking, frequency doubling, etc.) and is widely used in industrial, medical, military and scientific research fields.