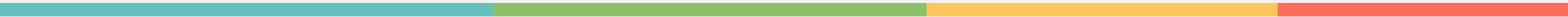




We Supply Speciality Metal with Confidence

Loyal cooperation positive optimism efforts to open up march forward



AGESCAN

AGESCAN

INTERNATIONAL

Part1
Supply



Part3
Product



Part2
Quality



Part4
Cooperation



Agescan is a Canadian entity based in Toronto, ON. We specialized in refractory metal since 2003.

Agescan International Inc. (ASI) manufactures and supplies premium, Tungsten heavy alloy (WHA), Tungsten carbide, pure tungsten, molybdenum and other refractory metals for various industries. ASI maintains significant production capacity while expanding to support various industries such as defense, aerospace, mining, automotive, petroleum and industrial customers with our high quality tungsten and other non-ferrous metals and finished products based on customized needs.



AGESCan – Specialty Metal Mfg & Supply

- Decades of Experiences
- Best Tech Team & Skilled Workers
- Highest Efficiency
- From Powder to Parts
Quality Control

All kinds of Cemented carbide for mineral use

These mineral alloys are assembled on various kinds of geological drill bits, such as carbide cone bits and underhole bits, and are used for geological drilling and exploration.





Cemented carbide sealing ring

Cemented carbide sealing ring is widely used in the sealing of high pressure valve and pump body in petroleum, coal mine and chemical industry. Good performance, high hardness, corrosion resistance, acid resistance, pressure resistance, long life.

Carbide-tipped drill bit

The drill can be used for drilling rock cable hole, bolt hole, blasting hole and grouting hole in petroleum geology, urban construction, railway, highway, river, hydropower and other projects.





Precision Carbide Bushing and Sleeve

Precision tungsten carbide Bushings/Sleeves with high impact resistance, abrasion resistance and corrosion resistance. Widely used in oil extraction equipment such as Electric Submersible Pump (ESP), Motor, Centrifugal pump, wear sleeve protector of all kinds of rotating shaft , also used in water pump & sealing industry.

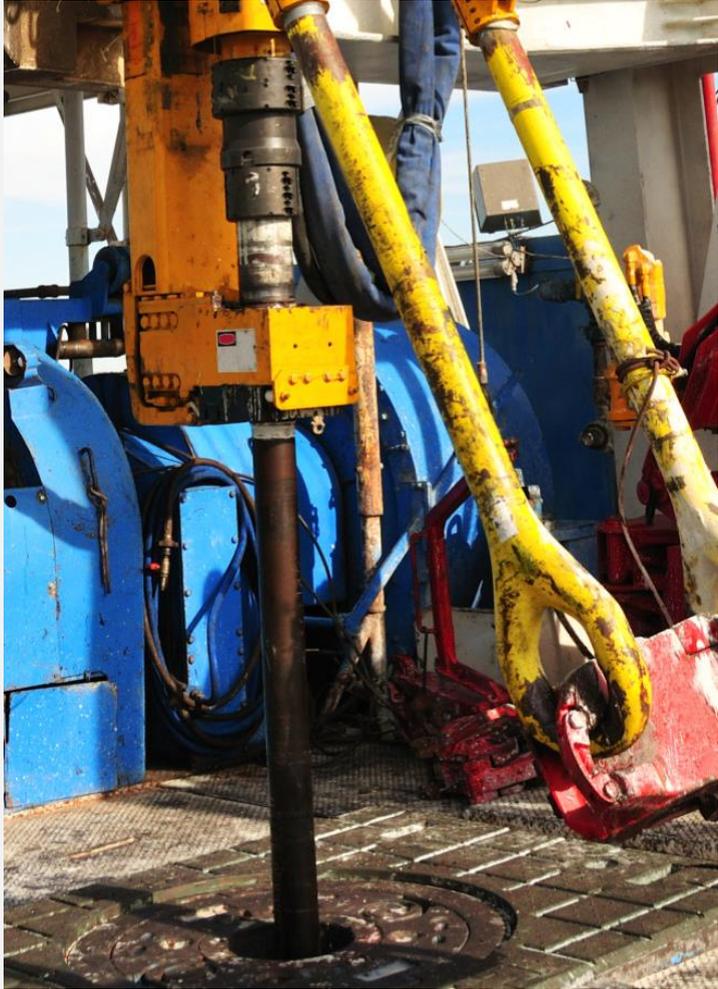
Product Specifications

Dimensions(mm)		
OD	ID	Height
OD≤300	ID≥0.5	H≤300

Technical Parameters

Dimension Tolerance (mm)	Cylindricity (mm)	Flatness (mm)	Parallelism (mm)	Perpendicularity (mm)	Concentricity (mm)	Roughness (μm)
≤0.025	≤0.01	≤0.005	≤0.01	≤0.025	≤0.025	Ra 0.1~1.6





Precision Flange Sleeve and Shaped Sleeve

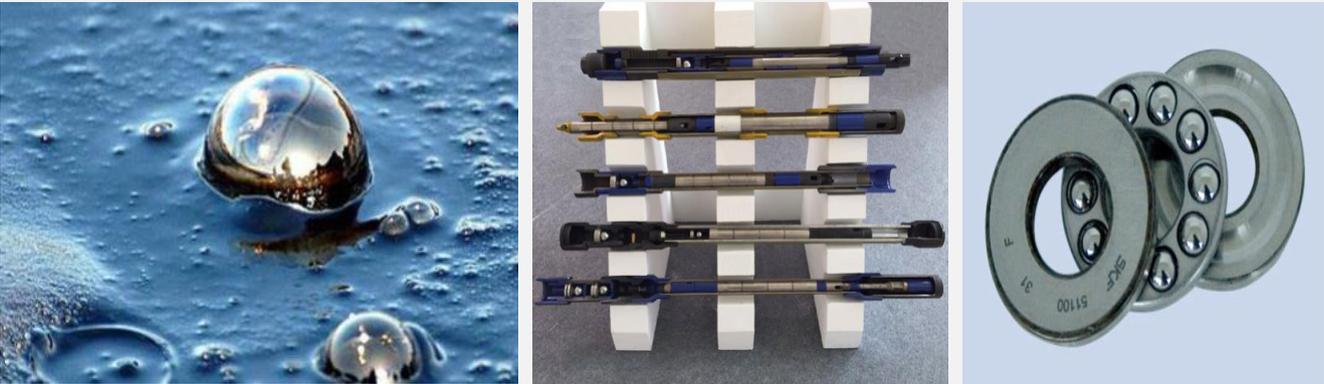
Different series of flange sleeve and shaped sleeve with high precision, wear resistance, corrosion resistance, good impact resistance and long life can be customized. Widely used in oil and gas exploration, drilling, chemical, pump valve, seals and other fields



Precision Flange Sleeve and Shaped Sleeve

Mechanical Properties of Common Cemented Carbide Grades

Grade	Binder (%)	HRA		Density (g/cm ³)		TRS (N/mm ²)	Application
GF05N	5.0(Ni)	93.6	91.6	15.10	14.90	2070	Superior wear and corrosion resistance, Suitable for Electrical submerged oil Pump ,acid-proof pump, seal-ring and valve balls.
GF06N	6.0(Ni)	92.5	90.5	15.05	14.80	1725	Superior wear and corrosion resistance, suitable for submerged oil pump , acid-proof pump and slush pump.
GF08N	8.0(Ni)	90.5	89.5	14.70	14.50	2000	Superior wear and corrosion resistance property, suitable for submerged oil pump , acid-proof pump and slush pump.
GK05	6	90.5	92.3	15.05	14.85	2720	Suitable for saw tips, nozzles, non-standard structure products or mechanical components under conditions of low mechanical stress.
GU10	6.1	93.5	92.5	14.93	14.73	2700	Excellent wear resistance, applicable to low mechanic stress conditions as prototype blades, valve cores, bushings, seal-ring, measuring implement, fixture and mechanic components.
GU20	10.3	92.2	91.4	14.50	14.30	3500	Good wear resistance and high intensity, applicable to carbide balls, cutting tools, non-standard structure parts and mechanical accessory.



Precision Tungsten Carbide Balls

Precision tungsten carbide balls with high impact resistance, abrasive resistance, corrosion resistance, also particularly strict Sphericity and surface roughness, are widely used in bearing, ball valve, cartridge of high pressure pumps, ball-milling, etc. The quality of our products is in a leading position at domestic market. We are the long-term suppliers for international oil & gas Service Company

Product Specifications

Sphere Diameter(mm)
$2 \leq D \leq 65$

Technical Parameters

Grade	Ball diameter Variable Momentum	Spherical Deviation	Roughness	Basic Diameter Tolerance
	Vdws	Δ Sph	Ra	Dt
G20	0.5 μ m	0.5 μ m	0.032 μ m	$\pm 4\mu$ m
G40	1 μ m	1 μ m	0.06 μ m	$\pm 4\mu$ m





Precision Carbide Assembly Parts

The assembly parts consist of tungsten carbide and steel parts adopting the process of Shrink fit/Inlay, Welding/Brazing, Overlaying/Build up welding, Epoxy fit. And have the advantages of low residual stress, high assembled strength and low production cost. The price & performance are very competitive and widely applied to Oil/Gas, Chemical, Energy, Environmental protection, Die, Machinery manufacturing and so on.





Precision Non-Standard Carbide Parts

Adopting advanced pressing, sintering and machining technology to obtain the shape of a variety of hard alloy precision Non-standard products, the products are with high wear resistance, high corrosion resistance and good impact resistance properties, widely applied to industry of Titanium alloy forging, food machinery, oil exploration and exploitation, filling in the application blank of some fields at home and abroad.





Cemented carbide cone bit

Roller bit is an important tool for oil drilling. It is widely used in oil drilling and geological drilling. Cone bit can impact, crush and shear the formation rock when rotating, so it can adapt to soft, medium and hard stratum. Cone bits can be divided into milling teeth (steel teeth) cone bits and insert teeth (carbide teeth on the cone) cone bits. According to the number of cone bits, it can be divided into single cone bits, three cone bits and multi-cone bits. At home and abroad, the most widely used is the three-cone bit.

Heavy tungsten alloy oil industry



Tungsten Heavy Alloy / Shielding Parts

Tungsten alloy with high density, high melting point, strong Ray absorption ability, good mechanical

processing performance, can be machined into various shapes of the precision parts, widely used in

the production of radiation shield, collimator, radiation proof tank, uranium material replacement,

container detection system shield, geological prospecting Gamma Ray shielding ,flaw detector

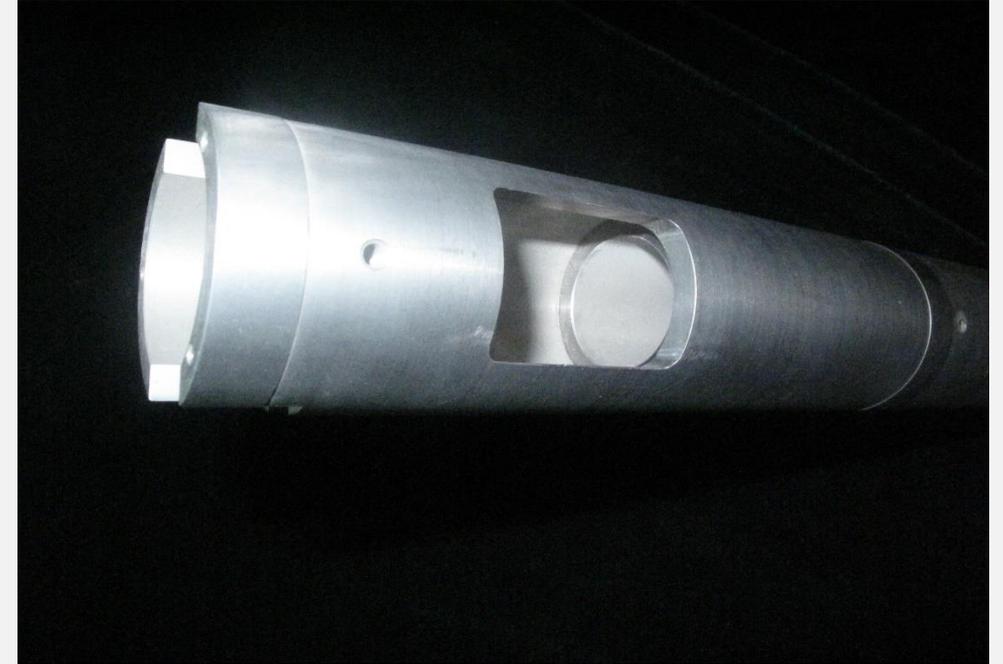
gamma ray shielding device.

Tungsten alloy precision parts due to excellent material properties and accurate machining accuracy

is widely used in oil exploration and mining, electronics, aerospace, medical and other industries.

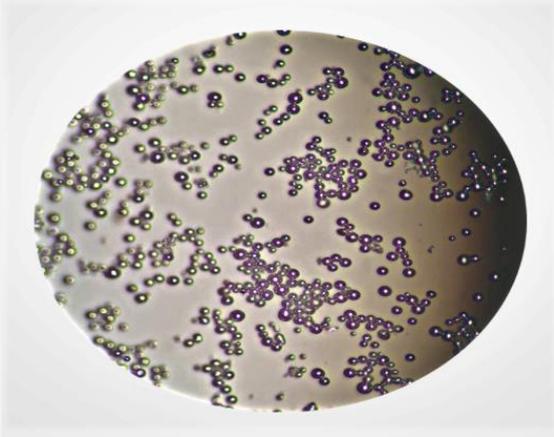
Tungsten alloy oil drilling counterweight

Drilling can be done in different formations at depths ranging from 300 m to 8,000 m. In this process, drilling counterweights have to face the hard rock layer and withstand the strong pressure in the earth's crust. Tungsten alloy is the best material for drilling counterweights. High density with great weight can enter barite mud very well, high hardness in ultra-low temperature and other harsh environment, but also can withstand water pressure. The design of drilling equipment requires highly processed detectors to locate. The stability of mechanical properties plays a key role in the operation of these components



Advantage

Due to its density of 18.6g/cm^3 , hardness of up to 36 HRC, wear resistance, impact resistance and durability, tungsten alloy is the best material for drilling underground water and oil and gas equipment. The outstanding mechanical properties make tungsten alloys have great advantages in the field of oil drilling.



Spherical rhenium powder

Appearance: Dark grey Metallic Powder

Specification: Main content Re-4N grade $\geq 99.99\%$ (subtraction method)
Re-5N grade $\geq 99.999\%$ (subtraction method)

Chemical Composition: 4N Grade $\text{Re} \geq 99.99\%$, 5N Grade $\text{Re} \geq 99.999\%$

Particle size: FSSS 0-20 μm , 15-45 μm , 15-53 μm , 53-105 μm , 53-150 μm , 105-250 μm , Standard: YS/T 1017-2015

Application: Rhenium, alloyed with platinum, was used in petroleum-reforming catalysis in the production of high-octane hydrocarbons, used for lead free gasoline

Impurities content (% , \leq)					
Element	APR-4N Grade	APR-5N Grade	Element	APR-4N Grade	APR-5N Grade
Na	0.0005	0.0001	Ni	0.0001	0.00001
Mg	0.0001	0.00005	Cu	0.0001	0.00001
Al	0.0001	0.00005	Zn	0.0005	0.00001
Si	0.0005	0.0001	As	0.0001	0.00001
P	0.0005	0.0001	Zr	0.0001	0.00001
K	0.0005	0.0001	Mo	0.0005	0.0001
Ca	0.0005	0.00005	Cd	0.0001	0.00001
Ti	0.0001	0.00001	Sn	0.0001	0.00001
V	0.0001	0.00001	Sb	0.0001	0.00001
Cr	0.0001	0.00001	Ta	0.0001	0.00001
Mn	0.0001	0.00001	W	0.0005	0.00005
Fe	0.0005	0.0005	Pb	0.0001	0.00001
Co	0.0001	0.00001	Bi	0.0001	0.00001



Rhenium Pellet / Ingot

Appearance: Grey or silver metallic cylinder or square block , medium density ingot is dark grey and high density ingot is bright silver.

Specification: 4N Grade $\text{Re} \geq 99.99\%$ (calculated by subtractive method , except gas element)
 5N Grade $\text{Re} \geq 99.999\%$ (calculated by subtractive method , except gas element)
 Medium density rhenium pellet/ingot, density is about 12/cc
 High density rhenium pellet/ingot, density is about 18.5g/cc

Size: D(12-20)*H(10-15)mm , single weight 30-50g. It can be customized as per requirement.

Application: Used as an additive for manufacturing superalloys.

Classification: according to the different requirements of use, rhenium pellet/ingot according to the physical properties is divided into "high density rhenium pellet/ingot" and "medium density rhenium pellet/ingot", according to the chemical composition is divided into "high purity 99.99%" and "ultra high purity 99.999%".

Chemical composition: Rhenium pellet/ingot, main content $\text{Re} \geq 99.99\%$ (except gas element)
 Other trace metal impurity (\neq), analysis method: ICP-MS
 Gas element (\neq), analysis method: LECO

Na	0.0005%	Ti	0.0001%	Cu	0.0001%	Sb	0.0001%
Mg	0.0001%	V	0.0001%	Zn	0.0001%	Ta	0.0001%
Al	0.0005%	Cr	0.0001%	As	0.0001%	W	0.0005%
Si	0.0005%	Mn	0.0001%	Zr	0.0005%	Pb	0.0001%
P	0.0005%	Fe	0.0008%	Mo	0.0010%	Bi	0.0001%
K	0.0005%	Co	0.0001%	Cd	0.0001%	Se	0.0001%
Ca	0.0005%	Ni	0.0001%	Sn	0.0001%	Te	0.0001%
O	0.01%	C	0.002%	N	0.001%	H	0.005%

Contact information



CONTACT US



AGESCan International Inc.

P: +1 647-284-3766

F: +1 416-855-4349

E: jzhou@agescaninternational.com

www.agescaninternational.com