

ABICOR[®] GROUP

- CUTTING
- WELDING
- SYSTEMS
- COMPONENTS

WELDSTONE

WELDSTONE - Member of ABICOR® Group

ABICOR®
GROUP 



ABICOR® GROUP

CUTTING
WELDING
SYSTEMS
COMPONENTS

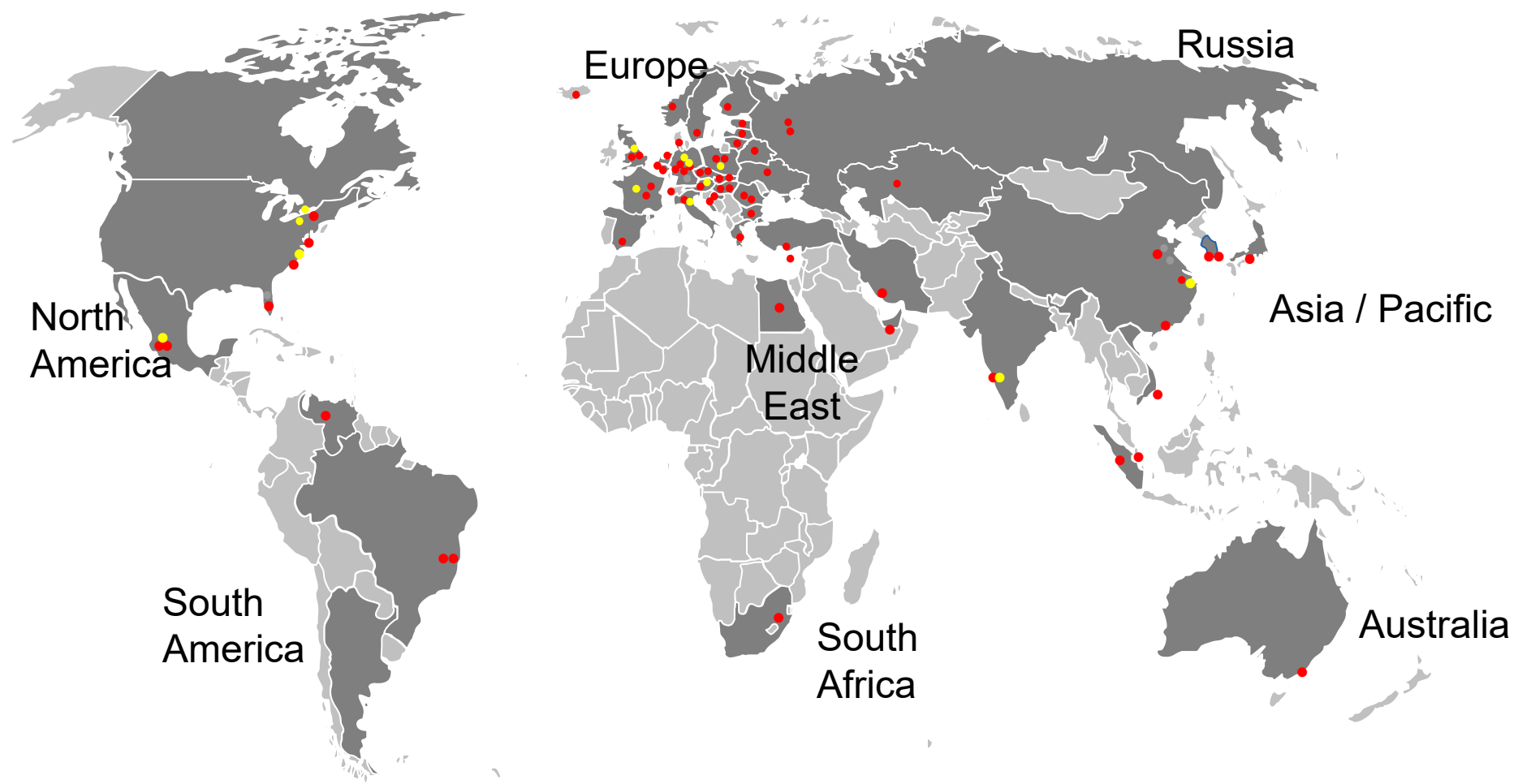
ABICOR
BINZEL® 

ABICOR®
SYSTEMS

THERMACUT®
THE CUTTING COMPANY™

HERR®
INDUSTRY SYSTEM

WELDSTONE
COMPONENTS GROUP





Alexander Binzel Schweisstechnik
MIG / TIG / Robo



Kurt Haufe Schweißtechnik
MIG / Electrode holders / Welding cables



Binzel do Brasil Industrial
MIG / TIG



Abicor Binzel India
MIG



Shandong Weldstone Tungsten Industry
TIG / Tungsten Components



Risong Weldstone
Automation



ABITEC Welding Equipment
MIG



Thermacut, s.r.o.
Plasma / Wear parts



Astaras Welding Accessories
TIG / Tungsten Components



Alexander Binzel Corporation
MIG / TIG



Kemper System America
Cantesco Production



Abicor Binzel Svarochmaya Technika
Plasma / Wear parts

Total Factory



New workshop & office building



Total area: 20.000 m²
Workshop: 15.000 m²
Office building: 5.000 m²



Mixing and Machining



Sintering



Copper Machining



Heavy Alloy Machining



Characteristics of Tungsten

High melting point

Low vapor pressure

High hardness

High strength

Very high density

High stiffness







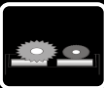


Extremely high temperature strength

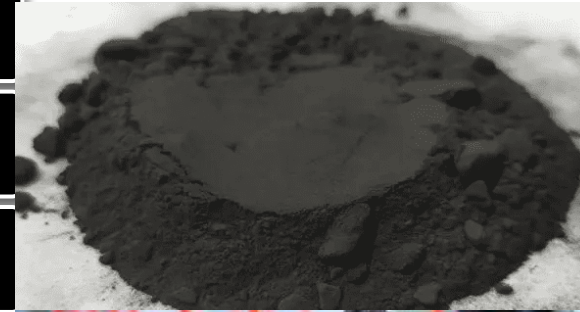
High electrical conductivity

High thermal conductivity

Acid and alkali resistance

How to produce Tungsten - Powder Metallurgy

	Raw materials (APT)
	Reducing (WMP)
	Mixing powder
	Forming
	Sintering
	Rotary forging
	Machining
	Heat Treatment
	Quality Inspection



Chemical Elements

H Hydrogen																				He Helium
Li Lithium	Be Beryllium											B Boron	C Carbon	N Nitrogen	O Oxygen	F Fluorine				Ne Neon
Na Sodium	Mg Magnesium											Al Aluminium	Si Silicon	P Phosphorus	S Sulfur	Cl Chlorine			Ar Argon	
K Potassium	Ca Calcium	Sc Scandium	Ti Titanium	V Vanadium	Cr Chromium	Mn Manganese	Fe Iron	Co Cobalt	Ni Nickel	Cu Copper	Zn Zinc	Ga Gallium	Ge Germanium	As Arsenic	Se Selenium	Br Bromine			Kr Krypton	
Rb Rubidium	Sr Strontium	Y Yttrium	Zr Zirconium	Nb Niobium	Mo Molybdenum	Tc Technetium	Ru Ruthenium	Rh Rhodium	Pd Palladium	Ag Silver	Cd Cadmium	In Indium	Sn Tin	Sb Antimony	Te Tellurium	I Iodine			Xe Xenon	
Cs Cesium	Ba Barium	Lanthanides	Hf Hafnium	Ta Tantalum	W Tungsten	Re Rhenium	Os Osmium	Ir Iridium	Pt Platinum	Au Gold	Hg Mercury	Tl Thallium	Pb Lead	Bi Bismuth	Po Polonium	At Astatine			Rn Radon	
Fr Francium	Ra Radium	Actinides	Rf Rutherfordium	Db Dubnium	Sg Seaborgium	Bh Bohrium	Hs Hassium	Mt Meitnerium	Ds Darmstadtium	Rg Roentgenium	Cn Copernicium	Uut Ununtrium	Fl Flerovium	Uup Ununpentium	Lv Livermorium	Uus Ununseptium			Uuo Ununoctium	
			La Lanthanum	Ce Cerium	Pr Praseodym	Nd Neodymium	Pm Promethium	Sm Samarium	Eu Europium	Gd Gadolinium	Tb Terbium	Dy Dysprosium	Ho Holmium	Er Erbium	Tm Thulium	Yb Ytterbium	Lu Lutetium			

Application Industries



Die Casting



Welding



Machines



Aerospace



Automotive



Spark Erosion



Cutting



Measuring



Injection
Molding



Medical



Electronic



Coating



Anviloy® - Group of tungsten-based alloys

Density from 12.7-18.8 g/cm³

High Radiation Shielding

Environmentally Friendly

Units 1 & 2: TIG welding electrodes & Welding Accessories

Automotive

Engineering Construction

Power Plants

Pipeline Engineering



TIG welding electrodes



WR2



WLa10



WLa15



WLa20



WZr3



WZr8



WP



WCe20



Contact Tip, Nozzle, Diffuser, Collet, Collet Body, Gas Lense, Insulator, Cable Connector, Nylon, Braided Rubber Hose

Tungsten Components

Aerospace components

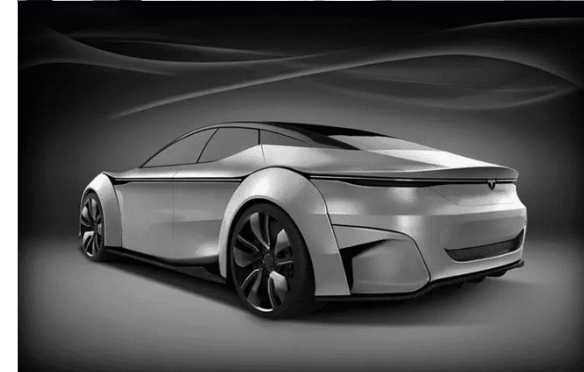
Medical / Industrial Radiation Shielding

Light alloy die casting mold

Chip heat sink

Precision equipment weight

Thermal Spraying

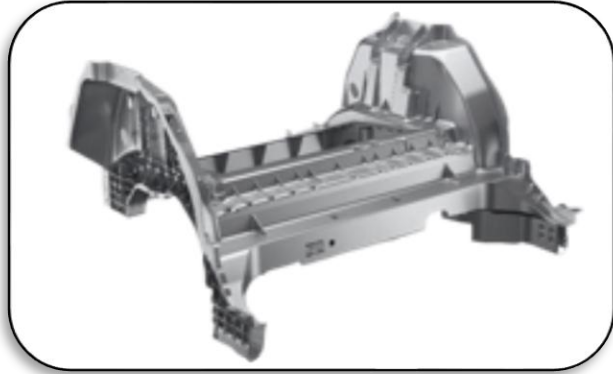


Anviloy® - tungsten-based alloys

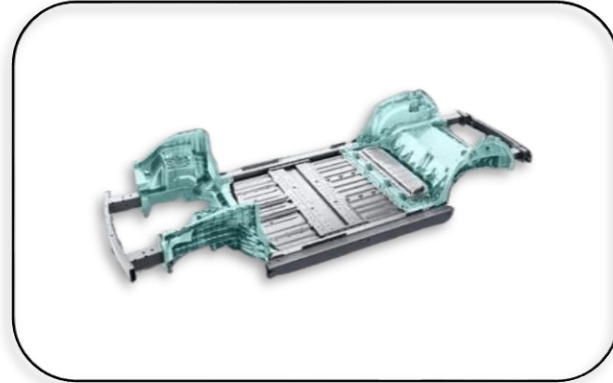
Tungsten content: 60% - 98%

Enhancing die casting performance

Widely used as wear resistant parts



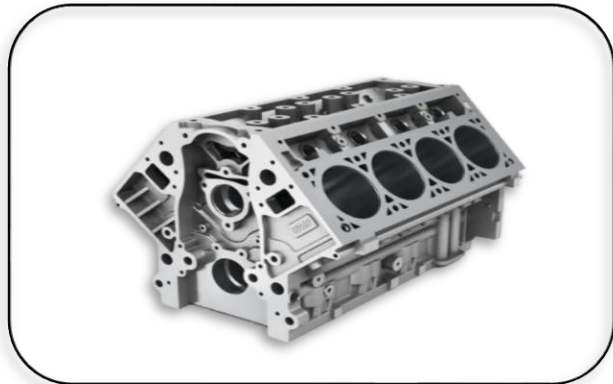
GIGA-Model Y Trunk



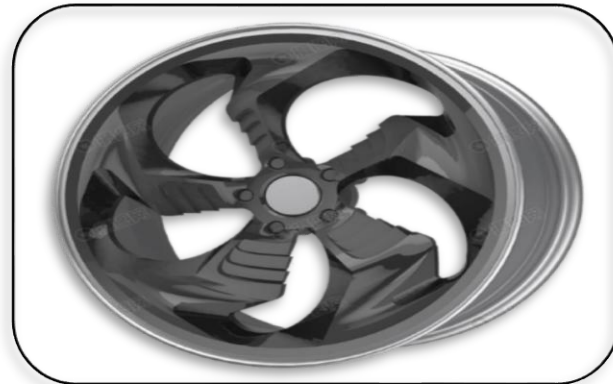
GIGA-EV Chassis



Cylinder Head



Engine Block

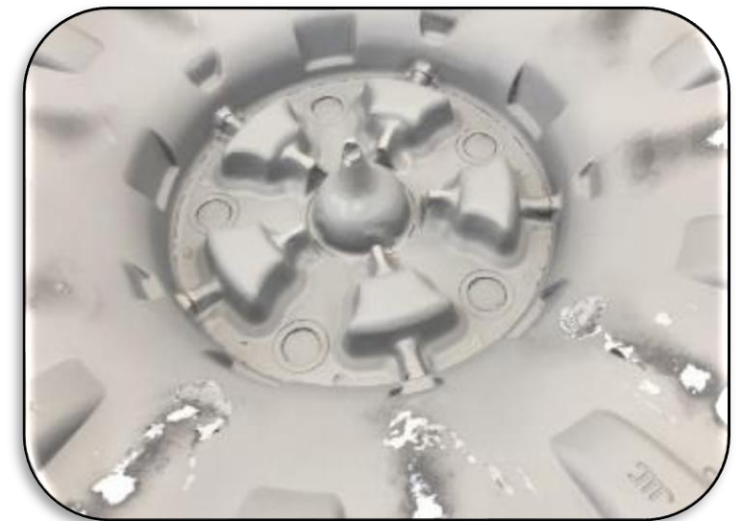
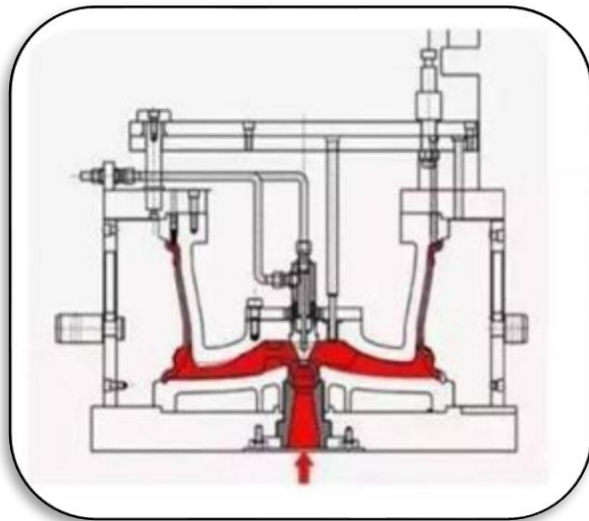


Wheel



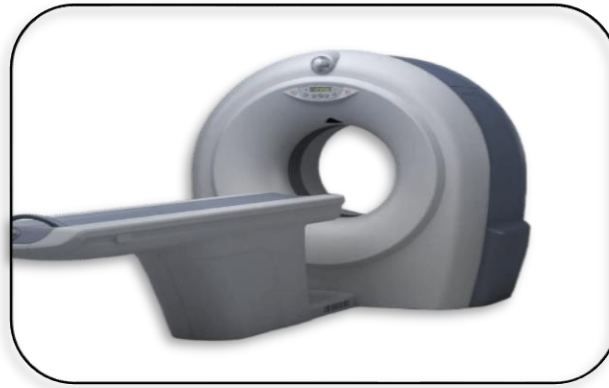
Knuckle

Anviloy[®] for Die Casting Molds





CTs



PETs



Accelerators



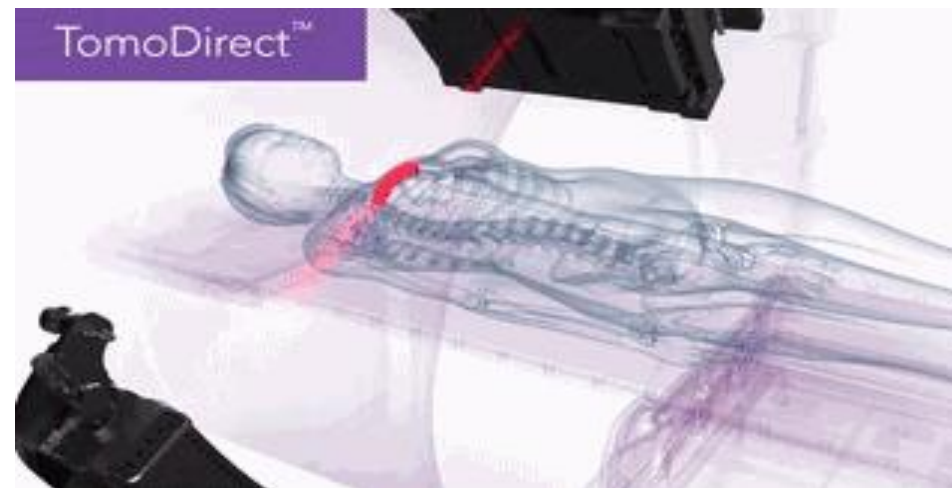
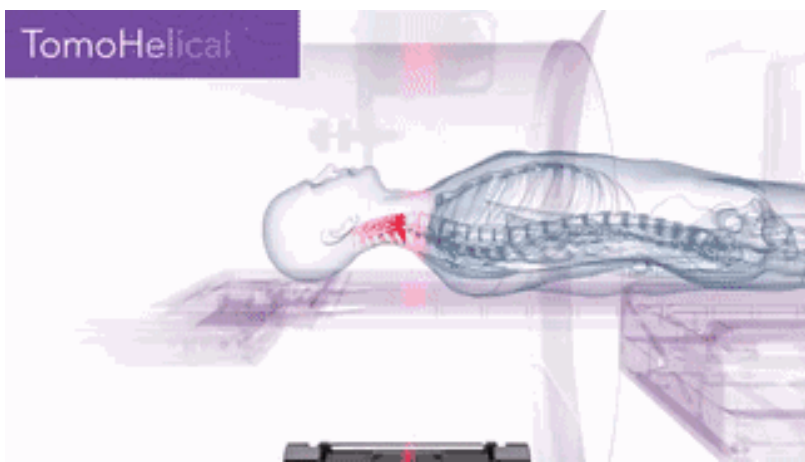
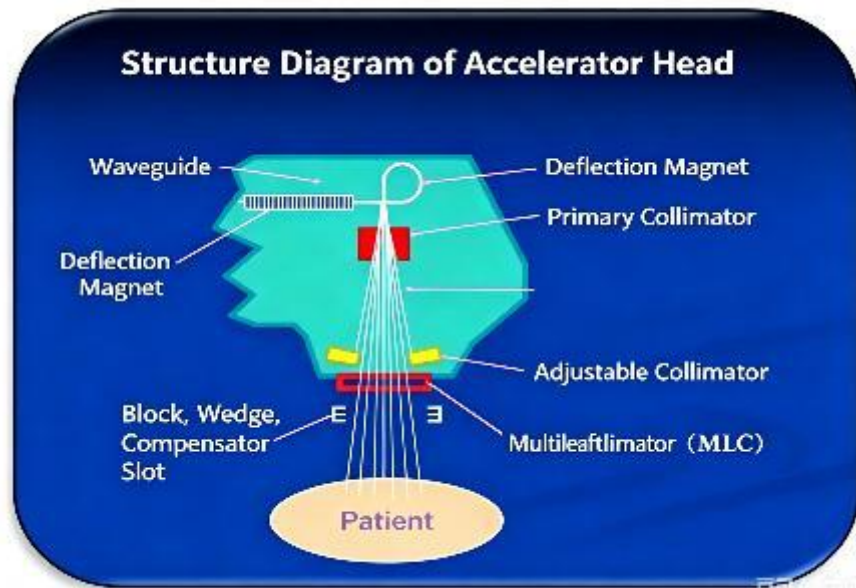
Crankshaft Weights

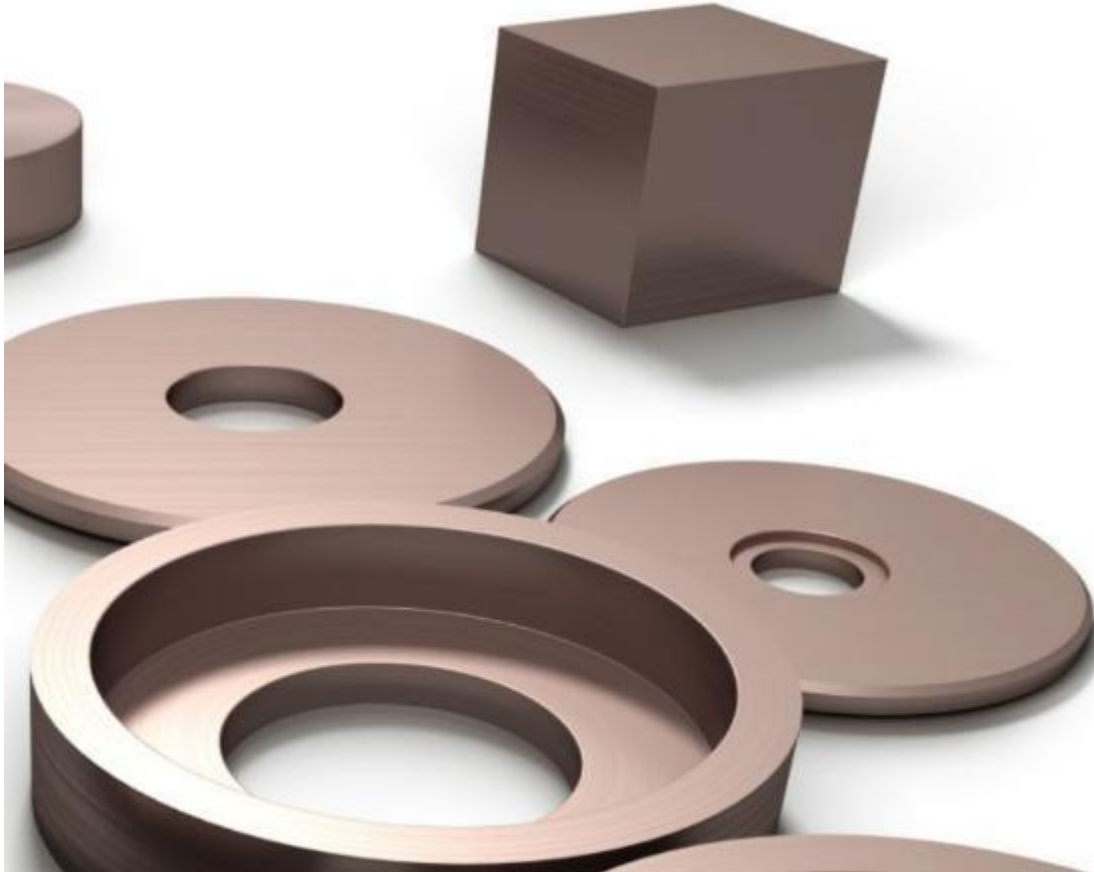


Airplane Weights



Ball Weights





Tucomet® - tungsten-copper alloys

Copper content from 10% to 50%

High melting point & high electrical conductivity

High thermal conductivity



Heat sinks for chips



High voltage contacts



Gyroscope Weights

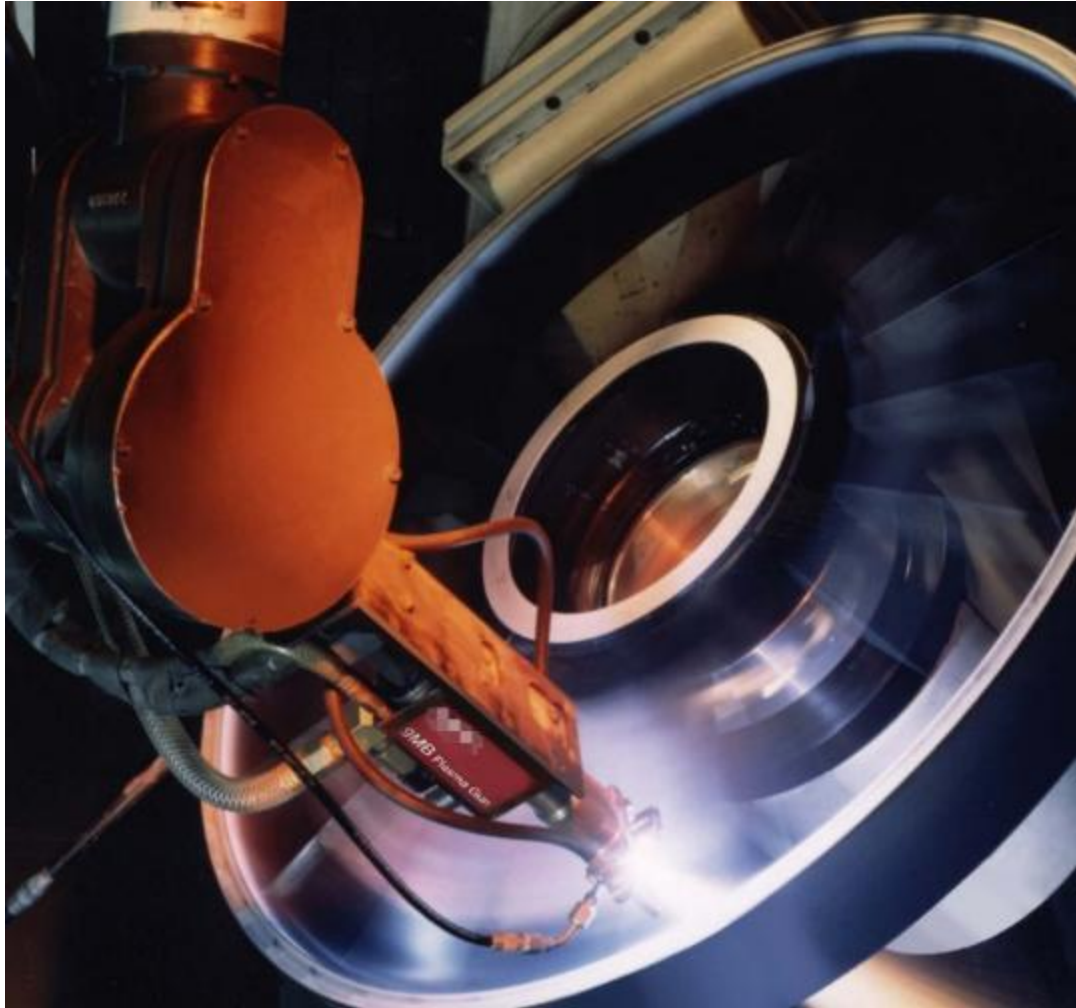


EDM Electrodes

Resistance Welding Electrodes



Plasma Spraying Electrodes



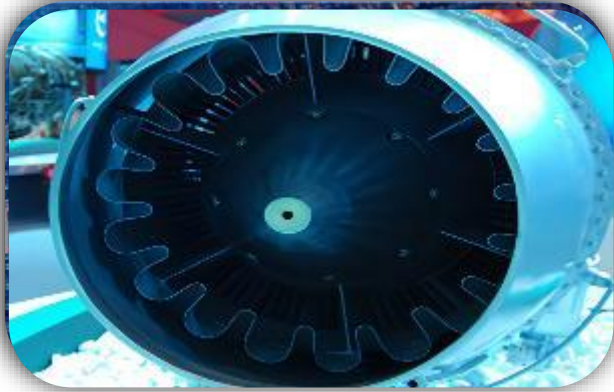
Tungsten & Tungsten Copper Composite

Tungsten core and copper body

Surface Strengthening

Heat source - Plasma Arc

Plasma Spraying Electrodes - Typical applications



Aerospace



Transportation



Pipeline



Space

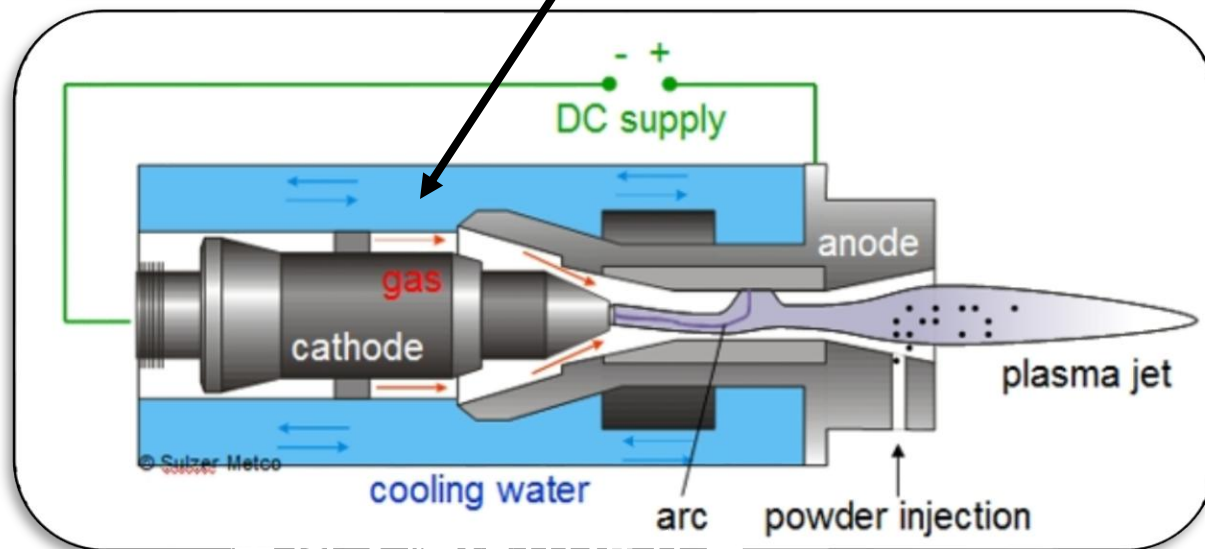
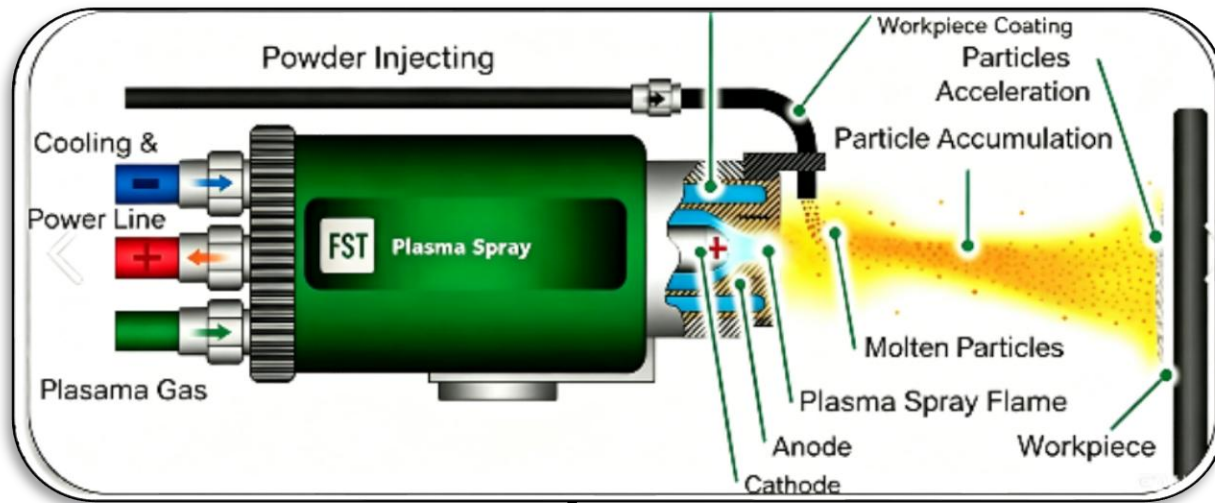


Mining

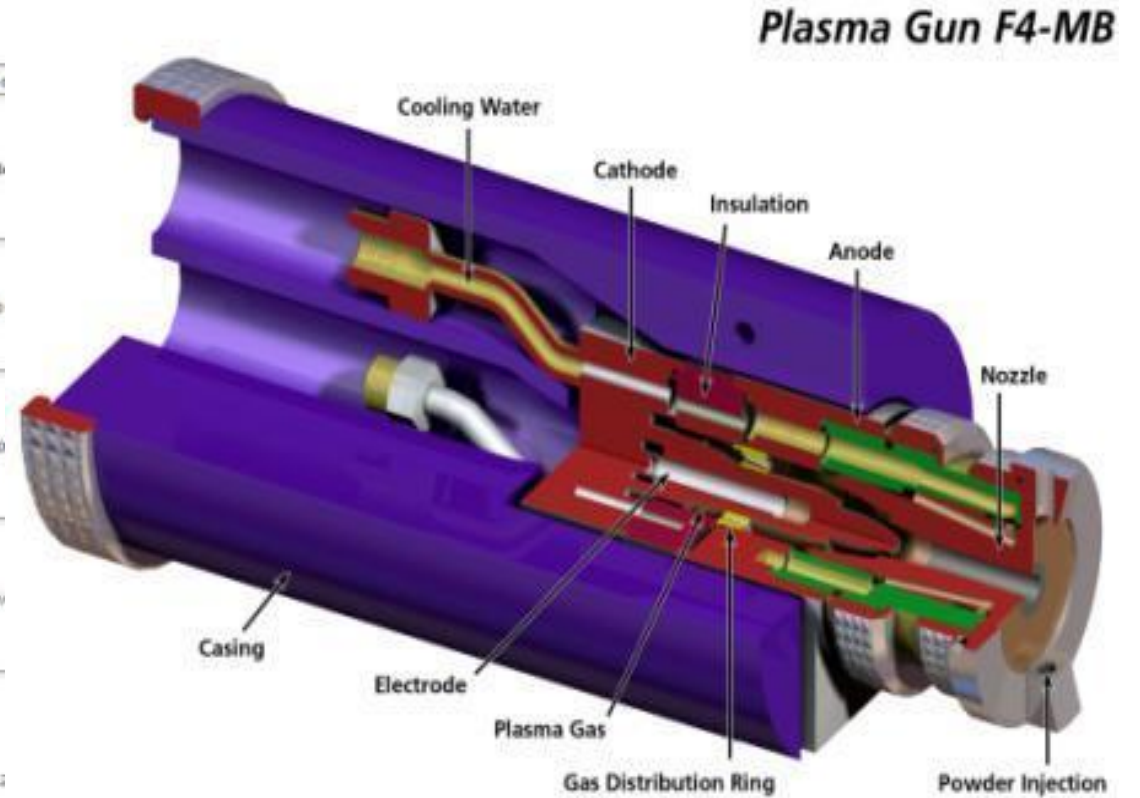


Medical

Plasma Spraying Electrodes



Typical Plasma Spraying Electrodes



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Thank you.