

Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Floating Ball	1/2" - 12"	Class 150-2500	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Trunnion Ball	2" - 36"	Class 150-900	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...





Supporting Plate Trunnion Ball

Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Supporting Plate Trunnion Ball	6" - 36"	Class 150-2500	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel, Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Stem Trunnion Ball	2" - 16"	Class 150-900	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
V-type Ball	2" - 24"	Class 150~600	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Special Ball	2" - 24"	Class 150~2500	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



L-type Three Way Ball

Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
L-type Three Way Ball	2" - 16"	Class 150~600	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



T-type Three Way Ball

Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
T-type Three Way Ball	2" - 16"	Class 150~600	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel Inconel etc...	ENP Chrome Plating Tungsten Carbide Chromium Carbide Cobalt-base alloy Nickel-base alloy Iron-base alloy etc...



Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Floating Ball Valve Seat	1/2" - 12"	Class 150~2500	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel, Inconel etc...	ENP, Chrome Plating, Tungsten Carbide, Chromium Carbide, Cobalt-base alloy, Nickel-base alloy, Iron-base alloy etc...

Product Details

Product Name	Nominal Diameter	Pressure Rating	Basic Material	Coatings
Trunnion Ball Valve Seat	2" - 36"	Class 150~2500	ASTM A105, A350 LF2, A182 F304, A182 F316, A182 F6A, A182 F51, A182 F53, Monel, Inconel etc...	ENP, Chrome Plating, Tungsten Carbide, Chromium Carbide, Cobalt-base alloy, Nickel-base alloy, Iron-base alloy etc...





Hard Seal Valve Ball and Seat Ring

Composting a coating on ball and seat ring to make ball valve obtain different kinds of special properties, such as wear resistance, corrosion resistance, high temperature resistance, oxidation resistance, isolation, electrical conductivity, anti-wear, anti-fatigue , etc...



ARTECH
MACHINERY TECHNOLOGY



- Our company not only provides professional metal surface coating process, but also has 20 years' experience in technology and manufacture for valve ball and seat ring.
- Mirror effect. We have own unique lapping technology and assemble ball and seat tightly. Make your ball valve Zero-leakage.
- We are always focused on combining coating and actual working condition to help our customers find functional solution. Meanwhile we will take into account applicability, economy and other factor etc.
- Perform well in harsh work condition and extend service life effectively.

Common Used Coating Material & Major Properties

Material Info	Chemical composition	Hardness(HV)	Porosity	Bonding strength(MPa)	Properties	Application	Remark
WC-12Co	WC-12%Co	1150-1400	<1%	>68	Unparalleled ultimate hardness and density, wear resistance, maximum service temperature up to 450°C	Valves, molds, wire drawing wheel, plastic machine component, cryogenic roll mandrel etc	
WC-17Co	WC-17%Co	1000-1200	<1%	>75	High bonding strength, toughness, wear resistance, slide resistance, and fatigue strength better than WC-12Co	Pump and valve parts, molds, wire drawing wheel, support sections, plastic machine parts etc	
WC-10Ni	WC-10%Ni	1050-1250	<1%	>68	Unparalleled ultimate hardness and density, better corrosion resistance than WC-12Co	Oilfield equipments, pump and valve parts, molds, to protect facilities parts which work in corrosion and wear environment etc	
WC-10Co-4Cr	WC-10%Co-4%Cr	1150-1350	<1%	>68	Better corrosion resistance and wear resistance than the WC-12Co in humid environment, better fatigue strength than WC-12Co	Pump and valve parts, paper rolls, hydraulic poles, molds, and other parts need high wear resistance etc	
WC-Cr-7Ni	WC-23%Cr-7%Ni	950-1200	<1%	>75	High hardness and density smooth coating, better gas corrosion resistance, corrosion resistance than WC-12Co, maximum service temperature up to 650°C	Pump and valve parts, paper rolls, hydraulic poles etc	
Cr3C2-NiCr	75%Cr3C2-25%NiCr	850-1100	<2%	>65	High temperature oxidation resistance, high temperature erosion resistance, hot gas erosion resistance, sulfur corrosion resistance, Unparalleled ultimate hardness and density, maximum service temperature up to 815°C	Pump and valve parts, high temperature furnace rollers, valve spindles on engines, nuclear industry parts, high temperature molds, to replace hard chrome plating	
Cr3C3-NiCr	80%Cr3C2-20%NiCr	900-1150	<3%	>65	High temperature oxidation resistance, high temperature erosion resistance, hot gas erosion resistance, sulfur corrosion resistance, Unparalleled ultimate hardness and density, maximum service temperature up to 850°C	Pump and valve parts, high temperature furnace rollers, valve spindles on engines, nuclear industry parts, high temperature molds, to replace hard chrome plating	
Inconel Alloy	Inconel Alloy	450-650	<0.5%	>65	Show high corrosion resistance in alkalinity, acidity and water soluble salts environment, high thickness, maximum service temperature up to 850°C	Steamer in paper making industry, valves, chemical treatment equipment parts, high temperature and corrosive environment, garbage burning furnace parts, alloy repair etc	
Cobalt-base alloy	Stellite Alloy	600-1000	<0.5%	>70	Recommend using in vibration-resistant, hard surface touch and particle abrasion environment. Maximum service temperature up to 815, high corrosion resistance and high temperature resistance and hardness. Sometime can replace overlay cladding.	Corrosion protection: pump and valve parts, blender blade, blade, scraper, wear-resistance rings, paper rolls, etc.	
Iron-base alloy	FeNiCr alloy	350-650	<0.5%	>60	High corrosion resistance and gas corrosion resistance, good cold-working hardening, maximum service temperature up to 500°C	Corrosion-resistant parts, printing rollers, size repair etc	
MCrAlYS	MCrAlYS	400-550	<3%	>65	High temperature oxidation resistance, hot corrosion resistance, heat shock resistance, maximum service temperature up to 1000°C	Thermal-resistant coating, protective coating, can achieve high temperature resistance and wear resistance properties when mixed with other alloy	
T800 Alloy	CoMoCrSi	700-950	<0.5%	>60	High temperature resistance, corrosion resistance, oxidation resistance, vibration resistance, wear resistance between metal, adhesiveness. Maximum service temperature up to 780°C	High temperature fretting parts, valve shaft, pump parts, piston rings, etc.	
Nickel base alloy	NiCrBSiFeC	HRC 56-62			High bonding strength, corrosion resistance, heat shock resistance, particle abrasion resistance. Maximum service temperature up to 750°C	Pump and valve parts, heat conveyor roller, rollers, heat die casting mould, glass mold, seals etc	