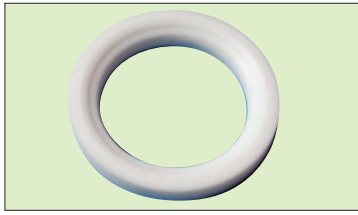




HISAKA

VARIETY OF BALL SEAT AND THEIR FEATURES



**PURE
PTFE
(W)**

Suitable MODEL: HF5 (Body Material Cast Iron, Ductile Iron)
HS5 (Body Material Ductile Iron)
H45

Property of sealing and chemical resistance are high.



**MAXTITE
PTFE
(MT)**

Suitable MODEL: HF5 (Body Material Stainless steel, Carbon steel)
HF5ST (for 1MPa Steam)
HS5 (Body Material Stainless steel), HS5ST

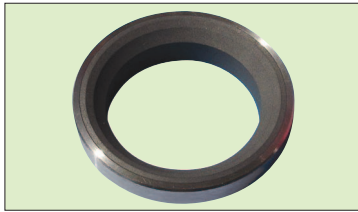
Next Generation PTFE

This material has high creeping property for high temperature, and it has higher performance for high temperature and pressure compare with reinforced PTFE (R.PTFE).



**CARBON
FILLED
R. PTFE
(R4)**

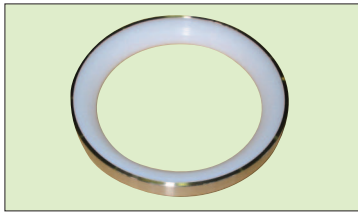
Reinforced PTFE that filled Carbon fiber into the PTFE is available to use for more severe condition than Maxtite PTFE. It has high abrasion resistance and available to use slurry service.



**CARBON
SEAT**

Suitable MODEL: HF5(CAM), HF5(CAH)

It has good performance for high temperature service.(Max. 400degree C) Carbon material has enough strength, but this carbon seat is attached support ring (stainless steel), and increased safety performance.



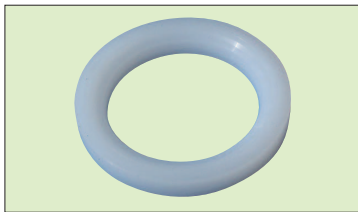
**PTFE with
Retainer
(RW, RMT, RR)**

This PTFE seat is attached outer ring outside diameter of PTFE seat (stainless steel). It can be protected creeping for high temperature and high pressure service, and protect to transform the seat shape for valve operation against fluid flow. This is usable for wider operation range. As the above, operation life time becomes long.



BR SEAT

Suitable for powder and pellet fluid by attached back seat behind of the ball seat. It can be reduced the operation torque in case of powder service by cushion of back seat. Material of Seat: PTFE + Silicon



LP SEAT

There are not many of void in LP seat Material. Therefore the penetration rate is lower and can be protected polymerization in case of using for Monomer service. The result of it, operation life time will be extended. Characteristic of Fluoroplastics material are good sealing, light weight, stability torque and high chemical resistance.

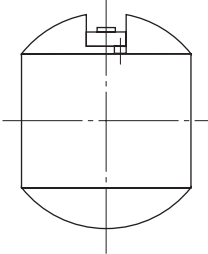
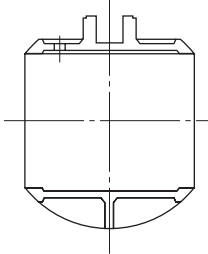
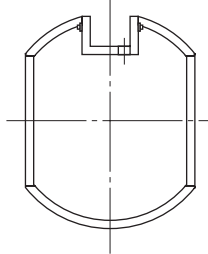


**METAL
SEAT**

Metal seat is suitable for Powder, Slurry, High Viscosity, High Temperature fluid service by using together with Metal ball. At the fluid touched part of ball and seat are treated hard facing treatment.
※Please refer the back page!

*We have the other special seat. PEEK seat, Polypenco, High density Polyethylene Seat, etc.
Please inquire the detail of your requirement.

VARIETY OF BALL(HF5)

DESIGN				
TYPE	SOLID		CORE CAVITY	HOLLOW
STYLE	THROUGH CONDUIT		THROUGH CONDUIT	HOLLOW
LINS	BODY MATERIAL	Stainless steel, Carbon steel Cast Iron, Ductile Iron	Stainless steel, Carbon steel Cast Iron, Ductile Iron	Cast Iron, Ductile Iron
	SIZE	~100A 15A~40A	125A~300A 250A	50A~200A

TYPE OF HARD FACING AND THEIR FEATURES

	Treatment	Details	Hardness (HV)	Features
BALL	ISONITE	Salt Bath Nitriding	1200	Usable for steam and powder line by hard material. It has some black colored carbide. Standard treatment of HF5(M1R), HF5(M1M).
	HARD CHROME PLATING	Galvanization	800~1000	High Hardness & High Corrosion Resistance.
	NEW KANUC	Vacuum Evaporation Gas Nitriding	1200~1400	High Hardness. It has no black colored carbide(below 350°C). Usable for steam and powder service.
	METCO -16C	Self-Fluxing Alloy Spraying (Ni basis)	655~738	Effective for Heatproof and Enduring Erosion(Max. 600°C). Suitable for steam and powder service. Standard of HF5(M1H)
	COLMONOY No.5	Self-Fluxing Alloy Spraying (Ni basis)	446~513	Effective for Heatproof and Corrosion Resistance (Max. 600°C).
	TUNGSTEN CARBIDE (LW-5)	Self-Fluxing Alloy Spraying (W basis)	1000	Effective for Enduring Erosion. High Hardness.
	STELLITE No.12	Welding (Co basis)	471	Effective for Enduring Erosion and Corrosion.
SEAT	STELLITE No. 6	Welding (Co basis)	435	Effective for Enduring Erosion.
	STELLITE No. 1	Welding (Co basis)	580	Effective for Enduring Erosion. High Hardness.



- ISO 14001 CERTIFIED FACTORY ●HIGH PRESSURE GAS AUTHORISED FACTORY
- ISO 9001 CERTIFIED FACTORY ●API CERTIFIED FACTORY

 **HISAKA WORKS, LTD.**
VALVE DIVISION

2-1-48, HIGASHI-KONOIKECHO, HIGASHI-OSAKA CITY
OSAKA 578-0973 JAPAN
TEL: 81-72-966-9651 FAX:81-72-966-9652
<http://www.hisaka.co.jp/>
e-mail:valve_info@hisaka.co.jp Printed in Japan