

System Component Product Families List



Vacuum Chamber Families								
Geometry types	D Type		Box Type		Tall Cylinder Type			
Vacuum level	HV grade		HV grade		HV grade		UHV grade	
Materials	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L

Vacuum Chamber Families								
Geometry types	Short Cylinder Type				Spherical Type		Bell Type	
Vacuum level	HV grade		UHV grade		UHV grade		UHV grade	
Materials	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L	Stainless Steel 304/L	Stainless Steel 316/L



Vacuum Chamber Quick Access Door Families		
Door types	With viewport	Blank flange
Flange types	CF Flange	CF Flange



Vacuum Viewport Families						
Vacuum level	UHV grade			HV grade		
Viewport materials	Kodial	Fuse silicon	Sapphire	Kodial		Tempered Glass
Viewport bonding types	Brazed	Brazed	Brazed	Brazed		FKM o-ring sealed
Flange types	CF Flange	CF Flange	CF Flange	KF Flange	ISO-K Flange	ISO-K Flange

Vacuum Viewport Shutter Families		
Vacuum level	UHV grade	HV grade
Flange types	CF Flange	ISO-K Flange



Vacuum Chambers

King Lai utilizes state-of-the-art manufacturing and inspection equipments dedicated for our vacuum chamber department. We can fabricate chambers up to 6 meters x 2.5 meters x 1.8 meters. Moreover, we stock large inventory of raw material in SS 304, 316L and aluminum alloy which are commonly used for fabricating HV and UHV chambers. We provide custom designed chambers that are built to meet your unique shapes or requirements. With thorough communication with customers to understand customers' unique requirements, careful control during each production process, and explicit inspection, we aim to provide vacuum chambers that are over customers' expectations.

Please contact us for more information.

Inspection and Test Equipment

- 3D computerized measuring systems
- Helium leak detectors
- Alloy analyzer
- Borescope

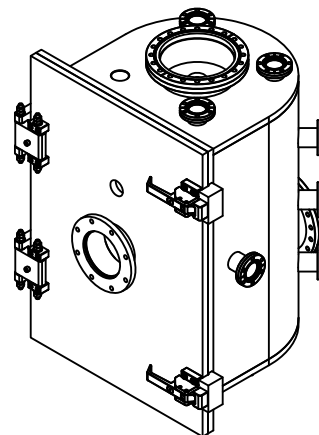
Main Facility for Chamber

- Water-Jet Cutting Machine
- 5-Axis Machining Center
- Bridge Type Machining Center
- Welding Platform
- CATIA 3D / Solid Works 3D
- Electropolishing Equipment
- TIG Weld Machines
- Class 10,000 clean room
- Ultrasonic Clean Machine w/ DI water
- Degreasing Process Equipment



D Type Stainless steel Chambers

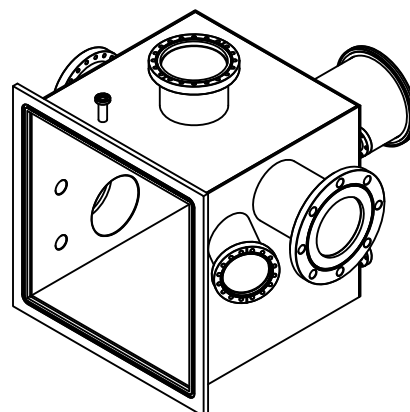
- Optional for SUS304 / SUS316L
- 100mm Viewport with o-ring sealed
- Customized ports configuration CF/KF/ISO
- Optional for water cooling
- Optional for inner shielding plates
- Customized designs are acceptable
- Body wall thickness 6mm/10mm, Plate wall thickness 20mm



Catalogue PN	Size	Product Description
DCH-500x450-X-X	500mm x 450mm	D-Chamber H500xW450
DCH-750x450-X-X	750mm x 450mm	D-Chamber H750xW450
DCH-1000x450-X-X	1000mm x 450mm	D-Chamber H1000xW450

Box Type Stainless steel Chambers

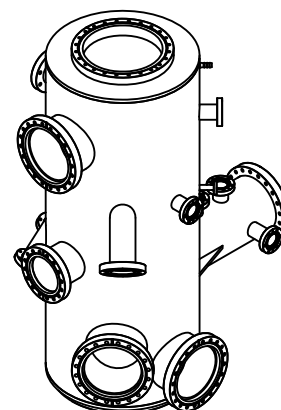
- Optional for SUS304 / SUS316L
- 100mm Viewport with o-ring sealed
- Customized ports configuration CF/KF/ISO
- Optional for water cooling
- Optional for inner shielding plates
- Customized designs are acceptable
- Body wall thickness 6mm/10mm, Plate wall thickness 20mm



Catalogue PN	Size	Product Description
BCH-500x450-X-X	500mm x 450mm	Box Chamber H500xW450
BCH-750x450-X-X	750mm x 450mm	Box Chamber H750xW450
BCH-1000x450-X-X	1000mm x 450mm	Box Chamber H1000xW450

Tall Cylinder Type Stainless steel Chambers

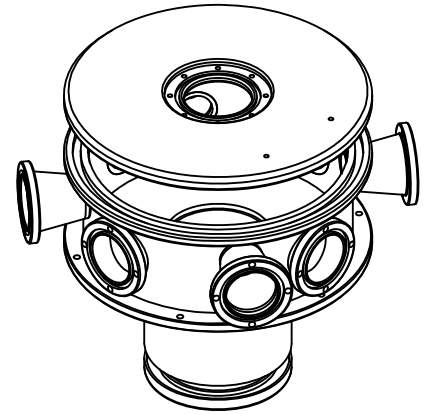
- Optional for SUS304 / SUS316L
- Customized ports configuration
- Optional for water cooling (Double Wall)
- Optional for LN2 Cold Trap
- Customized designs are acceptable
- Body wall thickness 6mm/10mm, top and bottom zero length flanges.



Catalogue PN	Size	Product Description
TCCH-254x500-X-X	OD10" x 500mm	Tall Cylinder Type Stainless Steel Chamber 10" X 500mm
TCCH-254x750-X-X	OD10" x 750mm	Tall Cylinder Type Stainless Steel Chamber 10" X 750mm
TCCH-305x750-X-X	OD12" x 750mm	Tall Cylinder Type Stainless Steel Chamber 12" X 750mm
TCCH-305x1000-X-X	OD12" x 1000mm	Tall Cylinder Type Stainless Steel Chamber 12" X 1000mm
TCCH-356x750-X-X	OD14" x 750mm	Tall Cylinder Type Stainless Steel Chamber 14" X 750mm
TCCH-356x1000-X-X	OD14" x 1000mm	Tall Cylinder Type Stainless Steel Chamber 14" X 1000mm

Short Cylinder Type Stainless steel Chambers

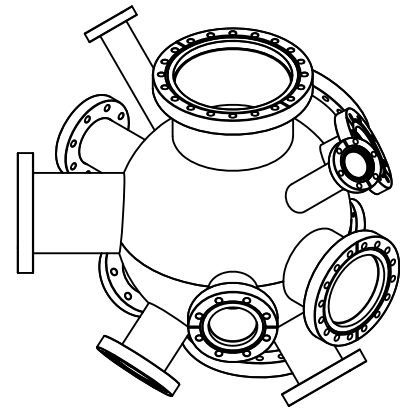
- Optional for SUS304 / SUS316L
- Customized ports configuration CF/KF/ISO
- Customized designs are acceptable (Up to 900mm OD, 500mm height)
- Body wall thickness 6mm / 10mm, top and bottom flanges are both gasket seal or o-ring seal.



Catalogue PN	Size	Product Description
SCCH-254x100	OD10" x 100mm	Short Cylinder Type Stainless Steel Chamber 10"x100mm
SCCH-305x200	OD12" x 200mm	Short Cylinder Type Stainless Steel Chamber 12"x200mm
SCCH-356x200	OD14" x 200mm	Short Cylinder Type Stainless Steel Chamber 14"x200mm
SCCH-457x250	OD18" x 250mm	Short Cylinder Type Stainless Steel Chamber 18"x250mm
SCCH-610x250	OD24" x 250mm	Short Cylinder Type Stainless Steel Chamber 24"x250mm

Spheric Type Stainless steel Chambers

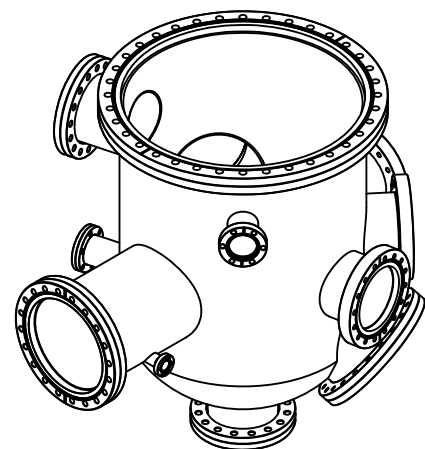
- Optional for SUS304 / SUS316L
- Customized port configuration
- Customized designs are acceptable
- Body wall thickness 6mm / 10mm



Catalogue PN	Size	Product Description
SCH-254	10" Spheric	Spheric Type Stainless Steel Chamber 10"
SCH-300	12" Spheric	Spheric Type Stainless Steel Chamber 12"
SCH-457	18" Spheric	Spheric Type Stainless Steel Chamber 18"

Bell Type Stainless steel Chambers

- Optional for SUS304 / SUS316L
- Customized ports configuration
- Optional for water cooling (Double Wall)
- Optional for LN2 Cold Trap
- Customized designs are acceptable
- Body wall thickness 6mm / 10mm



Catalogue PN	Size	Product Description
BLCH-305x500-X-X	OD12"x 500mm	Bell Type Stainless Steel Chamber OD12" x 500mm
BLCH-305x750-X-X	OD12"x 750mm	Bell Type Stainless Steel Chamber OD12" x 750mm
BLCH-356x750-X-X	OD14"x 750mm	Bell Type Stainless Steel Chamber OD14" x 750mm
BLCH-356x1000-X-X	OD14"x 1000mm	Bell Type Stainless Steel Chamber OD14" x 1000mm