



# AGS

شرکت نشت گیر گسیل آریا

Building the core competitiveness  
Enhance the added value of innovation



## AGS Ariya Gas Seal

Aria Gas seal was founded in 2022, through the partnership of SNS(Sinoseal Holding Company) and OTCE (Oil Turbo Compressor Equipment Company) to supply, manufacture and providing the best services for sealing system (Mechanical Seal, Dry Gas Seal, Seal Support Systems, DGS Panel).

In order to meet the demands of domestic market in sealing system particularly in oil and gas industry , we decided to transfer know-how and localizing, based on the latest technology and international standards .

Our factory with 5000 square meters (as the first phase) located in Kaveh special economic zone-near Saveh City, equipped with the latest machines and facilities such as CNC, Lapping and balancing machines for manufacturing and test rig to conduct all the required static and dynamic test based on API Standard.

Mechanical seals application range:

Pressure:  $\leq 20\text{MPa}$  Temperature:  $-196\sim 410^{\circ}\text{C}$

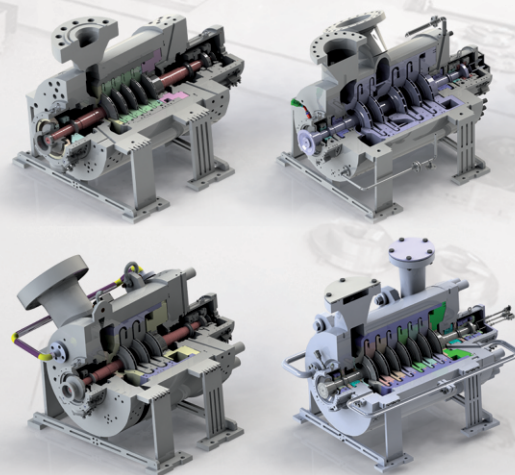
Shaft diameter:  $10\sim 280\text{mm}$  Rotating speed:  $\leq 30000\text{rpm}$

Dry gas seals application range:

Pressure:  $\leq 30\text{MPa}$  Temperature:  $-160\sim 260^{\circ}\text{C}$

Shaft diameter:  $20\sim 400\text{mm}$  Rotating speed:  $\leq 45000\text{rpm}$





## OTCE Oil Turbo Compressor Equipment co.

In response to the growing demand for gas supply and transmission in the country, The company was established in 2001 with primary objective to transfer technical knowledge in turbo compressor manufacturing.



Along the plan of localizing compressors manufacturing, OTCE has steadily endeavoured to play a significant role in rendering "Overhaul and Aftersales Services" of various types of compressors both to Iranian companies and others in the region. Manufacture and supply of various types of compressors as required by Ethylene Gas Projects, or Process Compressors demanded by different Phases of South Pars Gas Filed (world's largest gas field) have been in the scope of its works.



# SNS

## Sinoseal Holding co

SNS founded in 1978, is one of the world leading and China's first research institutes in sealing industry, and now the only stock listed mechanical seal company in China which its products are widely used in petrochemical, chemical, coal, chemical, natural gas, oil & gas, power plant and metallurgy industry.



over the past 40 years, SNS have earned the trust and support of their customers through unparalleled technical research & development as well as by providing round the clock response to service request. SNS focus on research & development, manufacture and the supply of mechanical seal, dry gas seal, auxiliary system.

the innovative employees of Sinoseal, adhering to the spirit of ingenuity, have always been committed to the research of basic theory and the development of new products and new technologies, well known as one of the strongest and most competitive enterprises in China's fluid sealing industry.

products exported to Europe, Middle east , Middle Asia and southeast Asia. SNS has developed dry gas seal, metal bellows seal, high pressure seal, high speed pump mechanical seal and mechanical seal for large shaft agitator.

### R & D Innovation

Innovation is the driving force of enterprise development. The innovative employees of Sinoseal, adhering to the spirit of ingenuity, have always been committed to the research of basic theory and the development of new products and new technologies, well known as one of the strongest and most competitive enterprises in China's fluid sealing industry.





# Core Competitiveness

## Quality Advantage

Ingenuity is the cornerstone of quality. Advanced processing technology, high-end complete processing equipment, perfect quality assurance system, and scientific test and verification ensure that high-quality products are constantly launched and the performance is constantly upgraded.



## Sealing test center with large scale, critical parameters, complete methods, automatic data collection and analysis



**Medium:** oil, water, air, nitrogen, carbon dioxide

**Pressure:** oil:  $\leq 20\text{MPa}$ , water:  $\leq 20\text{MPa}$ , gas:  $\leq 45\text{MPa}$

**Speed:**  $\leq 50000\text{ rpm}$

**Shaft diameter:** mechanical seal  $\leq 480\text{mm}$ , dry gas seal  $\leq 400\text{mm}$

**Temperature:** oil: normal temperature  $\sim 400^{\circ}\text{C}$ ,  
water: normal temperature  $\sim 150^{\circ}\text{C}$ , gas:  $-180 \sim 200^{\circ}\text{C}$



## Leading technology and production process

unique domestic product pattern

It has a wide range of products, a wide range of parameters and a wide range of applications. Compressor dry gas seals, welded metal bellow mechanical seals, high-pressure mechanical seals, high-temperature mechanical seals, high-speed mechanical seals, heavy-duty mechanical seals, API682 standard mechanical seals, and large shaft diameter agitator mechanical seals are the company's core products, and the domestic market share of products keeps ahead.

## Series Products



### Seals for agitators

Mechanical seals for agitators  
Dry gas seals for agitators  
Dry running seals for agitators

### Support systems for pump mechanical seals

Heat exchangers  
Tank systems  
Support systems for pump mechanical seals  
Dry gas seal systems for pumps  
Oil station/water station systems

### Engineered seals

High speed and high temperature seals  
High speed and high pressure seals  
High temperature and high pressure seals  
Cryogenic and ultra-cryogenic seals  
Heavy duty seals  
Upstream pumping seals--LPS

### Other seal

Bearing Isolators  
Split mechanical seals  
Rotary joints  
Magnetic Seals



### Seal Intelligent Monitoring System

### Mechanical seals for pumps

Pusher seals for pumps  
Metal bellow seals for pumps  
High parameter mechanical seals for pumps  
Dry gas seals for pumps  
Dry running seals for pumps



### Control systems for compressor dry gas seals

Control systems for dry gas seals  
Air source pretreatment devices  
Pressurization devices  
Liquid removal devices  
NGS nitrogen generators



Polyurethane, rubber elastomer and thermoplastic seals  
Semi-finished sealing materials  
Seal manufacturing systems  
TBM seals

### Seals for compressors

Dry gas seals for compressors  
Mechanical seals for compressors  
Carbon ring seals for compressors  
Oil floating ring seals for compressors



### Seals for Nuclear plants

### Rotary Jet Pumps





# Mechanical Seals for Pumps

Pusher seals for pumps  
 Metal bellow mechanical seals for pumps  
 High parameter mechanical seals for pumps  
 Dry gas seals for pumps  
 Dry running seals for pumps  
 Slurry seals

## Application Parameters

**Pressure:**  $\leq 20\text{MPa}$

**Temperature:**  $-196\sim 410^{\circ}\text{C}$

**Shaft diameter:**  $10\sim 280\text{mm}$

**Rotating speed:**  $\leq 30000\text{rpm}$

Provide the best sealing solutions as per the working conditions and users' needs.

Provide the mechanical seal in accordance with API682 standards.

Provide product supporting services for pump manufactures.

Provide product retrofit and upgrading services for users.

## Typical applications

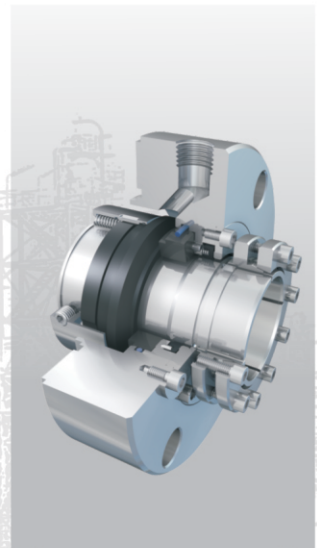
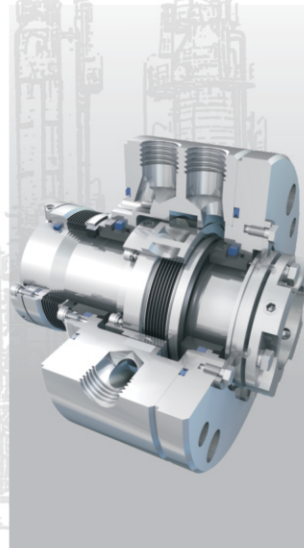
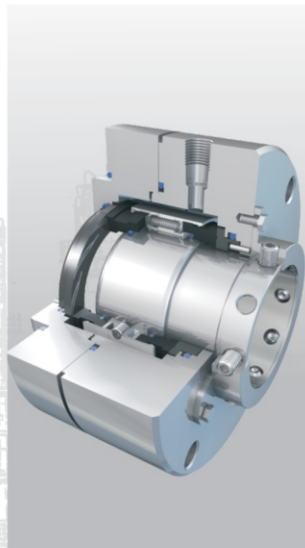
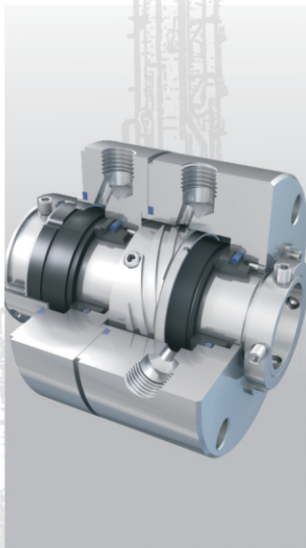
The products are widely used in centrifugal pumps in oil transportation, oil refining, chemical, fertilizer, LNG, MTO, PDH, Power, environmental protection and other industries.

**Oil transportation industry:** oil pipeline pump.

**Oil refining industry:** Atmospheric and vacuum distillation, reforming, hydrogenation and other chemical process pumps.

**Chemical industry:** Ethylene, EOEG, PP, PE and other chemical process pumps.

**Fertilizer industry:** Synthetic ammonia, urea and other chemical process pumps.





# Seals for compressors

Dry gas seals for compressors  
 Mechanical seals for compressors  
 Carbon ring seals for compressors  
 Oil floating ring seals for compressors

## Application parameters

**Pressure:**  $\leq 30\text{MPa}$

**Temperature:**  $-160\sim 260^{\circ}\text{C}$

**Shaft diameter:**  $20\sim 400\text{mm}$

**Rotating speed:**  $\leq 45000\text{rpm}$

Provide the best sealing solution as per the working conditions and user requirements.

Provide dry gas seal according to API617 or API692 standards.

Provide product supporting service for compressor manufactures.

Provide product retrofit and upgrading services for users.

## Typical applications

The products are widely used in gas transmission, oil refining, chemical industry, chemical fertilizer, LNG, NGL, MTO, PDH and other industries.

**Natural gas transportation industry:** compressor for long-distance natural gas pipeline.

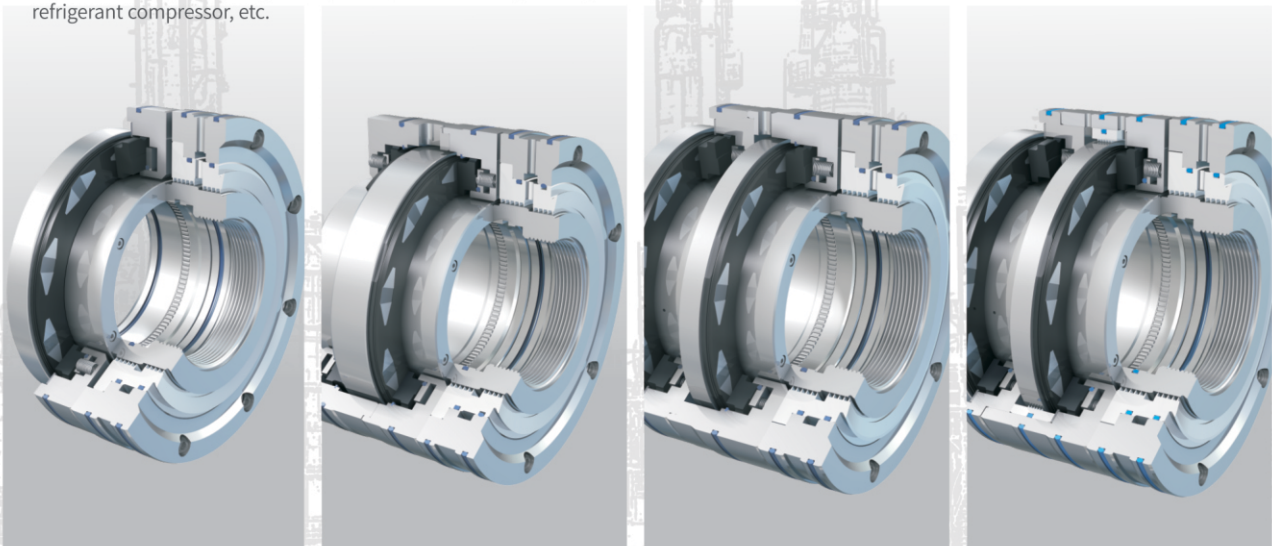
**Oil refining industry:** diesel hydrogenation, wax oil hydrogenation, hydrocracking, residue hydrogenation, recycle hydrogen compressor for lube oil hydrogenation unit, circulating hydrogen compressor for reforming unit, hydrogen booster for reforming unit, etc.

**Chemical industry:** cracking gas compressor, propylene compressor, ethylene compressor, PP unit circulating gas compressor, PE Unit circulating gas compressor.

**Fertilizer industry:** raw material gas compressor, ammonia compressor, synthetic gas compressor, circulating gas compressor,  $\text{CO}_2$  compressor, etc.

**MTO, PDH industry:** product gas compressor, propylene compressor, ethylene compressor, etc.

**LNG industry:** coke oven gas compressor, raw material gas compressor, refrigerant compressor, etc.





# Seals for agitators

Mechanical seals for agitators  
 Dry gas seals for agitators  
 Dry running seals for agitators

## Application parameters

**Pressure:**  $\leq 15\text{MPa}$

**Temperature:**  $-100\sim 300^{\circ}\text{C}$

**Shaft diameter:** 30~480mm

**Rotating speed:**  $\leq 1480\text{rpm}$

Provide the best sealing solution as per the working conditions and user requirements.

Provide product supporting service for agitators.

Provide product retrofit and upgrading services for users.

## Typical applications

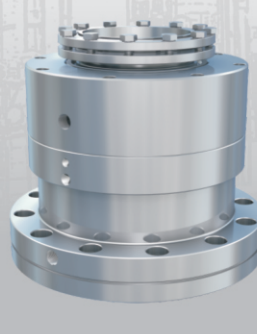
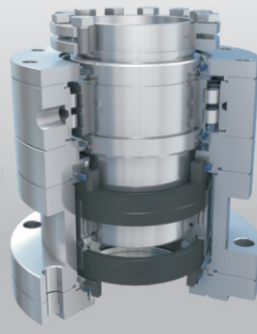
The products are widely used in rubber, PTA, ABS, Caprolactam, PP, PE, PVC, Pharmaceutical, food, batteries and other industries of polymerization kettle, agitator, and reactor.

**PTA industry:** oxidation reactor agitator, CTA crystallizer agitator, PTA crystallizer agitator, etc.

**PP industry:** polymerization reactor agitator, catalyst feed tank agitator, modifier mixing tank agitator, etc.

**ABS industry:** PBL reactor, ABS reactor and other agitating equipment.

**Caprolactam industry:** hydrogenation reactor, fresh catalyst preparation agitator, silica gel agitator and other agitating equipment.





# Engineered seals

High speed and high temperature seals

High speed and high pressure seals

High temperature and high pressure seals

Cryogenic and ultra-cryogenic seals

Heavy duty seals

Upstream pumping seals of LPS

## Application parameters

**Pressure:**  $\leq 20\text{MPa}$

**Temperature:**  $-196\sim 410^{\circ}\text{C}$

**Shaft diameter:**  $30\sim 400\text{mm}$

**Rotating speed:**  $\leq 8000\text{rpm}$

It provides overall solutions for high temperature, low temperature, high pressure, large shaft diameter and extreme working conditions, dangerous medium, key equipment and special process. The sealing products and sealing auxiliary systems are one-to-one designed and more targeted for the working condition, which can ensure the normal operation of core equipment of users for a long period of time.

Provide product supporting service for OEMs.

Provide product retrofit and upgrading services for users.

## Typical applications

The products are used in the core equipment of petrochemical, coal chemical, offshore oil, electric power and other industries.

**Oil refining industry:** slurry pump, radiation feed pump, hydrogenation feed pump, hydraulic turbine.

**Ethylene industry:** quench oil pump, chilled water pump, Ethylene pump, Propylene pump, PP, PE axial flow pump.

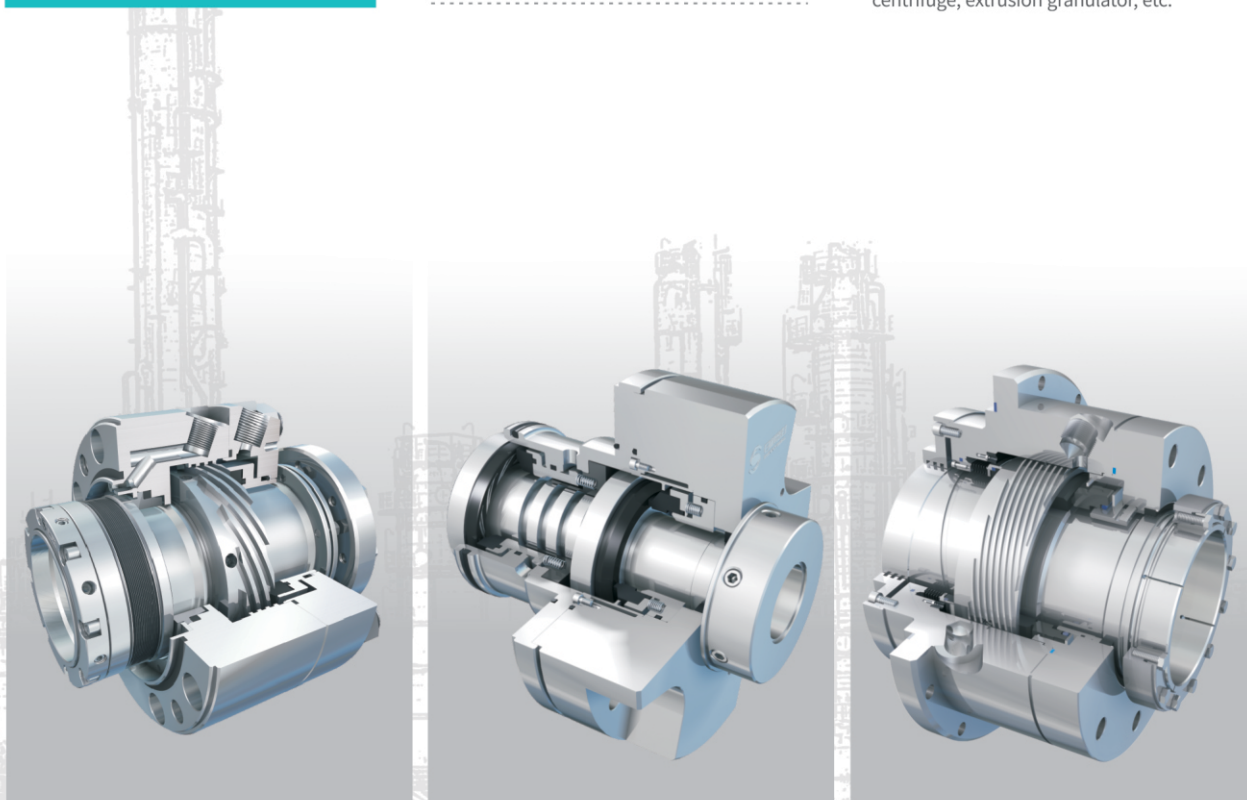
**Coal chemical industry:** Lean methanol pump, high temperature drum water pump, high pressure condensate pump, coal slurry pump.

**Fertilizer industry:** high pressure liquid ammonia pump, Carbamate pump.

**Others:** oil pipeline, offshore platform oil pump, etc.

**Power industry:** boiler feed water pump, condensate pump.

**OEM:** large vacuum pump, roots blower roots, centrifuge, extrusion granulator, etc.



# Support systems for pump mechanical seals

Heat exchangers

Tank systems

Support systems for pump mechanical seals

Dry gas seal systems for pumps

Oil station/water station systems

Provide the support systems for pump mechanical seals in accordance with API682 standards.

Provide product supporting services for pump manufactures.

Provide product retrofit and upgrading services for users.

Provide customers with special customized products.

## Typical applications

Products are widely used in gas transmission, oil refining, chemical industry, fertilizer, LNG, NGL, MTO, PDH and other industries.





# Control systems for compressor dry gas seals

Control systems for dry gas seals  
 Air source pretreatment devices  
 Pressurization devices  
 Liquid removal devices  
 NGS nitrogen generators

Provide the support systems for compressor dry gas seals in accordance with API614 or API692 standards.

Provide product supporting services for compressor manufactures.

Provide product retrofit and upgrading services for users.

Provide customers with special customized products.

## Typical applications

Products are widely used in gas transmission, oil refining, chemical industry, fertilizer, LNG, NGL, MTO, PDH and other industries.

