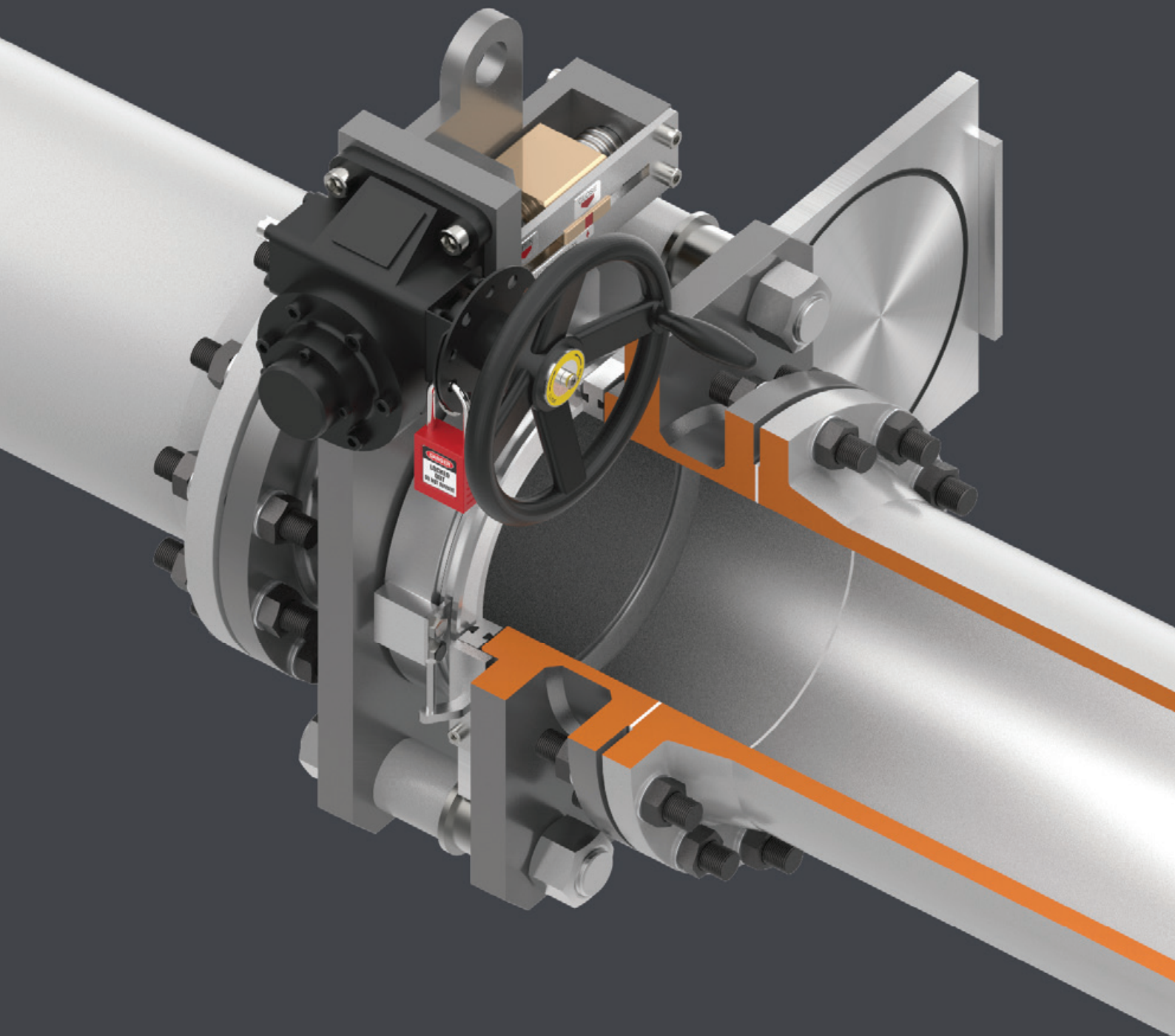


Upgrade safety of your piping facility

LINE BLIND

For Positive Isolation



CUSTOMER LIST

North America

- AIR LIQUIDE
- ARKEMA
- BASF GIESMER
- BP TEXAS
- CARPENTER CHEMICAL
- CENOVUS
- CHEVRON BORGER
- CHEVRON MISSISSIPPI
- CHEVRON PHILLIPS CHEMICAL
- DOW
- DUKE ENERGY
- DUPONT BAYPORT
- DUPONT VIRGINIA
- ENTERGY
- EXXON MOBIL HOUSTON
- FORMOSA PLASTIC
- GE POWER SYSTEMS
- GLENCORE
- GOODYEAR CHEMICAL
- HOLLY FRONTIER
- HONSBY-SEATHERFORD
- ICA INC
- JINFEX
- KAO SPECIALTIES AMERICA
- LAUREN ENGINEERING
- LUBRIZOL PASADENA TX
- MEAD WEST VACO
- MONSANTO LOUISIANA
- NAUGHTON POWER PLANT
- NORANDA ALUMINA
- OCI
- OILTANKING HOUSTON
- PUMA ENERGY GUATEMALA
- RHODIA
- ROCHE CAROLINA INC
- SHELL
- SINGLE BUOY MOORINGS INC(FPSO)
- SYNGENTA CROP PROTECTION INC
- UOP
- ASHLAND CHEMICAL
- ANDEAVOR
- MARATHON PETROLEUM CORPORATION
- JOHNSON MATTHEY
- US STEEL
- EUREKA MIDSTREAM
- ALBEMARLE
- PPG
- TENARIS TAMSA
- FLINT HILLS RESOURCES
- NOVA CHEMICAL
- INEOS
- KARDEMIR IRON & STEEL

Middle East

- BOROUGE
- ENOC
- FUJAIRAH REFINERY COMPANY LIMITED
- GULF PETROCHEM
- IPC(INTERNATIONAL POLYMERS COMPANY)
- VOPAK HORIZON FUJAIRAH LIMITED
- OMAN OILTANKING TERMINAL
- VTTI
- PORT OF FUJAIRAH
- BPGIC

Europe

- AQUAFIL ENGINEERING
- ARCELOR MITTAL GENT
- AVICO B.V
- BASF
- BLUEWATER ENERGY ENGINEERING
- BP GELSENKIRCHEN
- CEPSA
- COMBRIAN FISHER
- DUPONT
- EXXON MOBILE
- HAMWORTHY COMBUSTION
- LAFARGE ZEMENT KARSORFER GMBH
- LANXESS
- LINDE ENGINEERING
- NESTE FINLAND
- NUON POWER PLANT
- OILTANKING MALTA
- OILTANKING TERNEUZEN
- PETROCHEM
- PETROLEOS DEL NORTE
- REPSOL
- RHODIA
- S.F.D.M
- SARLIN FURNACES AB
- SINGLE BUOY MOORINGS INC(FPSO)
- SMCA
- SOLVAY
- STATEOIL PETROLEUM
- TATA STEEL UK
- TATA STEEL VELZEN
- THYSSENKRUPP STEEL EUROPE AG
- TOTAL
- VALERO PEMBROKE REFINERY UK
- VOST ALPINE AUSTRIA
- YARA UUSIKAUPUNKI FINLAND
- BRITISH STEEL
- ANDRITZ
- ARLANXEO
- HUNTSMAN
- POLIMERI EUROPA
- KRONOS
- SASOL
- HTO
- COVESTRO
- LUKOIL
- METAFRAX
- ROSNEFT
- SIBUR
- CHEMOURS
- SHELL
- YARA
- HOPE CEMENT
- MACFARLAN SMITH
- REPSOL-SINOPEC RESOURCES

South America

- ELECNO
- ICA FLUOR
- MC DERMOTT
- OCCIDENTAL DE COLOMBIA LLC
- PEMEX
- PETROBRAS
- QUIP



■ Republic of Korea

- AKYUNG PAINTING
- AKYEONG PETROCHEMICAL
- DAELIM INDUSTRIAL
- DAELIM PETRO
- DONGYANG CHEMICAL
- GS CALTEX
- GS CONSTRUCTION
- HANHWA PETRO
- HONAM PETRO
- HYUNDAI E AND C
- HYUNDAI ENGINEERING
- HYUNDAI STEEL
- ISOO CHEMICAL
- KOLONG CHEMICAL
- KUMHO P&B
- LG CHEMICAL
- LG DOW POLYCARBONATE
- LOTTE CHEMICAL HOIL PLANT
- LUBRIZOL
- POSCO
- SAMNAM PETRO
- SAMSUNG C AND T
- SAMSUNG ENGINEERING
- SAMSUNG EVERLAND
- SAMSUNG GENERAL CHEMICALS
- SAMSUNG SEMI CONDUCTOR
- SAMSUNG TOTAL
- SAMSUNG HEAVY INDUSTRY
- SEETEC
- SK CHEMICAL
- SK CORP
- SK ENERGY
- S-OIL
- STX SHIPBUILDING
- TOYO ENGINEERING
- YNCC

■ Africa

- SEREPT
- ARCELOR MITTAL
- STEVAL ENGINEERING
- TEKFEN
- TOTAL GABON
- AMBATOVY
- CAMEL OIL
- OILCOM
- ORYX
- GBP
- TIPER
- ENGEN
- HASS PETROLEUM
- CPMZ

■ Asia

- ARKEMA
- AUDEX PTE LTD
- BASF ELECTRONIC MATERIALS TAIWAN LIMITED
- BLUESCOPE STEEL
- CHANG CHUN PETROCHEMICAL
- CHINESE PETROLEUM CORPORATION
- CHUNG HUNG STEEL CO
- FERTITIZER KEDAH
- FINOLEX
- FORMOSA CHEMICAL AND FIBER CORPORATION
- FORMOSA PETROCHEMICAL CORPORATION
- FORMOSA PLASTICS
- GLAXO WELLCOME MFG
- HORIZON SINGAPORE TERMINAL
- HQCEC
- INDIA OIL COMPANY LIMITED(IOCL)
- JTC CORPORATION
- MITSUI ENGINEERING AND SHIPBUILDING
- MITSUBISHI HEAVY INDUSTRY
- NESTE OIL SINGAPORE
- OILTANKING SINGAPORE
- PETRONAS CHEMICAL
- PT ASAHIMAS CHEMICAL
- PTT SONGKLA SITE
- POLYPLEX
- ROHM AND HAAS INDIA(DOW INDIA)
- SHENHUA NINGXIA COAL INDUSTRY GROUP
- TECHNIP
- OILTANKING INDONESIA
- CPDC
- BASF
- DCC
- LOTTE CHEMICAL TITAN
- ZHONGTAI CHEMICAL

■ Australia

- BARRICK KANOWNA
- BLUESCOPE STEEL
- ERRARING POWER STATION
- INDEPENDENT CEMENT
- KOPPERS
- MELBOURNE CEMENT
- MINARA RESOURCES
- ORICA
- QUEENSLAND NIKEL
- SANTOS
- V&I AUSTRALIA
- BHP
- CSBP
- HATCH
- CHEVRON
- SUNSTATE CEMENT
- BAYSWATER POWER STATION
- SOUTH 32 ILLAWARRA COAL

ABOUT SAMMI LINE BLIND

SAMMI Machinery Co., Ltd. is a world leading company in the engineering and manufacturing of line blind products with over 25 years of experience in line blind development for various industries. SAMMI LINE BLIND provides absolute shut-off and long-life products with professional services to the global line blind market.

Company Profile

- **Apr. 1993** Established
- **Sep. 2000** Quality Certification from KOREA Gas Safety Authority
- **Oct. 2002** Licensed new product of the Line Blind Valve
- **Nov. 2002** Licensed Utility Model of the Line Blind Valve
- **Aug. 2003** CE-PED approved from Bureau Veritas
- **Mar. 2005** Certificated "Venture Company" from KOREA government
- **May. 2007** ISO 9001 Approved
- **Aug. 2009** Fire Safety Test approved
- **Sep. 2009** CRN(Canada Registration Number) approved
- **Feb. 2010** API Spec. Q1 Certificate, ISO / TS 29001 approved
- **Dec. 2012** TSSA (Technical Standards & Safety Authority, Ontario) approved
- **Feb. 2013** RUSSIA GOST-R approved
- **May. 2013** RUSSIA ROSTECHNADZOR (RTN) approved
- **Jun. 2013** Canada ABSA (Pressure Equipment Safety Authority, Alberta) approved
- **July. 2013** API 6D approved
- **Aug. 2013** UAE TAKEER Qualified vendor approved
- **Dec. 2013** KSA SABIC Qualified Vendor approved
- **Apr. 2014** BRAZIL PETROBRAS Offshore Qualified Vendor approved
- **Jun. 2014** UAE Mott McDonald Limited Qualified Vendor approved
- **Oct. 2015** TR-CU 032 / 2013 approved
- **Oct. 2016** Cryogenic Test approved
- **Sep. 2018** Canada TSASK approved
- **Jun. 2022** TSG China approved
- **Dec. 2022** Canada TSSA (Technical Standards & Safety Authority Quebec) approved

Warranty

SAMMI Machinery Co.,Ltd provides a warranty up to 36 months after delivery for products that have been installed in accordance with the vendor's user instructions, with the exception of spare parts.

Assistance

SAMMI Machinery Co.,Ltd provides engineering and/or technical information to assist buyers in field installation and/or field services.

Requests for adjustments or modifications will be responded to quickly and professionally.

WHAT IS LINE BLIND?



[Typical Process]



[SAMMI Process]

SAMMI LINE BLIND

Line blinds have been used in pipelines where complete shut-off or full flow without a pressure drop is required.

Generally, blinding (or blanking) a line is a costly, labor intensive process requiring several personnel, heavy tool and machinery.

In addition to the typical methods of blinding a line, the lengthy process exposed operators to various hazards including inhalation of potentially toxic fumes, spills and the risk of explosion.

The SAMMI Line Blind incorporates a simple and durable design that has been developed to provide absolute shut-off, long life and cost-efficient service with minimum maintenance.

The unique opening-closing mechanism of the SAMMI Line Blind allows one person to blind pipelines quickly and safely without any tools or equipment.

■ Absolute shutoff

Zero leakage to downstream

■ Quick change

Blinding can safely be completed within only minutes

■ Only one operator

Easy and safe blinding requiring only one operator

■ Friction-Free

Gear-set system provides perfect isolation without any contact or rub of gasket

■ No line stretching / spreading

No stress on pipeline during operation (except EX & Jackbolt types)

■ Non-sticking mechanism

Unique Gear-set system prevents sticking problem of blind plate

■ Cost saving

Reduces maintenance hours, saving man-hour costs

■ No tools required

A simple hand-wheel operation.
No need for tools to provide completed shut-off

■ Safe

Prevention of potential hazards such as
Inhalation of potentially toxic fumes,
spills of product and risk of explosion

■ Simple structure

Minimum maintenance requiring only the replacement of sealing

COST EFFECTIVENESS

■ Necessary man-hour comparison

Size Ranged	Blank or Spectacle Plate(typical)	Sammi Line Blind	Saving Effect
1/2"~ 14" (DN15~DN350)	 1~4 Hours  2~4 persons gasket, tools, lifter	 20sec to 2min  by 1 person	- 2~16 man-hours - Gasket, bolts & nuts,tools - Time for draining and line cooling
16"~ 48" (DN400~DN1200)	 1~12 Hours  5-10 persons with gasket, tools, lifter & Heavy equipment	 2min to 10min  by 1 person	- 16~120 man-hours - Gasket, bolts & nuts,tools - Time for draining and line cooling

■ Reduce maintenance costs

- No replacement parts except gaskets
- No tools, wedges, crane, bolts necessary
- Quick and effective action in emergency
- Prevents loss of vacuum
- Prevents contamination and mixing of products
- Prevents potential leaking accidents in service
- Prevents environmental pollution

WHY CHOOSE SAMMI

SAMMI Quick Line Blind 2 essential features

- Zero Leakage
- Safe & Easy blinding by one operator



Features of SAMMI LINE BLIND

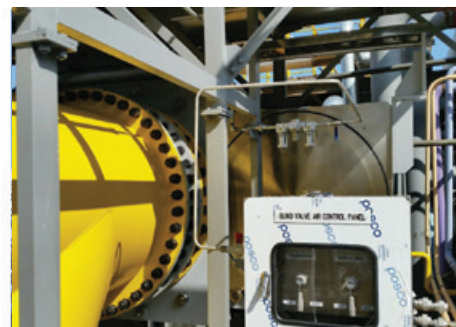
- **No line spread (except EX & Jackbolt type)**
SAMMI's unique Gear-set mechanism makes a gap for switching blind plate without line spreading
- **Self positioning of blind plate**
Blind plate is set on correct position by positioner
- **Hand wheel limit indicator**
Limit indicator provides correct positioning of tightening / untightening operation
- **Safety locking**
Locking devices can be used to prevent unexpected operation
- **Non-sticking mechanism**
Unique gear set mechanism prevents sticking problem of blind plate
- **Gasket protection cover**
Blind cover protects blind plate and gasket from external damages
- **Double Sealing (optional)**
Dependent on internal fluid and operating conditions, double sealing can be applied for extra safety
- **Open / Close position sensor (optional)**
Sensors can be installed to indicate blind plate position

APPLICATIONS

- Tank Farm
- FPSO
- Loading stations
- Ethylene furnaces
- COG (Coke Oven Gas)
/ BFG (Blast Furnace Gas)
- Mixing lines
- Fuel lines
- Shipboard lines
- Flares
- Clean out ports
- Tank vent
- Pump isolation
- LNG ships
- Product isolation
- Reactor blow down
- Filtration systems
- FSO
- Pig launching stations
- Steam lines
- Inert gas / Nitrogen gas
- Chemical cleaning isolation
- Lock out tag out systems
- Vessel inlets
- FCC unit



Naphtha, Diesel, Para-Xylene



Coke Oven Gas (AOV automation)



Natural Gas



Product carrier tank isolation



JET - Fuel (MOV automation)



Cryogenic service (LNG / Ethylene)



Tank Farm



Loading arm construction



Iron & Steel mill



VCM, RPG, Mix-Xylene



Chemical Terminal



Acetic acid, Methyl acetate



Ethylene, Propylene, SM



Regeneration gas



Gasoline and MTBE



Chemical Cleaning



Butadiene



Heat exchanger - Bypass line

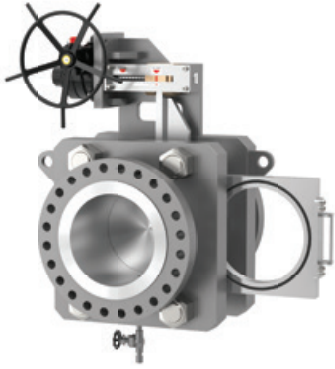


HDPE



On board vessel

PRODUCT LINE



SLIDING TYPE

Sliding type line blind has a unique gear set mechanism that makes a gap to slide in/out a blind plate without pipe joint stretching. It provides a safe and time efficient blinding process. SAMMI's sturdy and simple design creates highly reliable and durable line blinds using the most advanced technology.



SWING TYPE

Swing type line blind is one of the most popular line blinds that an operator can use to quickly and efficiently isolate a pipeline safely. SAMMI's unique design provides non-stretching operation that can prevent pipe joint stress caused by stretching movement.



COMPACT TYPE

Compact type line blind is designed for replacing an existing valve with limited F-F distance, large diameter pipeline or limited space installation. SAMMI's compact design provides weight reduction and removes the need for extra pipe supports.



NON SPILL TYPE

Non-spill type line blind has many advantages in oil terminal and offshore applications where the space of installation is limited and prohibiting of pollution is strictly required. With SAMMI's unique design, this line blind can prevent ground pollution and be installed parallel to the pipeline.

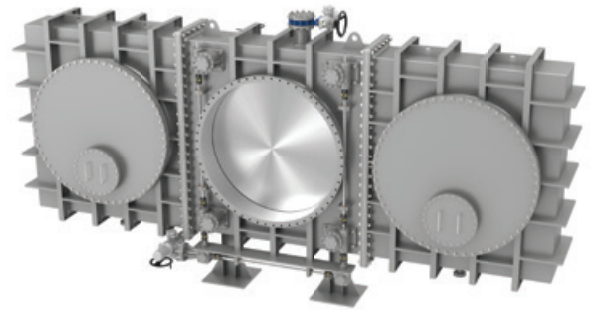


JACK BOLT

Jack bolt line blind has been used for a long time as it is applicable for a broad range of pressure pipelines with a lower cost. To change the blind plate position, an operator is required to unbolt it manually.

GOGGLE TYPE

Goggle type line blind is a good solution to isolate large diameter, high temperature and/or toxic gas pipelines for maintenance and inspection.



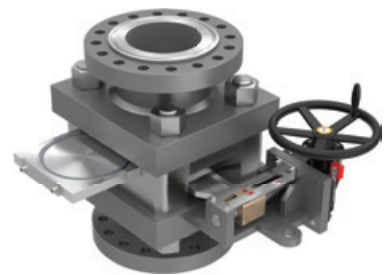
AUTOMATED LINE BLIND

Automatic Line Blind is good for remotely controlled blinding operation, high frequency of on-off cycle and/or critical fluid applications. SAMMI Line Blind provides automated blinding system by AOV, MOV or oil hydraulic source.



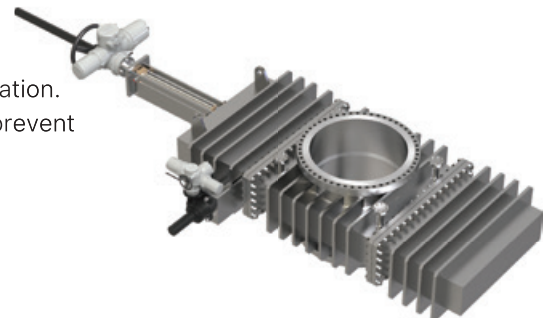
SLURRY / POLYMER

Slurry / Polymer type line blind offers perfect isolation for viscous fluid or liquid-solid mixture application. SAMMI's dual gear-set provides complete blinding without friction of the line, and specially designed scraper removes debris on blind plate.



RFCC

RFCC type line blind offers perfect isolation in catalytic cracking application. The enclosed compact body with stellite metal seating is designed to prevent blind jamming by depositions of coke/solid particles on blind plate.



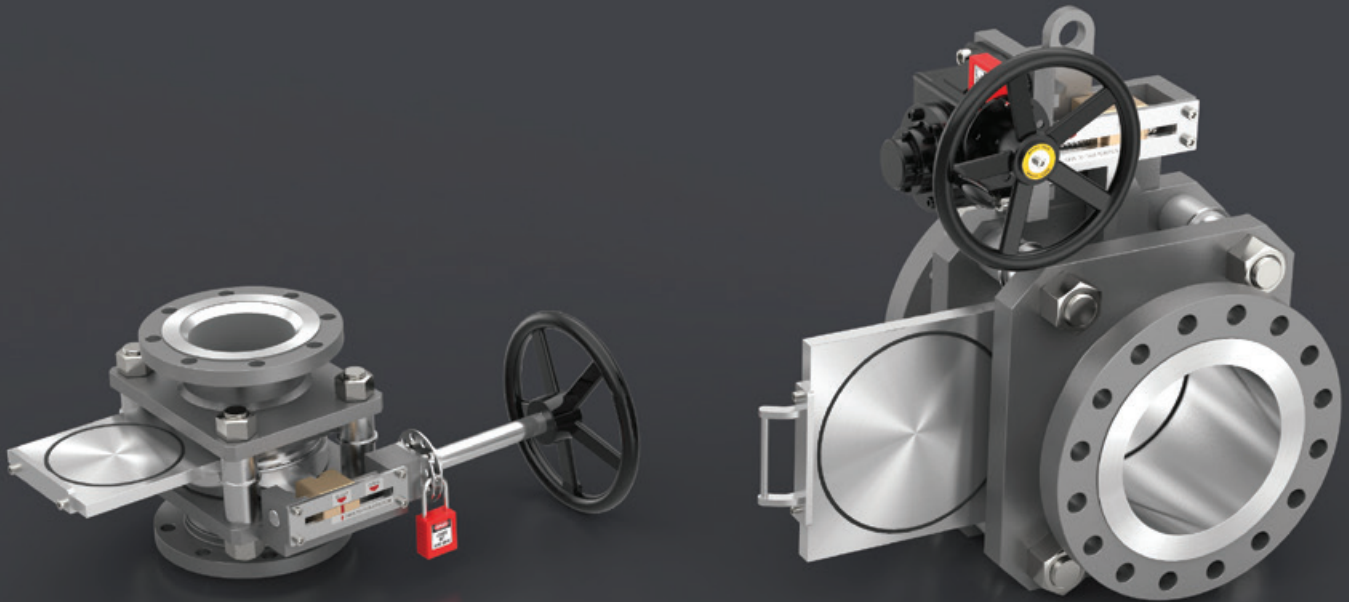
SLIDING TYPE



COMPACT TYPE



NON-SPILL TYPE



SLIDING TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Sliding type line blind has a unique gear set mechanism that makes a gap to slide in/out a blind plate without pipe joint stretching. It provides a safe and time efficient blinding process. SAMMI's sturdy and simple design creates highly reliable and durable line blinds using the most advanced technology.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

NPS 1/2 (DN15) - NPS100 (DN2500)

TEMPERATURE RANGE

Standard Design : -20°C ~ +200°C
High Temp. Design : +200°C ~ +816°C
Cryogenic Design : -196°C

PRESSURE RATING

ASME Class 150 to Class 1500
Other pressure classes up to ASME 2500
available upon request

MATERIALS

BODY : Carbon Steel, Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
BLIND : Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
MOVING PARTS & SEALING SURFACE are Anti-corrosion Materials

FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

APPLICATIONS

• REFINERY

- > Ethylene Furnace
- > Decoking line
- > Steam & Vapor line
- > FCCU Fractionator isolation (overhead & bottom line)
- > Catalyst service
- > Flare gas line

• CHEMICAL PLANT

- > Reactor Blowdown
- > Chemical Cleaning isolation
- > Mixing lines
- > Regeneration gas line
- > Filtration system
- > Loading station
- > Transfer line

• OFFSHORE

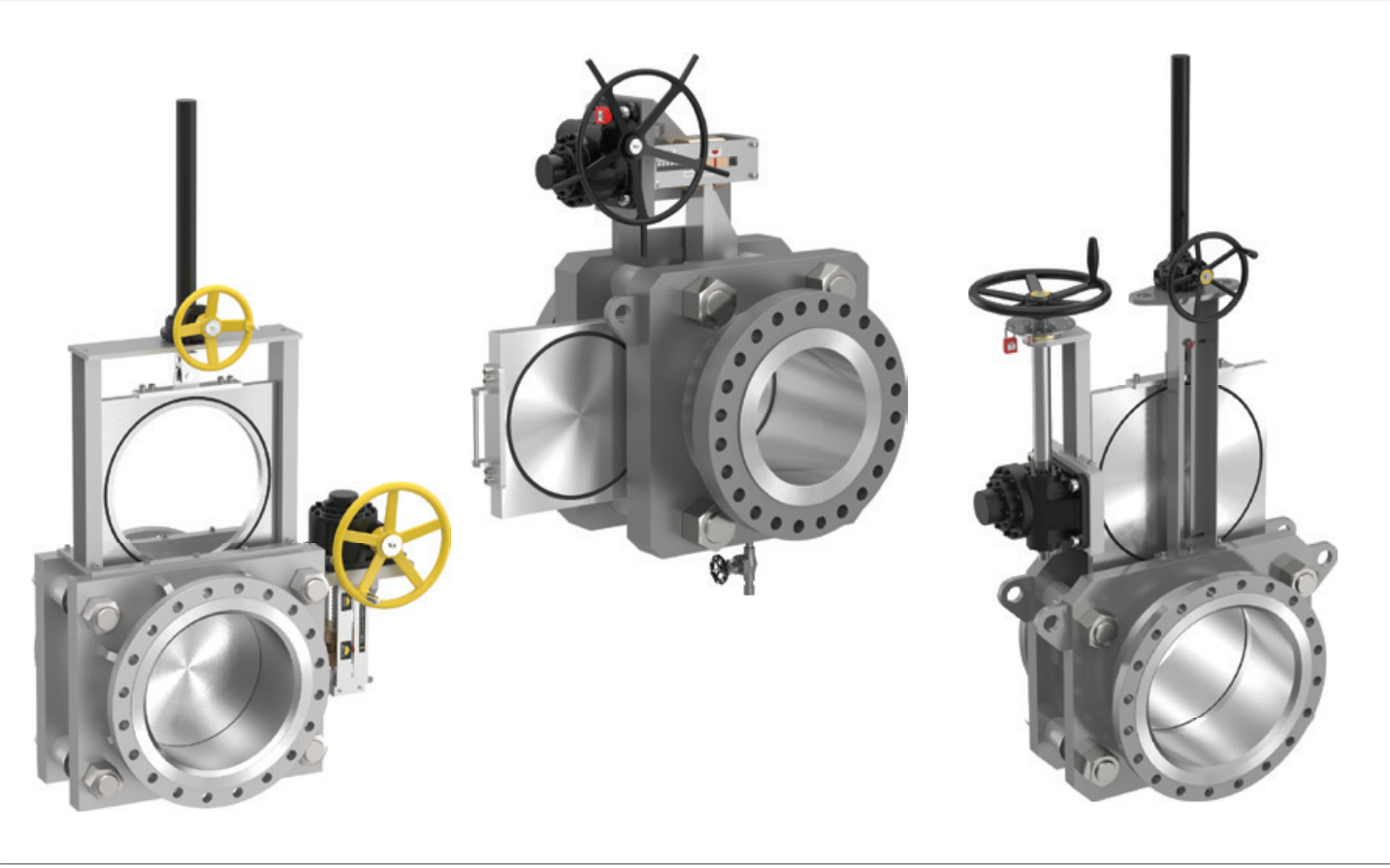
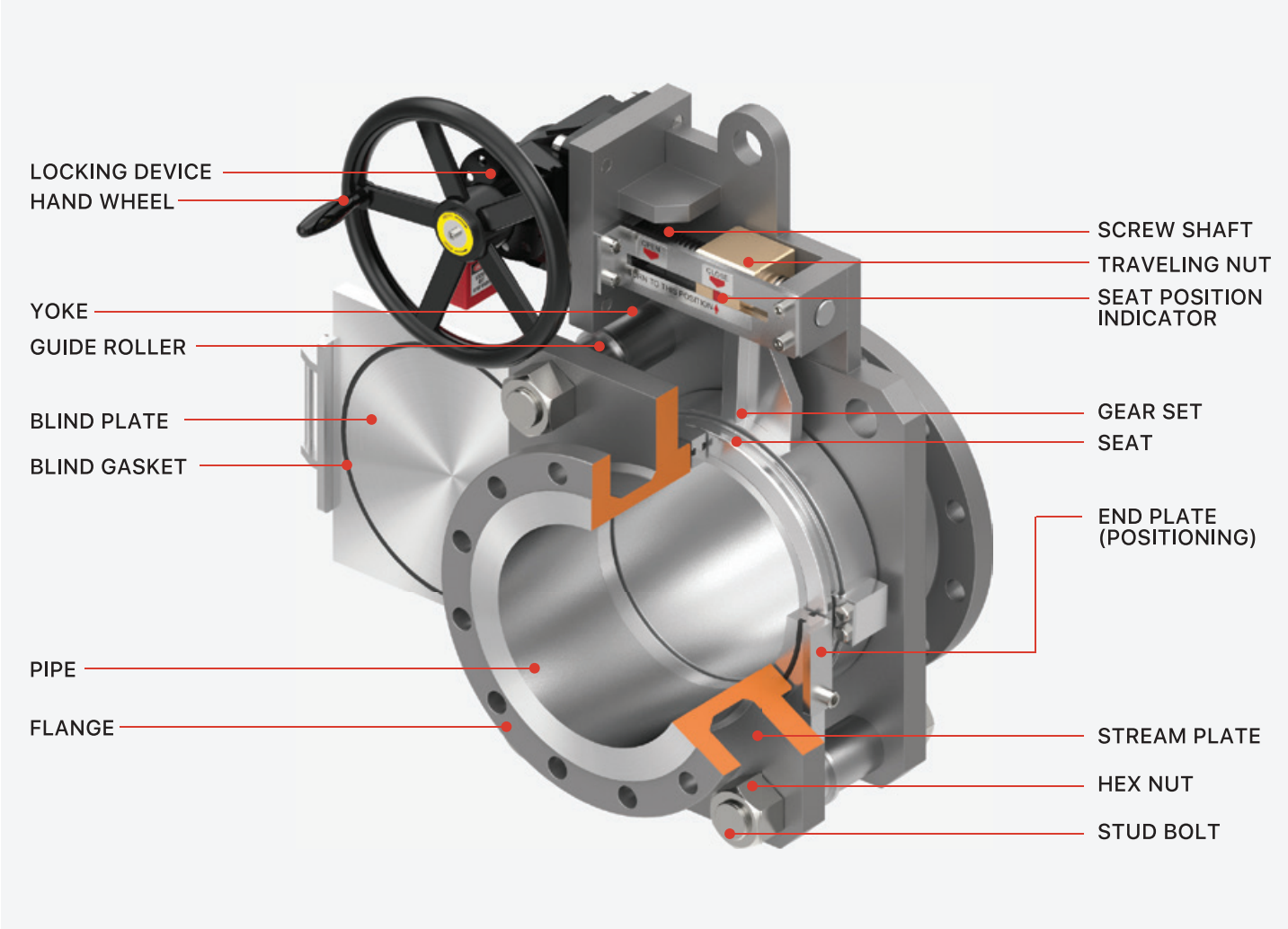
- > FPSO
- > LNG ship
- > Shipboard lines
- > Vessel inlet
- > Inert Gas system

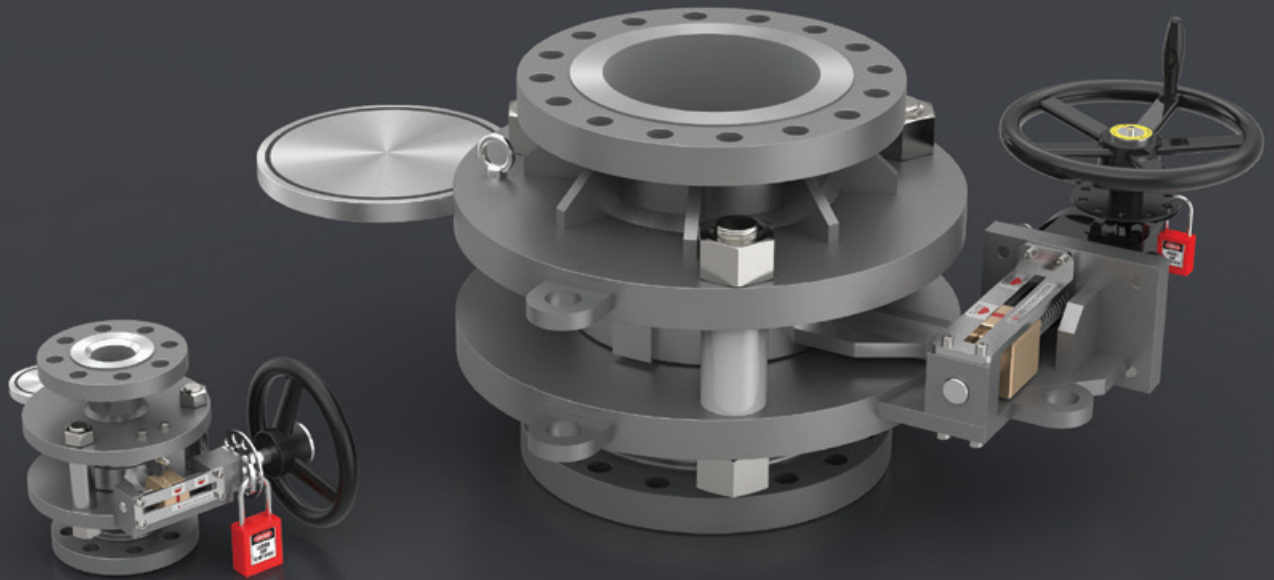
• STEEL

- > Coke Oven Gas
- > Blast Furnace Gas

PARTS DESCRIPTION

Sliding Type





SWING TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Swing type line blind is one of the most popular line blinds that an operator can use to quickly and efficiently isolate a pipeline safely. SAMMI's unique design provides non-stretching operation that can prevent pipe joint stress caused by stretching movement.

TECHNICAL SPECIFICATIONS

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FUNCTION

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OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

APPLICATIONS

• REFINERY

- > Ethylene Furnace
- > Decoking line
- > Steam & Vapor line
- > Flare gas line

• CHEMICAL PLANT

- > Reactor Blowdown
- > Chemical Cleaning isolation
- > Mixing lines
- > Regeneration gas line
- > Filtration system

• OFFSHORE

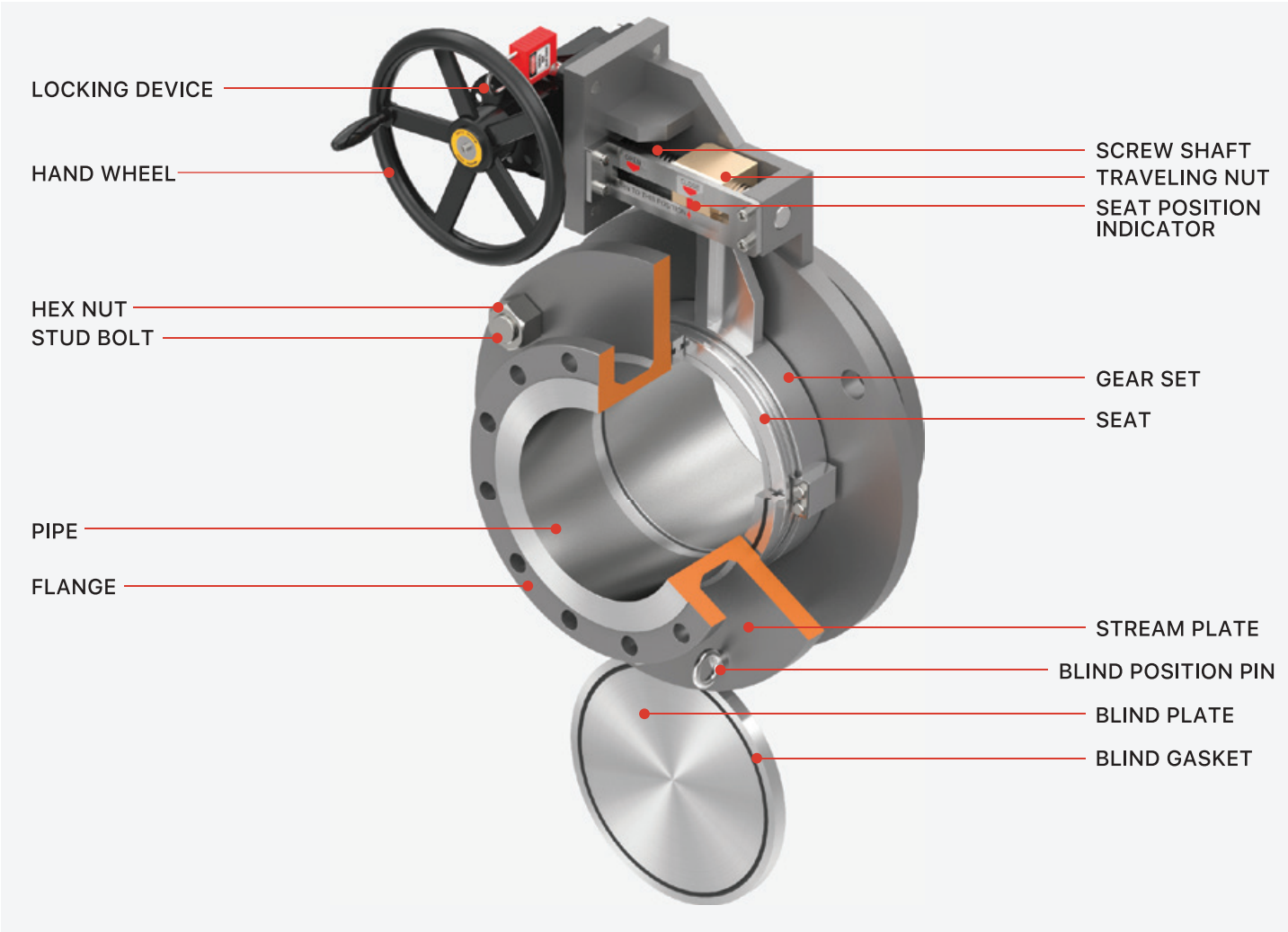
- > FPSO
- > LNG ships
- > Shipboard lines
- > Vessel inlet
- > Inert Gas system

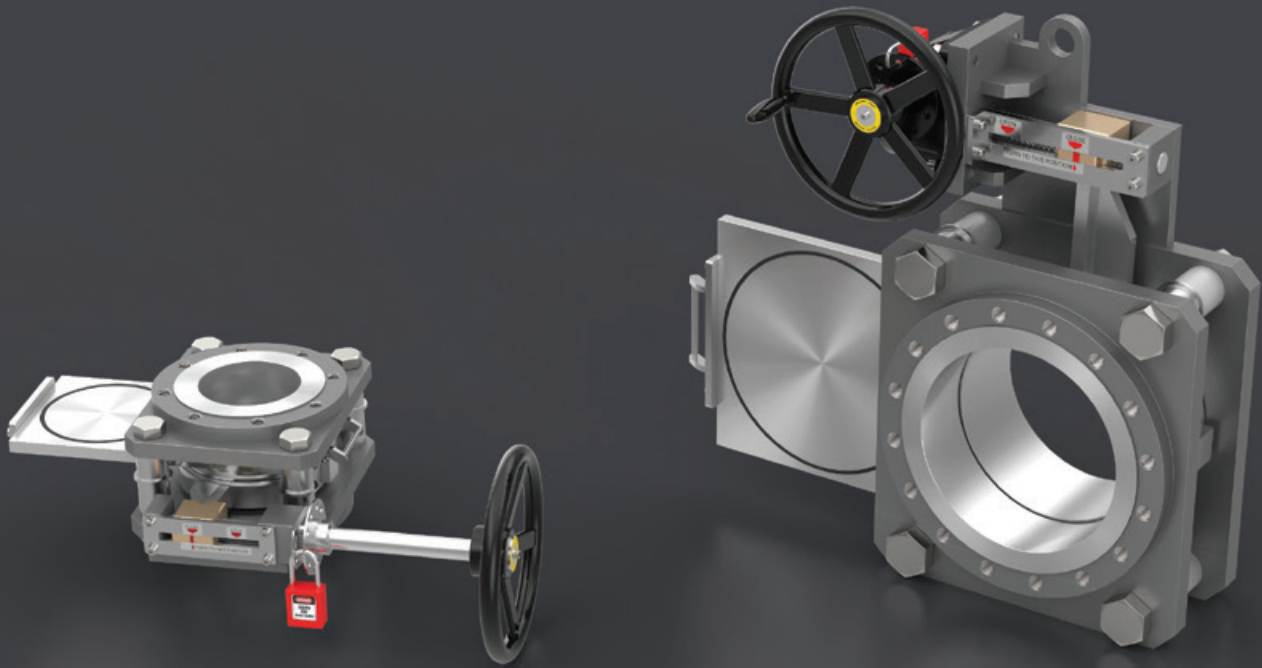
• STEEL

- > Coke Oven Gas
- > Blast Furnace Gas

PARTS DESCRIPTION

Swing Type





COMPACT TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Compact type line blind is designed for replacing an existing valve with limited F-F distance, large diameter pipeline or limited space installation. SAMMI's compact design provides weight reduction and removes the need for extra pipe supports.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

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FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

APPLICATIONS

• REFINERY

- > Ethylene Furnace
- > Decoking line
- > Steam & Vapor line
- > FCCU Fractionator isolation (overhead & bottom line)
- > Catalyst service
- > Flare gas line

• CHEMICAL PLANT

- > Reactor Blowdown
- > Ethylene Furnace
- > Chemical Cleaning isolation
- > Mixing lines
- > Regeneration gas line
- > Filtration system
- > Loading station
- > Transfer line

• OIL TERMINAL

- > Oil & Chemical tank farm
- > Loading Station
- > Pump isolation
- > LNG tank
- > Airport fuel line

• OFFSHORE

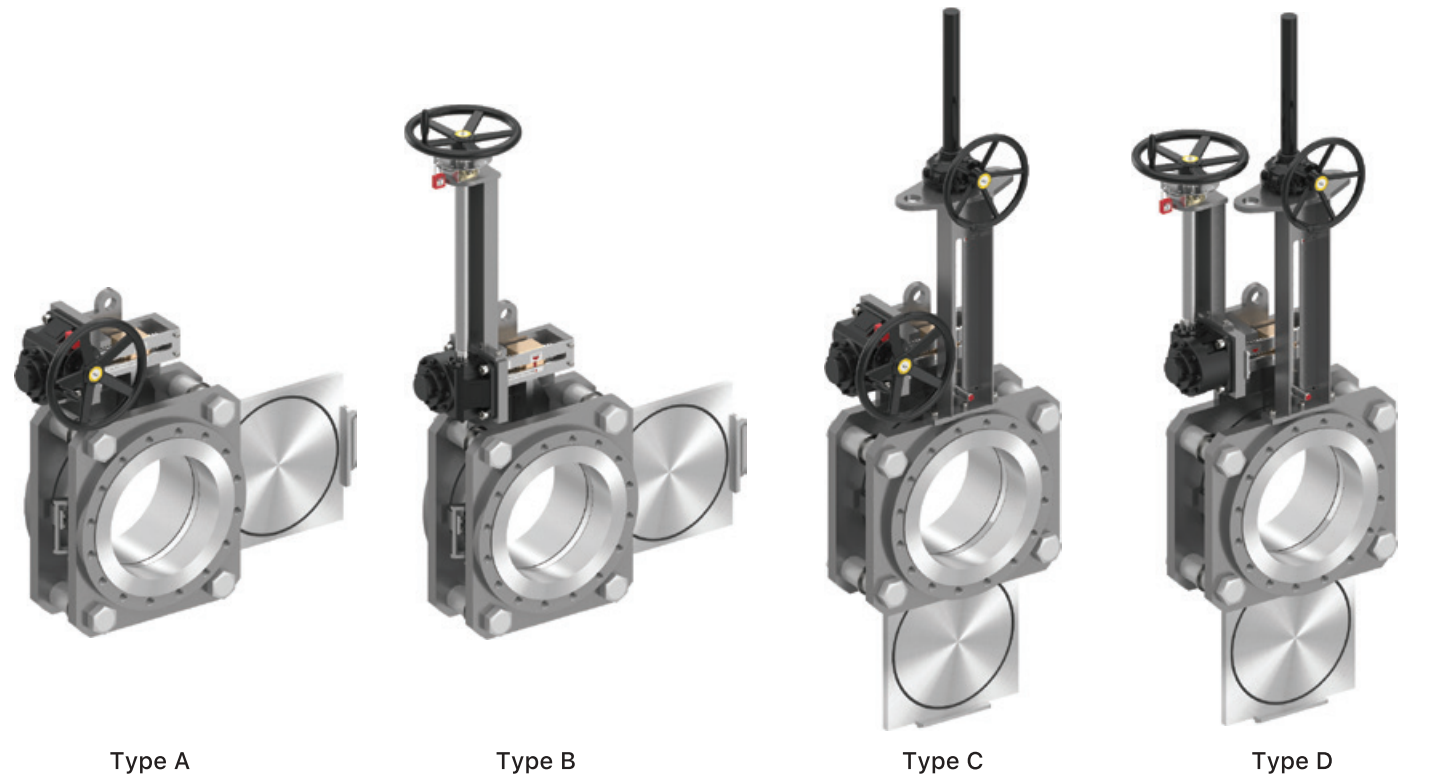
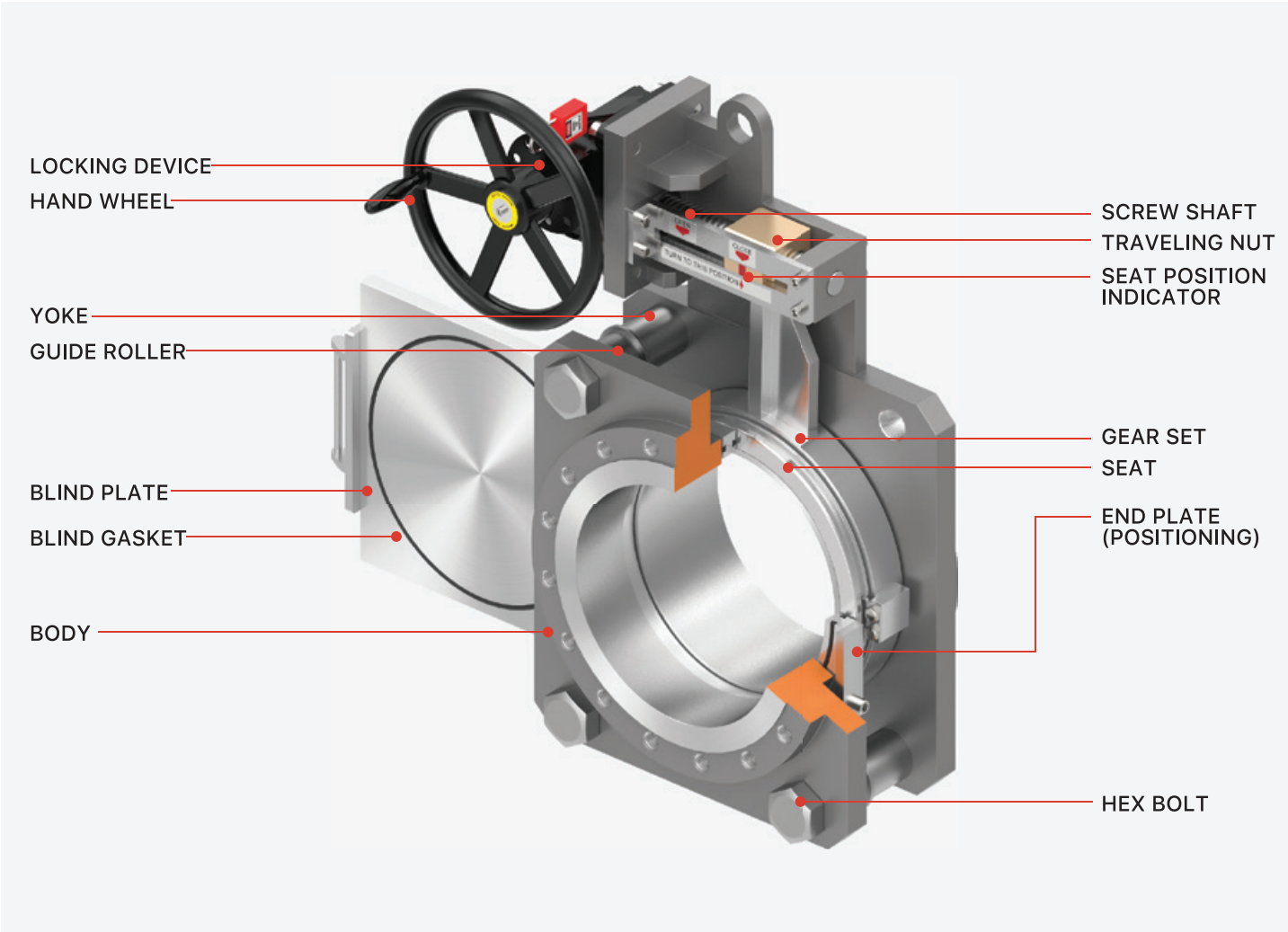
- > FPSO
- > LNG ship
- > Shipboard lines
- > Vessel inlet
- > Inert Gas system

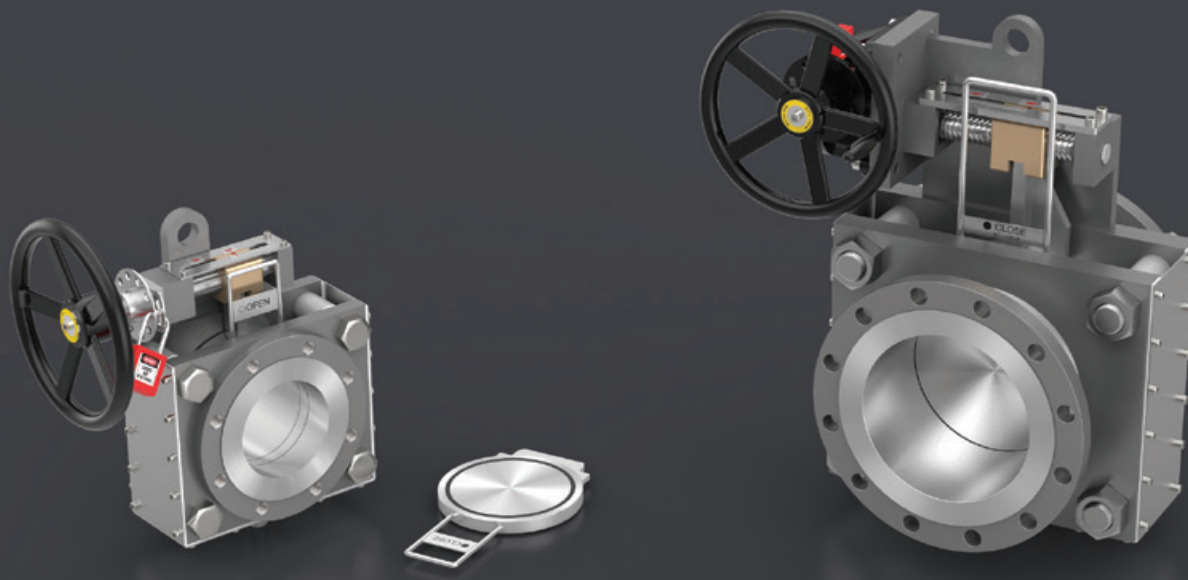
• STEEL

- > Coke Oven Gas
- > Blast Furnace Gas

PARTS DESCRIPTION

Compact Type





NON SPILL TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Non-spill type line blind has many advantages in oil terminal and offshore applications where the space of installation is limited and prohibiting of pollution is strictly required. With SAMMI's unique design, this line blind can prevent ground pollution and be installed parallel to the pipeline.

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OPERATION METHOD

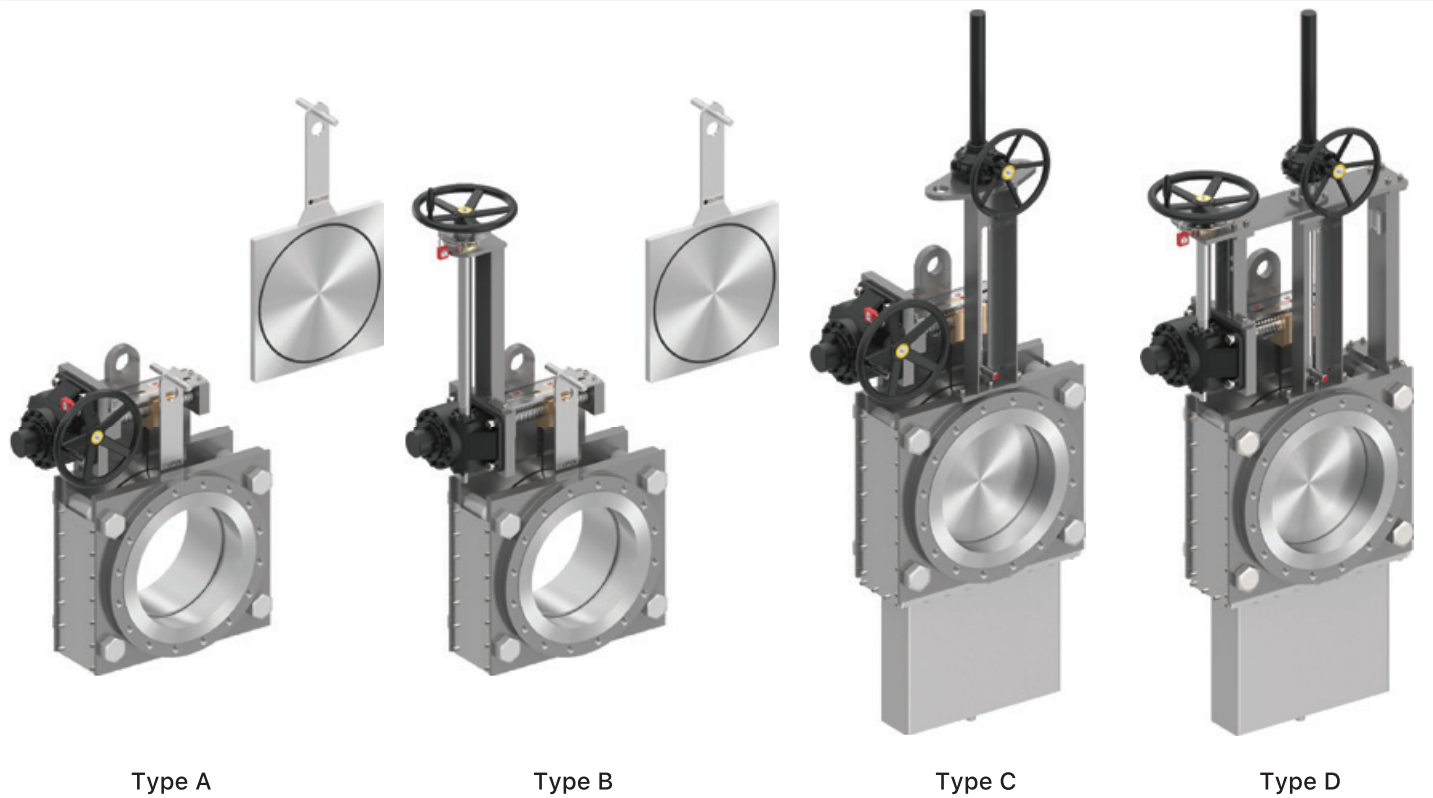
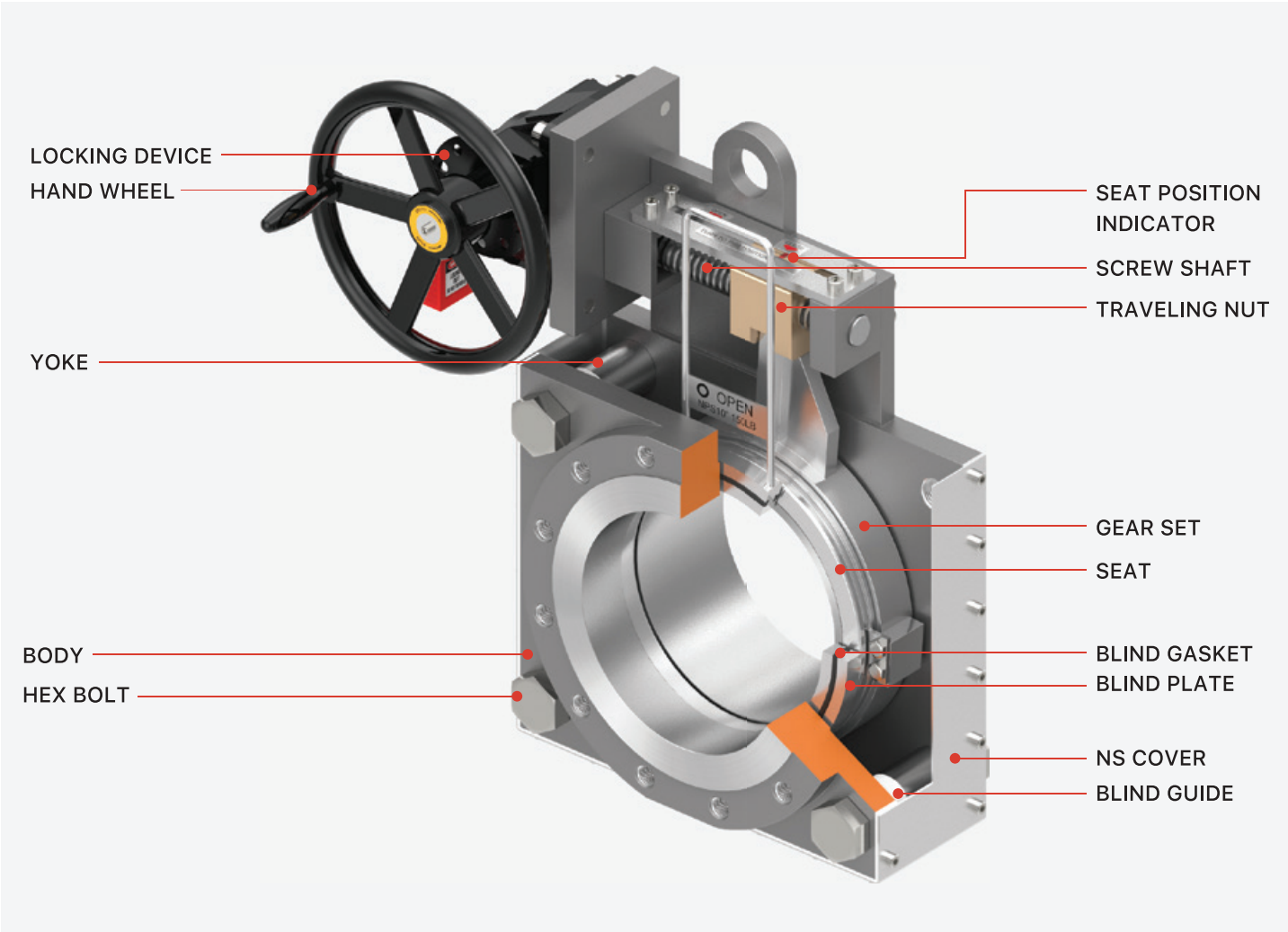
Manual Operation
Electric, Pneumatic or Hydraulic Operation

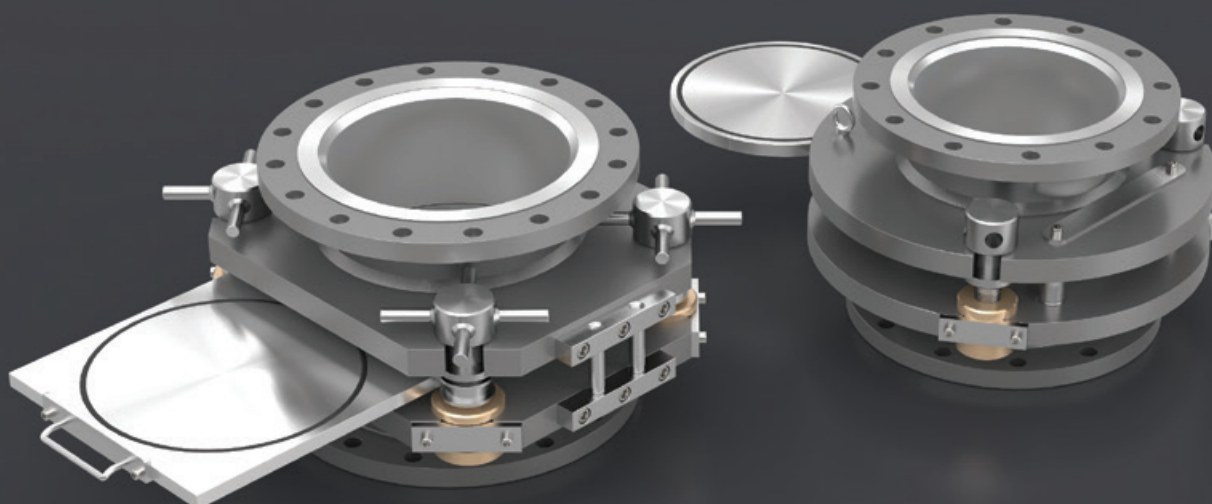
APPLICATIONS

- OIL TERMINAL
 - > Oil & Chemical tank farm
 - > Loading Station
 - > Pump isolation
 - > LNG tank
 - > Airport fuel line
- OFFSHORE
 - > FPSO
 - > LNG transfer
 - > Shipboard lines
 - > Vessel inlet
 - > Inert Gas system

PARTS DESCRIPTION

Non-spill Type





JACK BOLT TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Jack bolt line blind has been used for a long time as it is applicable for a broad range of pressure pipelines with a lower cost. To change the blind plate position, an operator is required to unbolt it manually.

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FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

APPLICATIONS

• REFINERY

- > Ethylene Furnace
- > Decoking line
- > Steam & Vapor line
- > FCCU Fractionator isolation
(overhead & bottom line)
- > Catalyst service
- > Flare gas line

• CHEMICAL PLANT

- > Reactor Blowdown
- > Ethylene Furnace
- > Chemical Cleaning isolation
- > Mixing lines
- > Regeneration gas line
- > Filtration system
- > Loading station

• OFFSHORE

- > FPSO
- > LNG ship
- > Shipboard lines
- > Vessel inlet
- > Inert Gas system

• STEEL

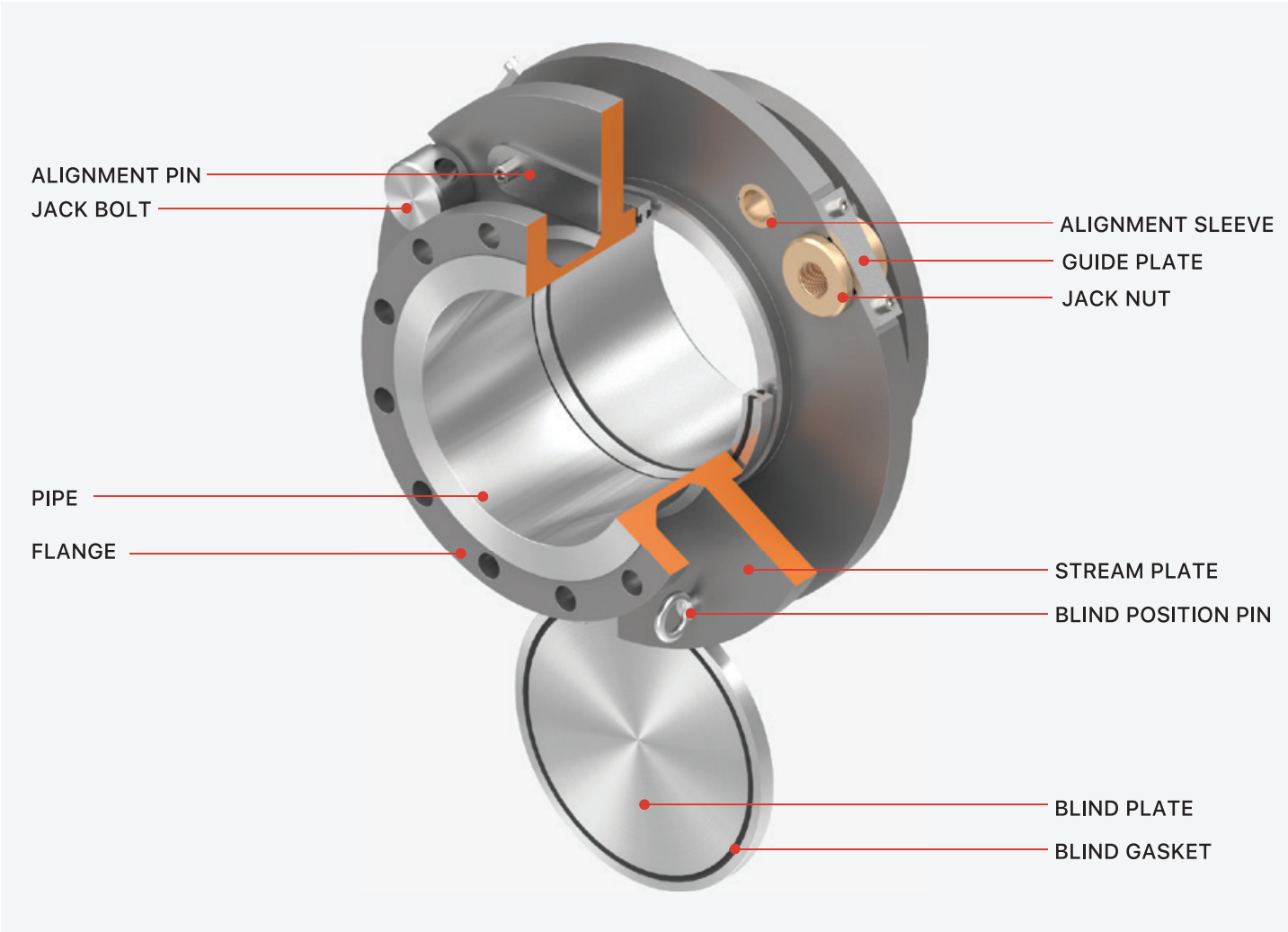
- > Coke Oven Gas
- > Blast Furnace Gas

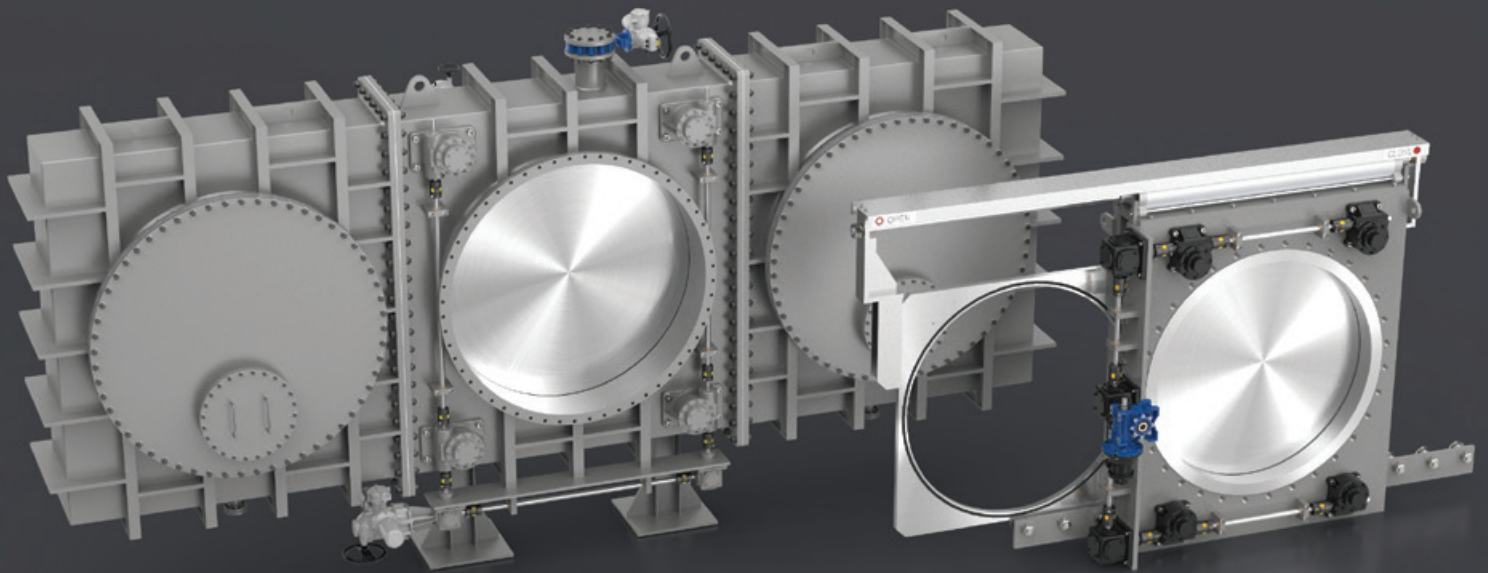
• POWER PLANT

- > Coke Oven Gas

PARTS DESCRIPTION

Jackbolt Type





GOGGLE TYPE

GENERAL INFORMATION

INSTRUCTION & FEATURES

Goggle type line blind is a good solution to isolate large diameter, high temperature and/or toxic gas pipelines for maintenance and inspection.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

NPS 24 (DN600) - NPS100 (DN2500)

TEMPERATURE RANGE

Standard Design : -20°C ~ +200°C
High Temp. Design : +200°C ~ +816°C
Cryogenic Design : -196°C

PRESSURE RATING

ASME Class 150 to Class 1500

MATERIALS

BODY : Carbon Steel, Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
BLIND : Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
MOVING PARTS & SEALING SURFACE are Anti-corrosion Materials

FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

APPLICATIONS

• STEEL

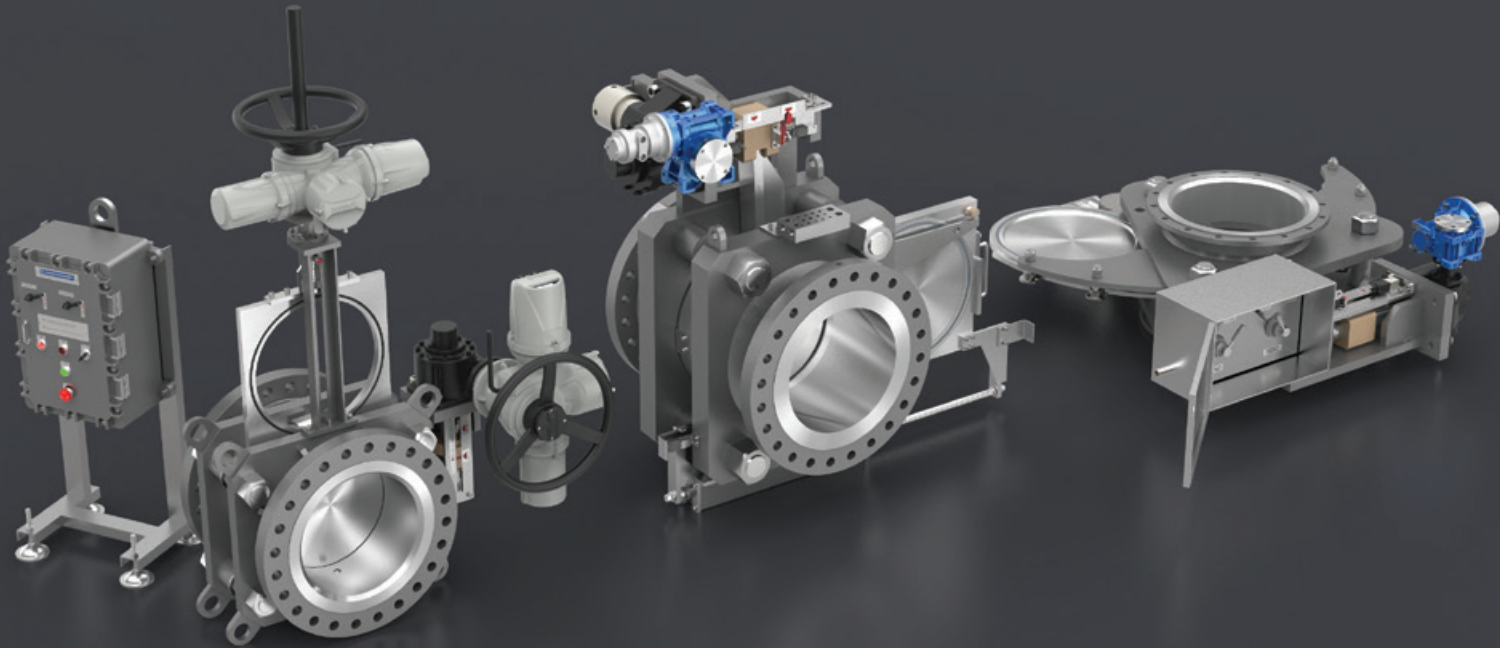
- > Coke Oven Gas
- > Blast Furnace Gas

• REFINERY

- > Flare gas line
- > LPG

• CHEMICAL PLANT

- > Chemical Cleaning isolation
- > Filtration system
- > Transfer line



AUTOMATED LINE BLIND

GENERAL INFORMATION

INSTRUCTION & FEATURES

Automatic Line Blind is good for remotely controlled blinding operation, high frequency of on-off cycle and/or critical fluid applications. SAMMI Line Blind provides automated blinding system by AOV, MOV or oil hydraulic source.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

NPS 1/2 (DN15) - NPS100 (DN2500)

PRESSURE RATING

ASME Class 150 to Class 1500
Other pressure classes up to ASME 2500
available upon request

FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

TEMPERATURE RANGE

Standard Design : -20°C ~ +200°C
High Temp. Design : +200°C ~ +816°C
Cryogenic Design : -196°C

MATERIALS

BODY : Carbon Steel, Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
BLIND : Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
MOVING PARTS & SEALING SURFACE are Anti-corrosion Materials

APPLICATIONS

• REFINERY

- > Ethylene Furnace
- > Decoking line
- > Steam & Vapor line
- > FCCU Fractionator isolation (overhead & bottom line)
- > Catalyst service
- > Flare gas line

• CHEMICAL PLANT

- > Reactor Blowdown
- > Chemical Cleaning isolation
- > Mixing lines
- > Regeneration gas line
- > Filtration system
- > Loading station
- > Transfer line

• OFFSHORE

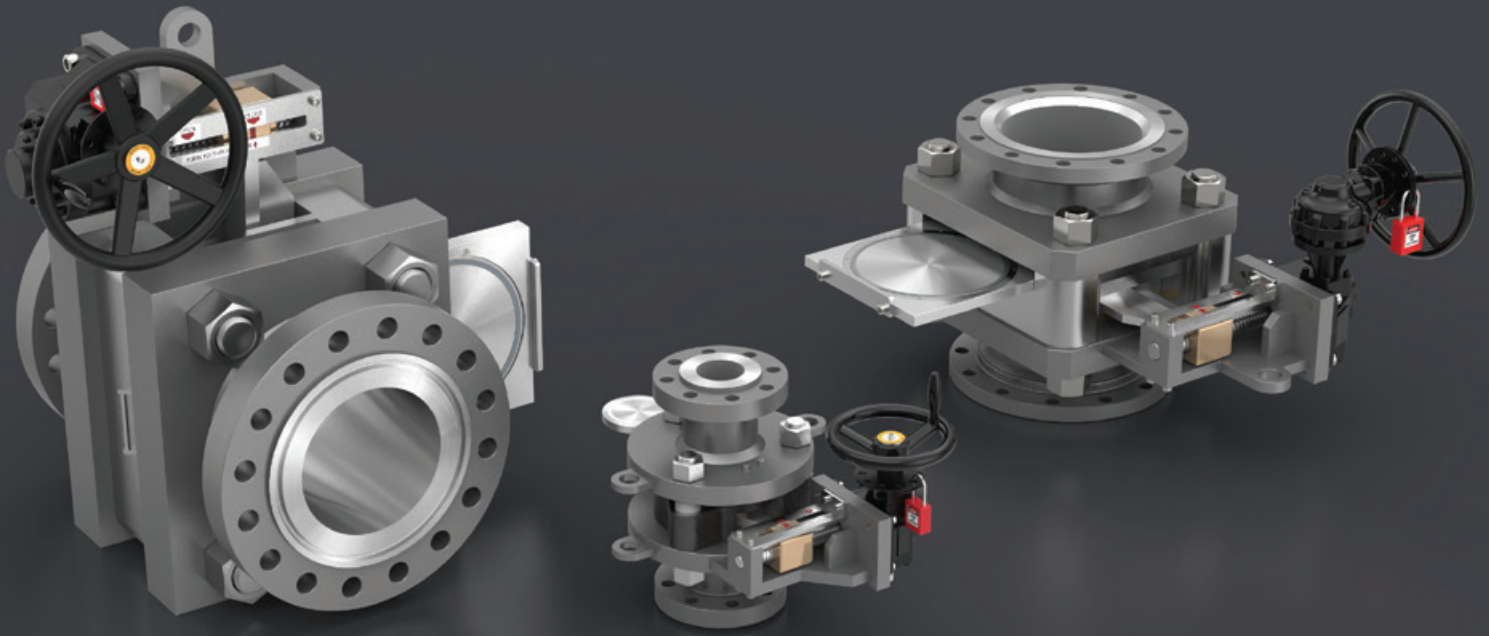
- > FPSO
- > LNG ship
- > Shipboard lines
- > Vessel inlet
- > Inert Gas system

• STEEL

- > Coke Oven Gas
- > Blast Furnace Gas

• POWER PLANT

- > Coke Oven Gas



SLURRY / POLYMER

GENERAL INFORMATION

INSTRUCTION & FEATURES

Slurry / Polymer type line blind offers perfect isolation for viscous fluid or liquid-solid mixture application. SAMMI's dual gear-set provides complete blinding without friction of the line, and specially designed scraper removes debris on blind plate.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

NPS 1 (DN25) - NPS100 (DN2500)

PRESSURE RATING

ASME Class 150 to Class 1500

FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

TEMPERATURE RANGE

Standard Design : -20°C ~ +200°C
High Temp. Design : +200°C ~ +816°C
Cryogenic Design : -196°C

MATERIALS

BODY : Carbon Steel, Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
BLIND : Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)
MOVING PARTS & SEALING SURFACE are Anti-corrosion Materials

OPERATION METHOD

Manual Operation
Electric, Pneumatic or Hydraulic Operation

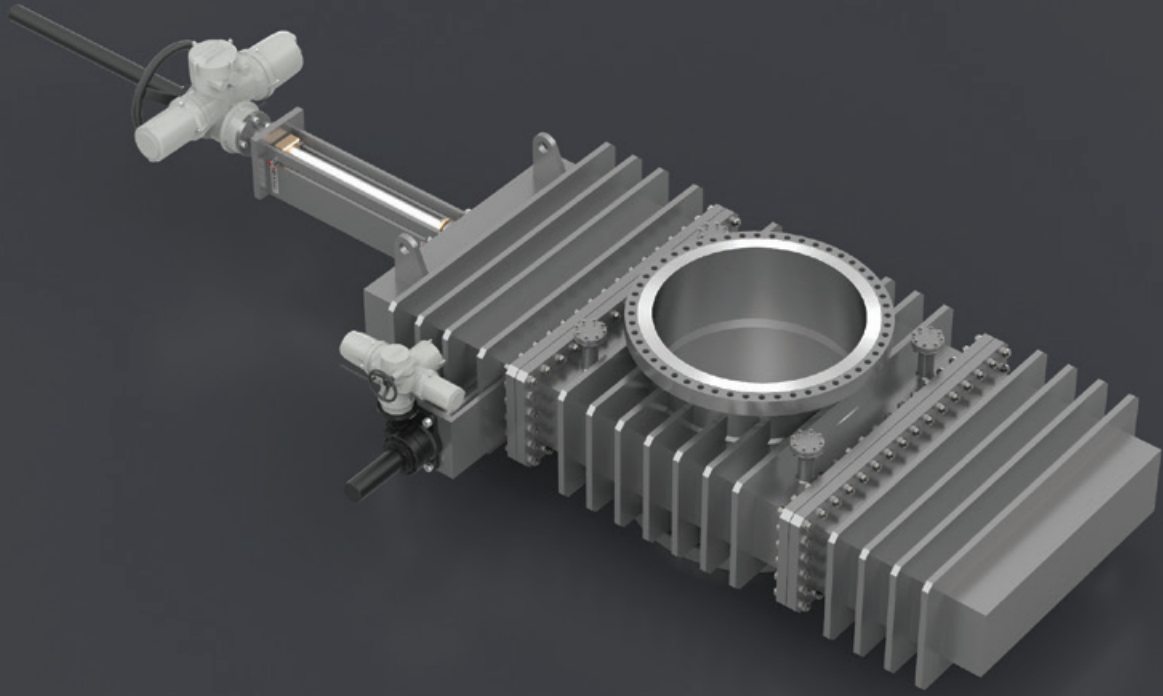
APPLICATIONS

• CHEMICAL PLANT

> Slurry
(HDPE, LDPE, PE, PP)

• MINING & MINERALS

> Copper, Nickel, Iron Transportation
> Corrosive & Caustic Media



FCC / RFCC

GENERAL INFORMATION

INSTRUCTION & FEATURES

RFCC type line blind offers perfect isolation in catalytic cracking application. The enclosed compact body with stellite metal seating is designed to prevent blind jamming by depositions of coke/solid particles on blind plate.

TECHNICAL SPECIFICATIONS

NOMINAL DIAMETER

NPS 20 (DN500) - NPS100 (DN2500)

TEMPERATURE RANGE

Standard Design : +200°C ~ +816°C

PRESSURE RATING

ASME Class 150 to Class 1500

MATERIALS

BODY : Carbon Steel, Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)

BLIND : Stainless Steel, Special Material (Duplex, Hastelloy, Monel, Inconel etc.)

MOVING PARTS & SEALING SURFACE are Anti-corrosion Materials

FUNCTION

Gas & Liquid Perfect Isolation(Zero Leakage)

OPERATION METHOD

Manual Operation

Electric, Pneumatic or Hydraulic Operation

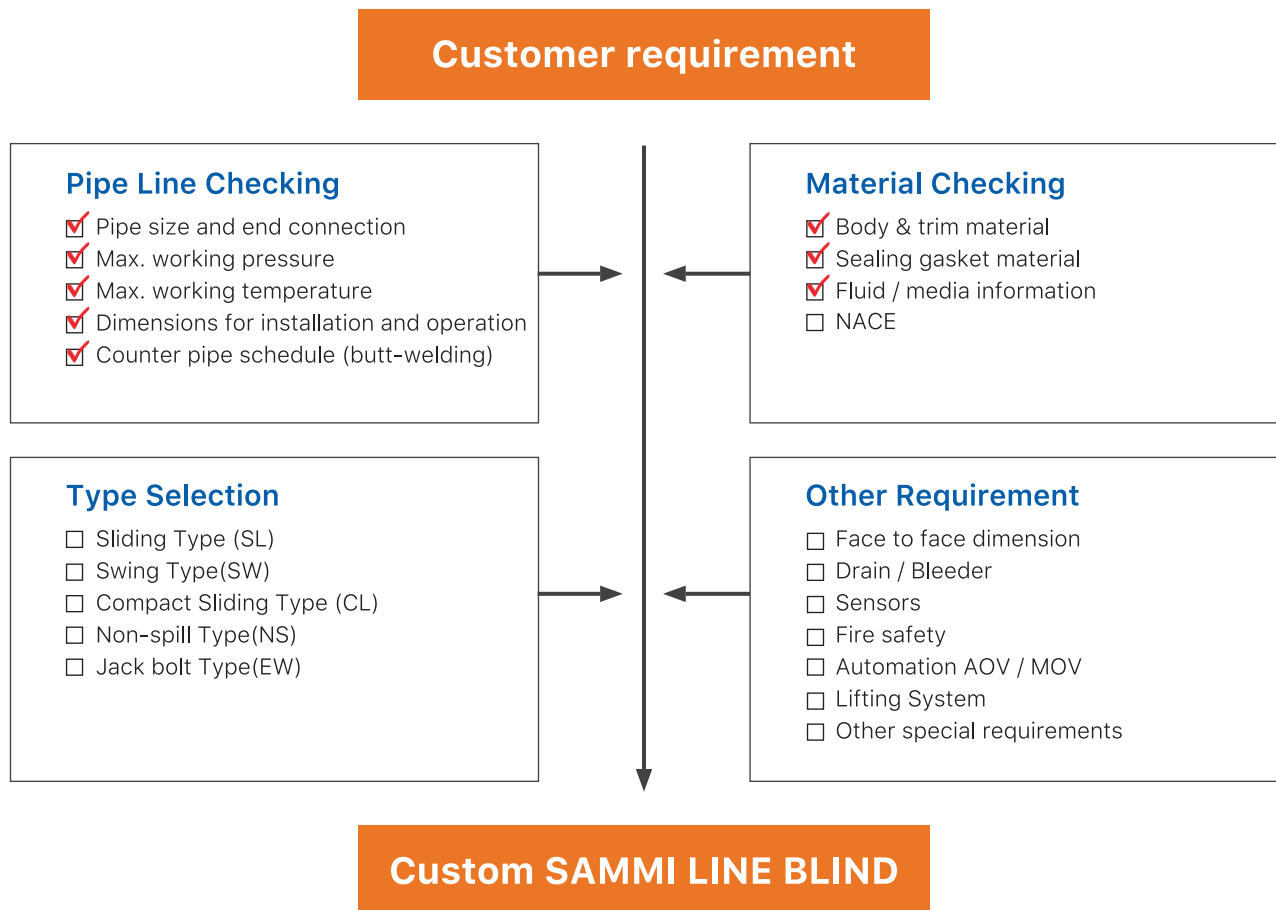
APPLICATIONS

• REFINERY

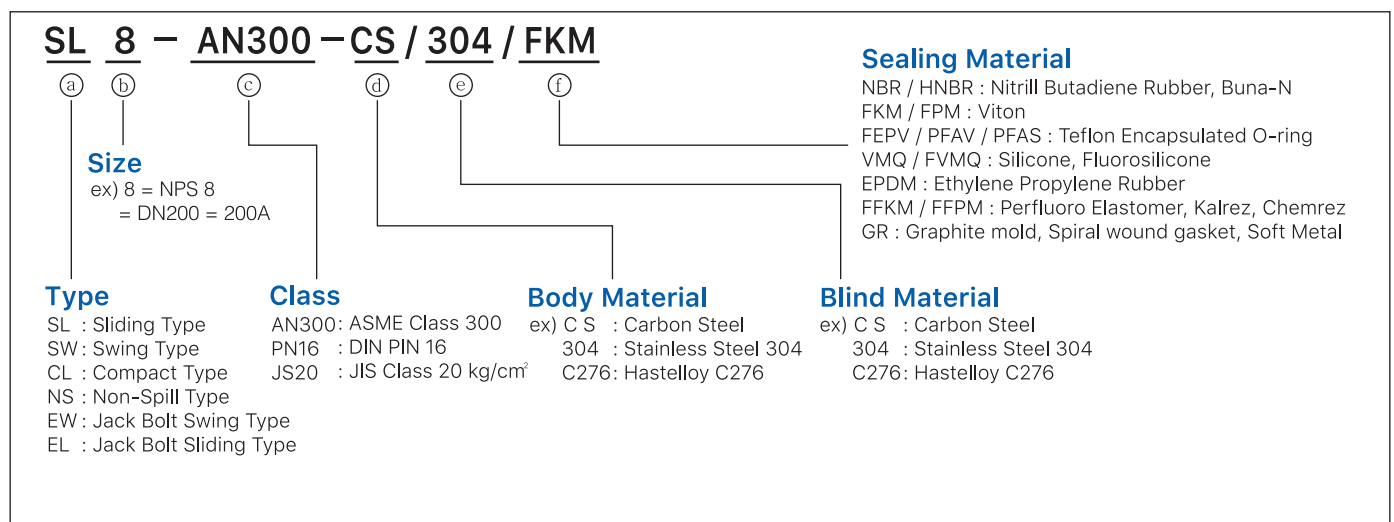
> FCCU Fractionator isolation
(overhead & bottom line)

> Catalyst service

Product Selection Guide



Product Code



Engineering

SAMMI Machinery does extensive physical testing on designs for optimal quality control. Our designs are developed using professional design software and validated by finite element analysis

ASTM Standard

- ASTM F1020 - 86 :
Standard specification for
Blind valve for Marine Application

ASME Standard

- ASME Sec.II : Materials
- ASME Sec.VIII Div. I : Rule for Construction of
Pressure Vessels
- ASME Sec.IX : Qualification Standard for
Welding and Brazing Procedures
- ASME B16.5 : Pipe Flanges and Flanged Fittings
- ASME B16.34 : Standard for valves - Flanges,
Threaded and Welding end
- ASME B31.1 : Power Piping
- ASME B31.3 : Process Piping

API Standard

- API Spec. Q1 : Specification for Quality program
for the Petroleum and Natural Gas Industry
- API Spec. 5L : Specification for Line Pipe
- API Spec. 605 : Larger - Diameter Carbon Steel
Flange
- API 598 : Valve Inspection and Test
- API 607 : Fire Test for Soft - Seated Quarter Turn
Valves.
- API 590 : Steel Line Blanks

MSS Standard

- SP - 6 : Finish for contact faces of pipe flanges
and connecting end flanges of valves and fittings
- SP - 25 : Marking system for valves, fitting,
flanges and unions.
- SP - 55 : Quality standard for steel castings for
valves, flanges and fitting and other piping
components (visual method)

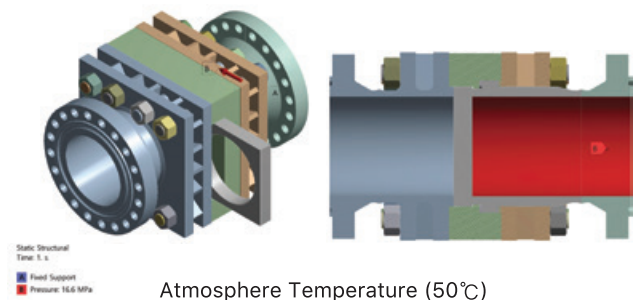
Pressure Test (ASTM F1020, API 598)

Class	Seat & Shell
150	23kg/cm ² (325psi)
300	58kg/cm ² (825psi)
600	116kg/cm ² (1,650psi)
900	172kg/cm ² (2,450psi)
1500	288kg/cm ² (4,100psi)

F.E Analysis

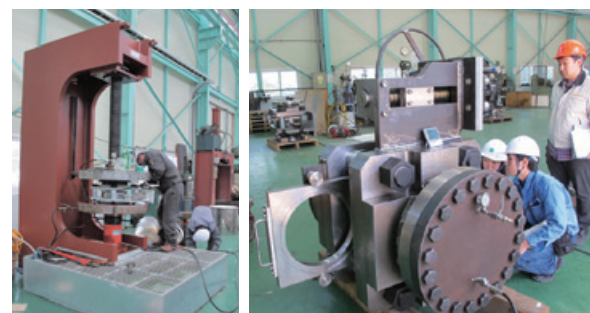
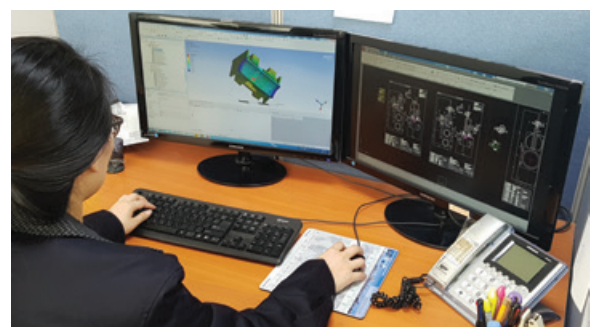
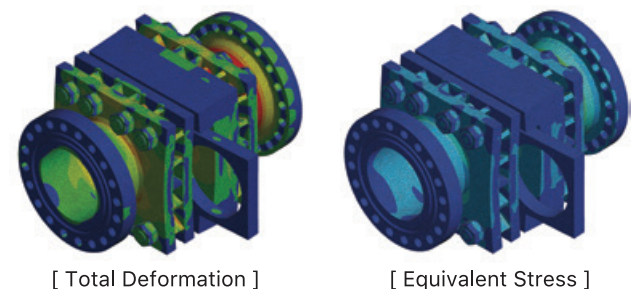
Sliding type, NPS 28, ASME 900 lbs, Stainless Steel 304
valve, part coupled thermal - structural F.E Analysis
(ANSYS 17.2)

Coupled Analysis



Stress Distribution

Overall stress distribution is the same as each other
(inside pressure 166bar)



MANUFACTURING & CERTIFICATE

SAMMI Machinery can provide engineering and/or technical information to assist buyers in field installation and /or field services. Requests for adjustments or modifications will be responded to quickly and professionally.

All SAMMI products are certified by global and local industry standards



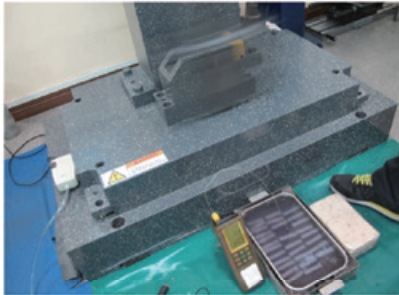
Fire Safety Test (API 607)



Fire Safety Test



Cryogenic Test (-196°C)



Impact Test (ASTM A370-12)



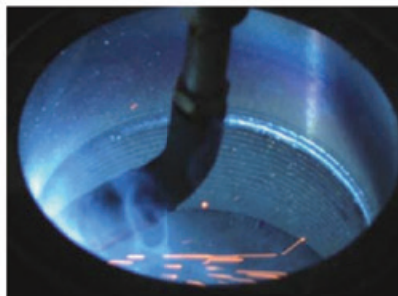
Xylan Coating



PTFE Lining



Metal Spray



Weld Built up



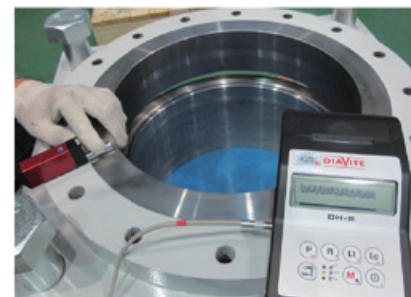
Weld Built up (ASME Sec. IX)



Pressure Test (API 598)



Class 5500 Pressure test



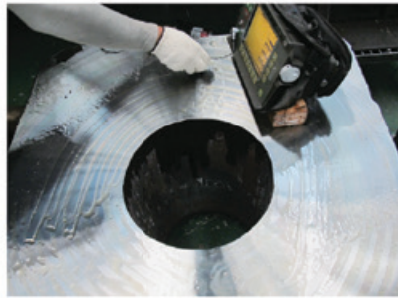
Surface Roughness Inspection
(ASME Sec. V Art.5)

Material

Carbon Steel, Stainless Steel, Duplex, Hastelloy, Alloys and other special materials are available



PM I (ASME Sec. II Part A,B,C)



NDE (UT)



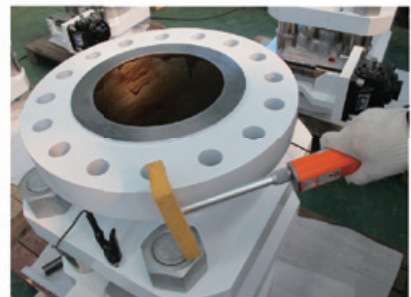
Bend Test (ASTM E190)



Tensile Test



Dry Film Thickness Inspection
(ISO 19840)



Holiday detection (NACE RP 0188)

CE-PED Module H.

- Pressure Equipment
- Approved from Bureau Veritas

ISO 9001

- Quality Management System
- Approved from Bureau Veritas

Fire Safety Test

- Fire Safe design
- Approved from Velosi

API Spec. Q1

- Quality Management system
- Approved from API

TSSA

- Boilers & Pressure Vessels
- Approved from TSSA
(full name CANADA)

ABSA

- Boilers & Pressure Vessels
- Approved from ABSA
(full name CANADA)

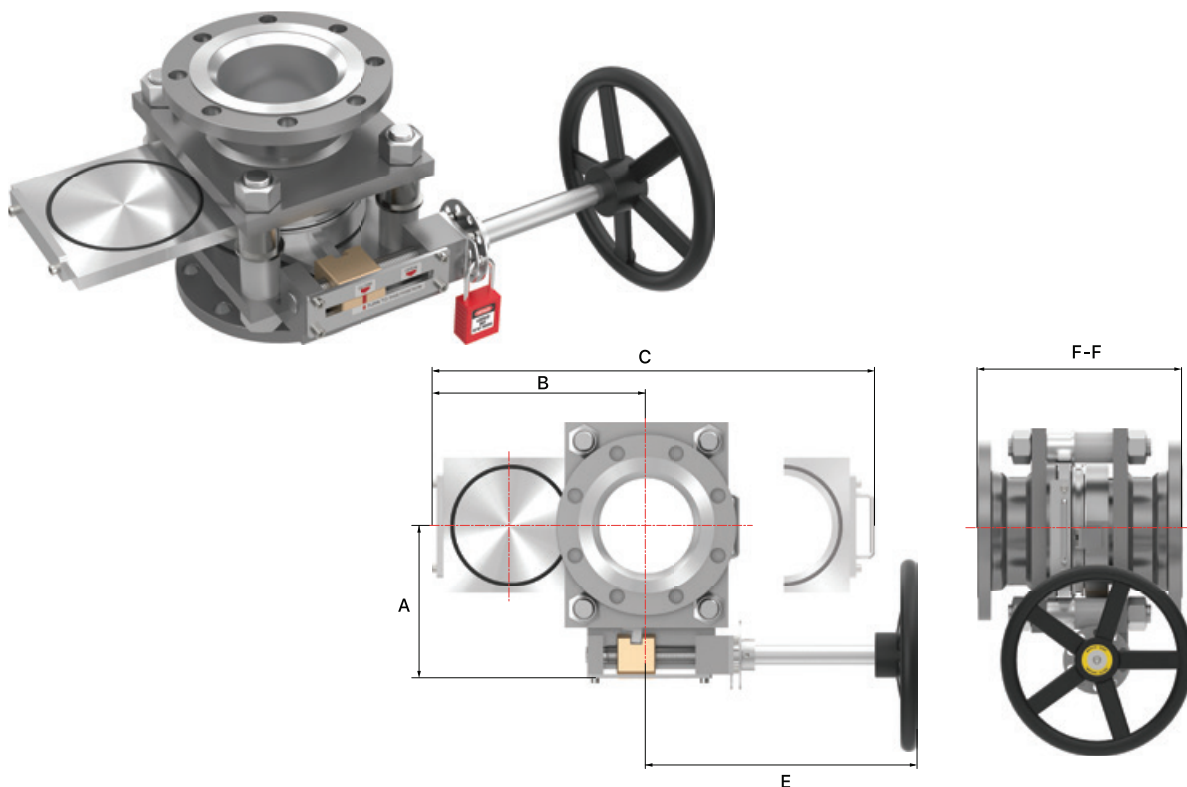
RCU 032/2013

- On safety of equipment for high pressure
- EAEC (Eurasian Economy Community)

API 6D

- Specification for pipeline valves
- Approved from API

Dimension - Sliding Type



Class 150

Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	190	99	116.5	233	174.5	10
1-1/2	40	210	115.6	142.5	285	205	16
2	50	230	134.5	166	332	234	27
2-1/2	65	240	146.5	185	370	260	30
3	80	270	168.5	211	442.4	320	35
4	100	280	187	244	508.4	340	49
6	150	320	233	333	687	427	87
8	200	360	331	415.5	859	335.5	145
10	250	380	362	525	1025.2	370	215
12	300	430	397	611	1198	380.6	312
14	350	470	483.6	685	1370	426.7	450
16	400	540	518	759.5	1519	436.5	600
18	450	560	575	856.5	1713	526.2	780
20	500	660	619	940	1880	527	900
24	600	720	750	1104	2202	659.5	1500

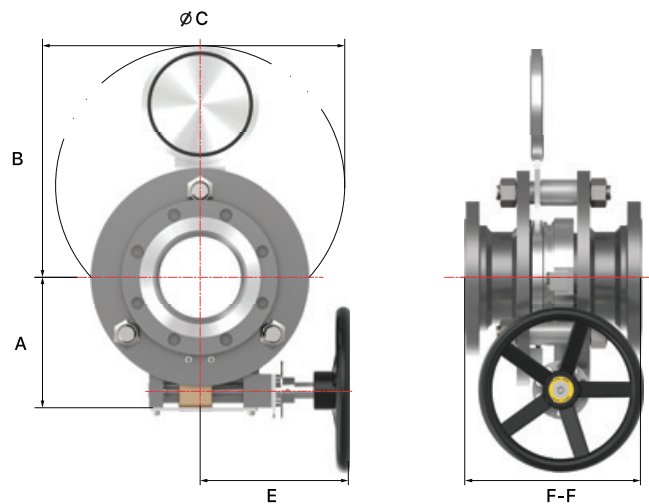
Class 300

Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	200	99	116.5	233	174.5	11
1-1/2	40	240	119	142.5	285	205	18
2	50	245	134.5	166	332	234	30
2-1/2	65	270	146.5	185	370	260	36
3	80	320	177	211	442.4	300	58
4	100	360	193.5	241	502	329	62
6	150	410	255	354	687	427	130
8	200	460	341	443	858	338	210
10	250	510	402	525.5	1025	381.1	300
12	300	570	468	618.5	1205	421.3	430
14	350	650	498	691.5	1383	410.6	540
16	400	720	594	789.7	1579.5	531.5	690
18	450	730	644	885	1770	545.7	950
20	500	800	645	940	1880	533.8	1800
24	600	850	800	1120	2240	665.5	2800

*This dimension table is only for the reference and it can be changed without notification.

* F-F dimension can be changeable according to site condition.

Dimension - Swing Type



Class 150

Size		F-F	A	B	Ø C	E	kg
inch	DN						Weight(NET)
1	25	190	90	133	163	145	10
1-1/2	40	200	102	163	201	153	15
2	50	220	125.5	193.4	237.8	188	24
2-1/2	65	240	146.5	220	272	205	30
3	80	250	173	258.5	321	215	35
4	100	250	175	298.5	375	250	54
6	150	300	233	415	520	271	85
8	200	340	331	508	640	414	152
10	250	380	380	602.5	765	373.5	225
12	300	430	410	678	862.5	381	310
14	350	470	475	748.3	949	425	520
16	400	540	513	848.5	1081	435	600
18	450	580	600	925.8	1183.9	515	750
20	500	660	659	1055	1340	546.1	1500
24	600	800	770	1235	1573	664	2300

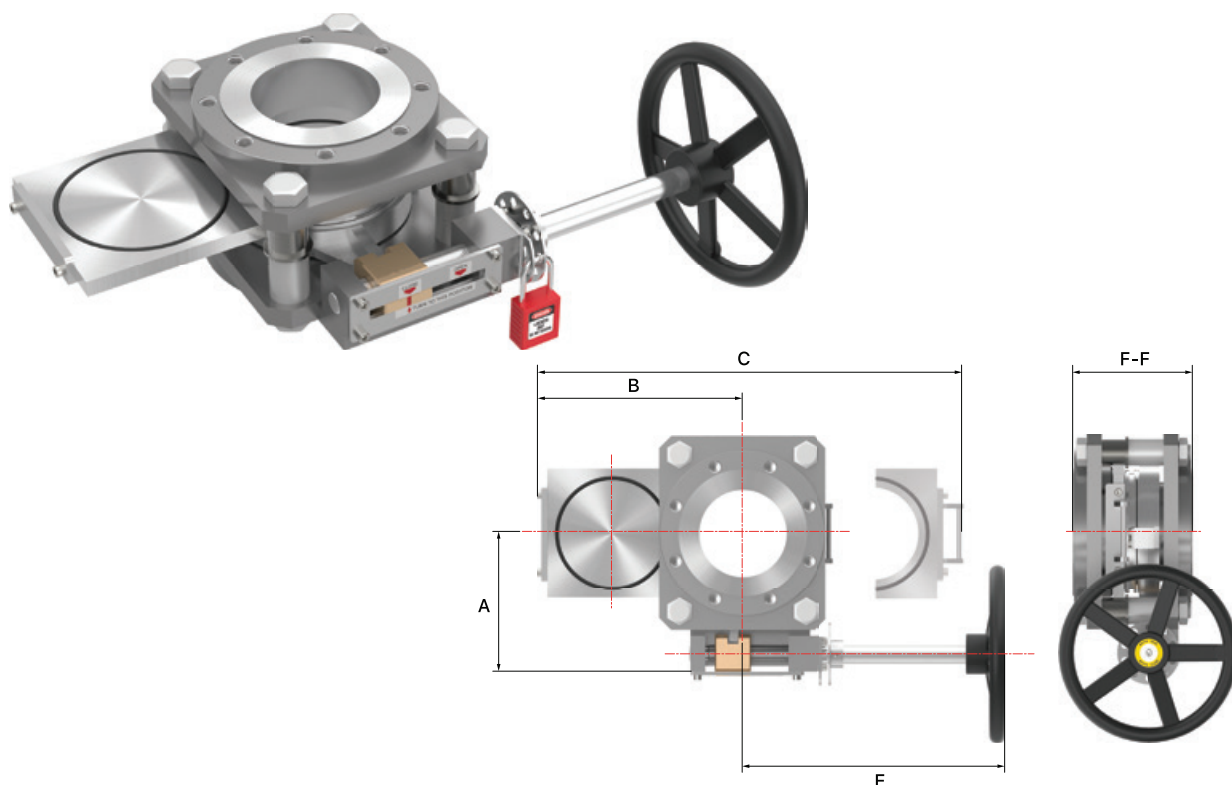
Class 300

Size		F-F	A	B	Ø C	E	kg
inch	DN						Weight(NET)
1	25	200	90	133	163	145	11
1-1/2	40	230	115.6	163.4	201.5	160	18
2	50	240	127.3	193.7	238	200	30
2-1/2	65	270	135	220.3	272.4	220	35
3	80	300	173	263.1	327.1	225	45
4	100	320	189	297	372	230	81
6	150	410	260	409	514	272	120
8	200	450	350	508	640	340	210
10	250	500	406	609.5	769	375	310
12	300	570	481	716	909.5	394	450
14	350	620	481	781.5	986	435	650
16	400	660	514.9	871.9	1104.2	458.6	950
18	450	720	600	965.1	1229.8	520	1200
20	500	780	700	1058	1350	530	1800
24	600	870	780	1235	1573	670	3000

*This dimension table is only for the reference and it can be changed without notification.

* F-F dimension can be changeable according to site condition.

Dimension - Compact Type



Class 150

Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	115	106.5	125	250	177	8
2	50	130	142.5	177.5	393	276	24
3	80	160	169.5	221.5	480	325	35
4	100	170	189	262.5	525	365	47
6	150	200	233	343	711	427	85
8	200	220	331	443.5	860	335.5	125
10	250	240	387	540	1038	377	195
12	300	260	412	639.5	1279	384	310
14	350	300	454	462	1322	400	382
16	400	340	518	762	1524	436	580
18	450	360	575	855	1710	526	620
20	500	400	630	940	1880	533.8	890
24	600	420	715	1105	2220	562	1200

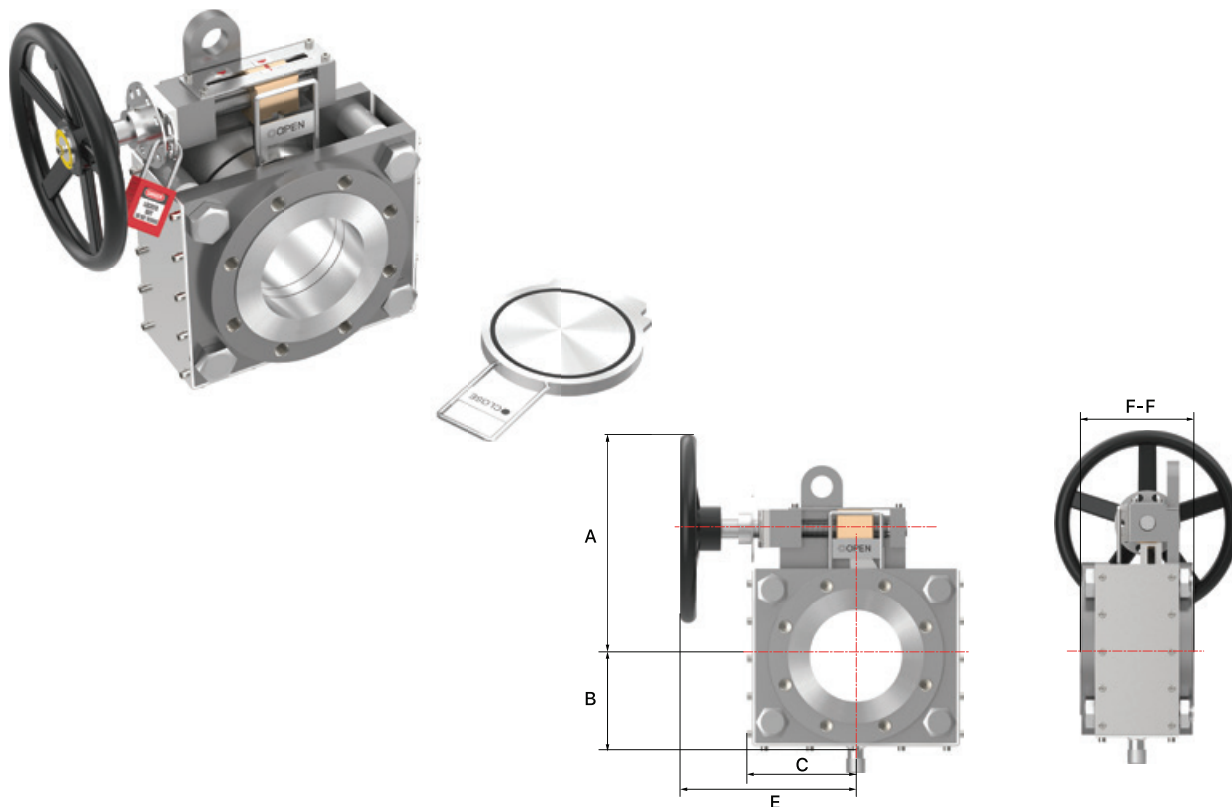
Class 300

Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	125	108	125	250	177	10
2	50	140	145.5	177.5	393	266	26
3	80	170	206	247.9	520.8	337.2	40
4	100	180	245.5	262.5	563	380	60
6	150	230	255	360.5	745	455	130
8	200	250	361	467	917	360	250
10	250	280	381	536.8	1095.5	342.9	290
12	300	290	424	627.5	1230	370	400
14	350	350	498	652	1367	415	545
16	400	430	605	795.8	1591.5	531.3	815
18	450	380	644	952.5	1775	571	1012
20	500	400	645	940	1880	533.8	1400
24	600	500	800	1120	2240	665.5	2000

*This dimension table is only for the reference and it can be changed without notification.

* F-F dimension can be changeable according to site condition.

Dimension - Non-Spill Type



Class 150

Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	110	175	117	75	160	10
2	50	130	235	128	101	190	25
3	80	160	275	148	121	220	35
4	100	170	276	142	130	217	48
6	150	200	350	173	173	325	85
8	200	220	463	205	204	329	130
10	250	240	500	238	238	356.2	250
12	300	260	543	275	277	435.5	350
14	350	300	612	303	280	458	410
16	400	340	691	338	330	452.8	650
18	450	360	768	357	350	559	750
20	500	400	885	422	410	640	950
24	600	420	990	492	472.5	693	1500

Class 300

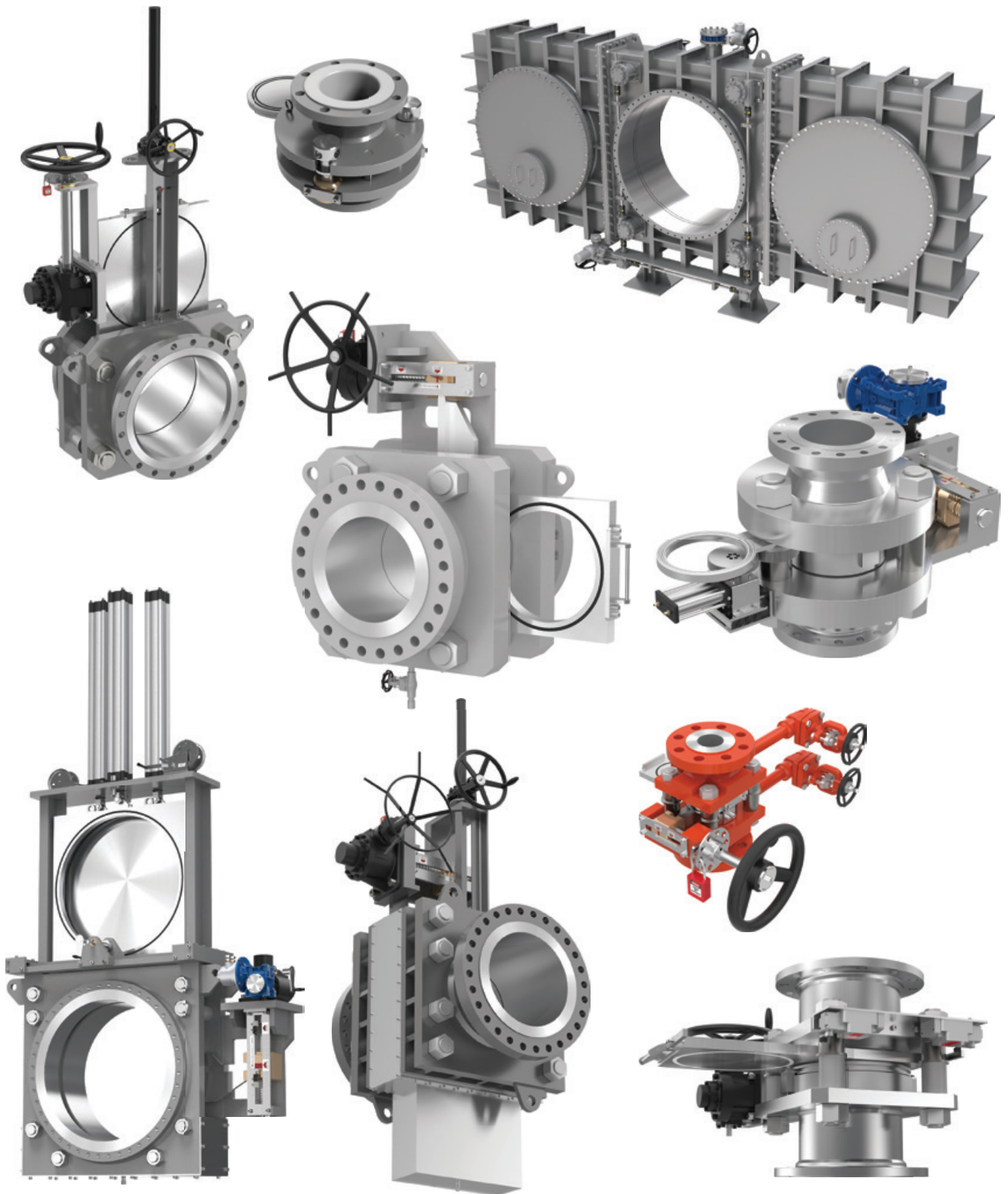
Size		F-F	A	B	C	E	kg
inch	DN						Weight(NET)
1	25	125	167.5	93	101.5	217	10
2	50	140	224.5	120	125.5	263.5	30
3	80	170	277	129.5	157.5	304	45
4	100	180	324	185	146	240	63
6	150	230	375	209	183	260	180
8	200	250	415.5	239	218	345.5	260
10	250	280	526	271.5	255.5	389	295
12	300	290	579	300	300	450	410
14	350	350	623	331.5	332	462	650
16	400	360	640	370	374	500.5	820
18	450	380	805	412	395	604	1020
20	500	400	856	443	447	635	1500
24	600	500	937	512	493	692	2200

*This dimension table is only for the reference and it can be changed without notification.

* F-F dimension can be changeable according to site condition.

SAMMI Provides Best Solution for Positive Isolation

SAMMI's product design team has developed many innovative line blinds and provided best solutions for positive isolation requested from worldwide clients. SAMMI's quality products designed by advanced technologies have been applied for various operating conditions in many industries.







The best solution for positive isolation

Address : 64, Iyeon-gill Sangnam-myeon,
Miryang-si, Gyeongnam S.KOREA (50449)

Tel : (+82)55.354.7504

Fax : (+82)55.354.7533

E-mail : sm@sammiw.com

Web : www.sammiw.com