



ALIOGAZ KUKUH SDN BHD

Delivering Engineered Excellence



OFFSHORE



REFINERY



SUBSEA



CHEMICAL



POWER



MINING





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VISION & MISSION

VISION

To be a leading S.E.A based company, recognized for delivering engineered excellence in Procurement, Consultancy and Servicing of Flow Controls, Filtration and Process Engineering products to the Oil & Gas and related industries, through performance, professionalism and partnership with renowned manufacturers, to achieve customer satisfaction and sustainable growth.

MISSION

- Deliver superior products & services to satisfy customers.
- Commit to innovative & cost effective solutions to contribute in lowering overall project cost.
- Implement effective management that focuses on leadership, good business ethics, care and professionalism.
- Maintain high standard of services and deliverables through clear and responsive communication.
- Aim to deliver all projects on time.

APPLICATIONS



OFFSHORE

All our offshore products are supplied to withstand corrosive environments and comply with all relevant safety & design standards.



REFINERY

Our products are the ideal tool for handling a wide variety of isolation tasks in applications that involve oil and gas processing fluids and gases.



SUBSEA

Our products meet performance, safety and reliability expectations in the deepest waters and some of the harshest environments in the offshore.



CHEMICAL

We provide variety of products which are the solutions to the top technical challenges faced by chemical industry.



POWER

Critical processes in power generation industry require highly optimized products like ours in order to have a safe and reliable operations.



MINING

Mining operators need reliable products to handle and withstand corrosive and abrasive process fluids and transport fluids. Our products are supplied to withstand the harshest mining and mineral processing applications.

PRODUCT LINE

PRODUCT OVERVIEW

Aliogaz Kuku specializes in Flow Control Valves, Manual Valves, Subsea Valves, Fluid Handling, Filtrations, Oil & Gas Separation System, Chemical Injections and Sampling Assemblies, Interlocking System, Gasket & Sealing Engineering Applications.

STRAINERS



We offer solutions to your pipeline filtration requirements as well as being able to retro-fit brownfield existing systems.

Whether the need is for simple low pressure, low flow application or a high pressure and high flow application. We supply strainers and filters specifically to suit your requirements.

VALVES



Providing manual isolation valves for reliable and continued shut-off process fluids and gases in a wide variety of applications. Our portfolio covers a comprehensive range of valves.

- Manual Isolation Valves
- Double Block & Bleed Valves
- Chemical Injection & Instrument Valves
- Control Valves
- Valve Materials

SUBSEA VALVES



In today's offshore oil and gas industry, wells have become deeper than ever, causing a growing demand for a subsea valves that can withstand extremely high pressures and harshest environments.

INTERLOCKING DEVICES



Valves play an important role in safety of operation in many process industry. The inadvertent opening and closing of valves in the wrong sequence can lead to serious consequences. Our interlocking devices are supplied to ensure that valves are operated in a safe sequence and maintained in safe position.

VALVE ACTUATION & CONTROLS



Proper selection in terms of function of manual valves is of utmost importance. These include actuator operation in a required opening and closing time set forth in the process system. Selection of our products considered the highest standards for reliability, safety and level of control in our valve automation systems to suit any working environment.

STRAINERS

Aliogaz Kukuh can supply a variety of strainers that offer solutions to your pipeline filtration requirement as well as being able to retro-fit the existing systems.

The strainers will be supplied in a wide variety of meshes, materials and ratings from Cast Iron to Inconel and Class 125Lb to Class 2,500Lb and higher just to suit with your requirement.

- Y-Type Strainer
- Mono Type Strainer
- Dual Type Strainer
- Fabricated Strainer
- Conical Strainer (Temporary / Permanent)
- Custom Build Strainer



Y-TYPE STRAINERS

- We offer Butt Weld (BW)/Socket Weld (SW), Flanged, Screwed and Flanged (PTFE Lines) with various forged and cast body materials and screens.
- Size range from 0.5" to 2" (SW) and 0.5" to 14" (BW), Flanged from 0.5" to 20", Screwed from 0.5" to 2" and Flanged (PTFE Lines) 0.5" to 12".
- Pressure range from 300Lb, 800Lb, 2,500Lb, API 6A 10K/15K Lb.



MONO TYPE STRAINERS

- We offer 2 (two) types of Mono Strainer; Quick Release Cover (QRC) and Bolted Cover (BC) with various cast materials of construction.
- Size range from 0.5" to 36".
- Maximum pressure range for QRC - 300Lb while for BC - 2,500Lb.



DUAL TYPE STRAINERS

- We have Swing Gate, Screw Gate, High Pressure and fabricated Dual type strainers with various cast materials of construction.
- 100% shut off for gas applications.
- Comes with Quick Release Cover or Bolted Cover.
- Size range high pressure and fabricated from 4" to 48" except Swing Gate from 0.5" to 4" and Screw Gate from 3" to 32" only.
- Pressure range from 300Lb to 2,500Lb.



FABRICATED STRAINERS

- We can offer Fabricated Y, Fabricated Mono, Fabricated Tee and Cartridge Filters.
- Size range from 0.5" to 30" for Fabricated Y and Cartridge Filters while 0.5" to 78" for Fabricated Mono and Fabricated Tee.
- Maximum pressure up to 2,500Lb.



CUSTOM BUILD/ PURPOSE BUILT STRAINERS

- We can supply custom build strainers such as automatic self cleaners, umbilical filters, ethylene strainers, mist eliminators for industrial and petrochemical application.
- We offer a purpose built strainer such as Tee strainers Types A, B and C up to 86".
- Screen burst pressure of up to 10 bar.
- Supported by analysis using FEA and CFD; if required.
- Mesh protection up to 1 bar burst in reverse flow condition/ pressure surges.



VALVES



Aliogaz Kuku supplies a comprehensive line of Manual Isolation Valves and Double Block & Bleed Valves that suits for all industries.

We can source all range of valves in a wide variety of materials, classes and configurations. All valves are designed, manufactured and tested to cater the exclusive requirement of each client.

Valves can be supplied with manual operators or complete with electric, pneumatic or hydraulic actuators, control system or HPU's.

Options include additional NDE Testing, NACE, high temperature design, locking devices, fire safe design & certificate, standard & custom coating.

- Ball Valves
- Gate Valves
- Globe Valves
- Check Valves
- Butterfly Valves
- Double Block & Bleed Valves
- Chemical Injection & Instrument Valves
- Control Valves

Ball Valves

Valves are available in side-entry, welded, top entry and designed to meet requirements of API 6D, API 6A, API 598, API 607, API 608, ASME B16.5, B16.10 and/ or B16.34.



Check Valves

Valves are available in a wide range including swing piston, dual disc, & tilting, either with water, lug, double flange & hub design type. The valves are designed to meet requirements of ASME B16.34, BS-1868, ASME B16.5, ASME B16.1, API 602, API 6D and API 6A.



Gate Valves

Valve are available in a wide range of OS&Y gate valves which include wedge gate, parallel slide gate and through conduit with bolted, welded or pressure sealed bonnet.

The valves are designed to meet requirements of ASME B16.34, API 600, ASME B16.5, ASME B16.10, API 602, API 6D and API 6A.



Butterfly Valves

Valves are available in concentric, single & double eccentric and triple-offset type and design to meet requirement of API 609, API 598, ISO 5208, ASME B 16.34, and ASME B16.5



Control Valves

Valves has superior performance in liquids and gaseous services. With economical maintenance cost while still maintaining its high precision, this control valve is no doubt preferred by the industry-leading end user.

We build confidence to our clients by proving the valve can handle extreme cases such as the globe control valve has the thrust capability to shutoff against higher fluid pressures as it can handle up to 10.30 bar air supply.



Globe Valves

Valve are available in a wide range of OS&Y globe valves which include straight pattern, angle pattern, y-pattern with bolted, Welded or pressure sealed bonnets, standard or bellow seal sealing.

The valves are designed to meet requirements of ASME B16.34, BS-1873, ASME B16.5, ASME B16.10 and API 602.



Double Block & Bleed Valves

Valve are available in a wide range including floating and trunnion mounted ball valve design. DBB valves also come in numerous configurations and connections, including sample and injection valve configurations. Bleed configurations range from bleed plugs, to needle valves and (DBB) ball and/or OS&Y globe & gate valves.

Face to face dimensions will comply with either ASME B16.10 or manufacturer standard.

Needle Valves

All needle valve are made from bar-stock and available from 1/4" to 1.1/2" with pressure rating of 6,000 PSI, 10,000 PSI.

Standard connections are threaded NPT, BSPT or BSPP but they are also available with BW or SW ends

Sample & Chemical Injection Valves

Valves are available in metal or soft seats and designed to meet requirements of ASME VIII, ASME II & API 6A.

Size range is available from 1/2" to 3" in all pressure class ratings from 150 Lbs to 2500 Lbs, API 3,000 to API 10,000. Internal bore diameter: 10 and 15 mm.



Monoflanges

Monoflanges are available in 4mm, 10mm bore diameter typically used in gas gauge pressure instrument applications to minimize the size and the weight of the pipeline valve assemblies used for primary and / or secondary isolation, vent and calibration.



Manifold Valves

All two, three and five valves manifold are made from bar-stock and available with 1/2" and 1/4" size connections with pressure rating of 6,000 PSI, 10,000 PSI.

Standard connections are threaded NPT, BSPT or BSPP but they are also available with BW or SW ends.



Modular Double Block & Bleed Valves

Valves are available in firesafe as standard and designed to meet requirements of ASME VIII, ASME II & API 6A.

Size range is available from 1/2" to 3" for instrumentation valve; from 1" to 24" for piping valve. In all pressure class ratings from 150 Lbs to 2500 Lbs, API 3,000 to API 10,000.



VIMEC
VALVES

VIMAR
VALVOLE

INTERLOCKING DEVICES

Our product offered for Interlocking Devices is an "all in one" guarding solution provider that suits in a wide range of heavy duty guarding applications.

Supplied Products

- Lock for lever operated valves
- Lock for hand wheel operated valves
- Interlocks for MOV – actuated valves
- Interlocks for pig traps
- Key operated pneumatic & hydraulic valves
- Key storage cabinets
- Car Seals and Valve lockout covers



SECUMS
INTERLOCKS

SUBSEA VALVES

- Valves are in accordance with API 6DSS.
- Generally fully welded valves, to prevent possible water passing through valve body.
- Suitable for 3,000 m water depth installation (10,000 feet).
- Offered with materials suitable for subsea environment.
- C/w subsea gear inclusive of ROV device.
- ROV for vertical or horizontal operation.
- Available also with Fully Welded & Double Block and Bleed, modular type design.

Product Range:

- 1" ½ up to 60".
- 150# up to 2500#, API 6A.
- RF, RTJ, BW, HUB.
- Bolted Body, Side Entry & Top Entry, Fully Welded.
- Body and Double Ball arrangements design available.
- Shallow Water & Deep Sea Application Test Facility.



**Top Entry - One Piece Forged Body
24" 1500# RTJ with Compact Hydraulic Actuator**

Client : HESS Exploration & Production Malaysia BV

Project : Full Field Development North Malay Basin (NMB)

**Side Entry - Three Pieces Forged Body
24" 900# Buttweld with Gear Operated**

Client : Petronas Carigali Sdn Bhd

Project : PLTS for Evacuation NMB Gas Delivery System



VALVE ACTUATION

Aliogaz Kuku can supply all type of valves complete with actuation to suit your specific requirements and as such providing you with a one stop solution for valves + actuators.

We offer a broad range of reputable brands and we are in a position to supply actuated valves complete with control systems which amongst others, includes; switch boxes, positioners, partial stroke test systems, overrides, filters, pressure regulator, fail safe tanks, line break system, etc.

The actuation range includes:

- Gear units
- Subsea gear units (hand wheel or ROV operated)
- Electric actuators
- Pneumatic actuator (single/double acting, piston or vane, scotch-yoke or rack & pinion)
- Hydraulic actuators (single/ double acting or compact design)
- Hydraulic subsea actuators (single/ double acting or compact design)



MATERIALS

Aliogaz Kuku can offer a wide range of common/exotic materials. All valves are designed, manufactured and tested under accreditation of API monogram requirements, well-equipped manufacturing facilities of our principal.



Valve Materials

Carbon Steel

- ASTM A105N
- ASTM A350 LF2

Alloy Steel

- ASTM A350 LF3
- ASTM A182 F5a
- ASTM A182 F9
- ASTM A182 F11
- ASTM A182 F22
- ASTM A182 F91
- AISI 4130

Stainless Steel

- ASTM A182 F304/F304L
- ASTM A182 F316/316L
- ASTM A182 F321
- ASTM A182 F47
- ASTM A182 F44 (6MO)
- ASTM A182 F20 (Alloy 20)
- AISI 410

Duplex Steel

- ASTM A182 F51 (Duplex)
- ASTM A182 F53 (Super Duplex)
- ASTM A182 F55 (Super Duplex)

Nickel Alloy

- ASTM B564 N08825 (Inconel 825)
- ASTM B564 N06600 (Inconel 600)
- ASTM B564 N06625 (Inconel 625)
- ASTM B564 N04400 (Inconel 400)

IRON FLOW PRODUCT RANGES

- We are dealing with product development, manufacturing, service, repair, reverse engineering and re-manufacturing. Our service division provides retrofit and refurbishing of all upstream, midstream and downstream products according to ASME and API guidelines.

Product Range for Manufacturing, Repair, Rental and Supply :

- **Valves:**

- **Gate Valve and Spares :**

- Size: 2-1/16" to 4-1/16"
 - Pressure Rating: 5000 PSI to 15000 PSI
 - Service: Sour, H₂S or Standard.
 - Ring Groove: SS or Inconel-625 Lined or without Cladding.
 - Design and Manufacturing: As per API-6A



- **Plug Valve :**

- 2" x 2" - Fig.1502 , Low Torq, Top and Bottom Entry.
 - 3" x 3" - Fig.1502 Hammer Union End, Low Torq Top and Bottom Entry.
 - Pressure Rating:
Standard Service 15000 PSI
Sour Service 10000 PSI.
 - Design and Manufacturing: As per API-6A



- **Choke Valve - Positive or Fixed Bean Choke:**

- **Flanged End Positive or Fixed Bean Choke Valve :**

- Size: 2-1/16" to 3-1/16"
 - Pressure Rating: 5000 PSI to 15000 PSI.
 - Ring Groove: SS or Inconel-625 Lined or without Cladding.



- **Hammer Union End Positive or Fixed Bean Choke Valve :**

- Size: 2" Fig.1502 & 3" Fig.1502
 - Pressure Rating:
For Standard Service 15000 PSI
For Standard Service 15000 PSI
 - Design and Manufacturing: As per API-6A



• Adjustable and Drilling Choke:

• Flanged End :

- Size: 2-1/16" to 3-1/16"
- Ring Groove: SS or Inconel-625 Lined or without Cladding
- Pressure Rating: 5000 PSI to 15000 PSI
- Design and Manufacturing: As per API-6A or API16C as Applicable.



• Hammer Union End :

- Size: 2" Fig.1502 & 3" Fig.1502
- Pressure Rating:
For Standard Service 15000 PSI
For Sour/H2S Service 10000 PSI
- Design and Manufacturing: As per API-6A or API16C as Applicable.



■ Flanges 6B and 6BX, ANSI/ASME :

- Size: API :1-13/16" to 21-1/4"
- Size: ANSI/ASME: 2"to 7" Class 150 to 1500 RTJ
- Ring Groove: SS or Inconel-625 Lined or Without Cladding.
- Pressure Rating: 2000 PSI to 15000 PSI as applicable for Sizes.
- Design and Manufacturing: As per API-6A



■ Double Studded Adapter Flange (DSA/DSAF)

- Size: 2-1/16" to 21-1/4"
- Ring Groove: SS or Inconel-625 Lined or Without Cladding
- Pressure Rating:
2000 PSI to 15000 PSI as applicable for Sizes.
- Design and Manufacturing: As per API-6A



■ Spacer/Riser Spool :

- Size: 2-1/16" to 21-1/4"
- Ring Groove: SS or Inconel-625 Lined or Without Cladding
- Pressure Rating:
2000 PSI to 15000 PSI as applicable for Sizes.
- Design and Manufacturing:
As per API-6A/API-16A



• Product List :

- Pressure Vessel
- Storage Tank
- Surge Tank
- Mud Gas Separator
- Indirect Water Bath Heater
- Structural Fabrication
- Piping fabrication
- Structural Fabrication
- Welding Overlay and Hard Facing.
- Repairing of old equipments.
- Heat Exchanger
- BOP
- BOP Test Stump
- BOP Control Unit
- Plating and Nitriding

• Material :

- Stainless Steel, Carbon Steel, Low Alloy Steel, Ni-Base Alloy, High Strength Quench and tempered Alloys.

• Welding Process :

- GTAW, SMAW, GMAW, FCAW

■ Inspection Services :

- NDT Inspection: Magnetic Particle Examination, Liquid Penetration Examination, Ultrasonic Examination, Radiography Examination.
- Supply of NDT and Welding Personal for Inspection.
- Welding Inspection by AWS-CWI
- Welding Procedure and Welder Qualification
- Welding Support to establish shop in compliance with API-6A, 16A, 16C and other National and International Code and Standard Requirements.

■ Manufacturing Capabilities :

- **Manual Machining** - Diameter up to 30inch, Length 20ft, Weight up to 10 tone.
- **CNC Machining** - Diameter up to 18inch, Length 3ft, Weight 2 tone.
- **Threading(In house/Out Source)** - All types of Thread on Internal and External up to 10 inch Dia. And 2 mtr. Length.
- **Welding and Fabrication** - OD 5 meter x Length 6mtr, Weight up to 6tone,
Welding Process: GTAW,GMAW,FCAW,SMAW
- **Pressure Testing Facility** - Pressure test up to 30000 PSI, Flange End: 2-1/16" to 21-3/4",
Union End: 1" to 4" - Fig.602; Fig.1002, 1" to 6" - Fig.1502, 2" to 4" - Fig.2202.
- **Non Destructive Examination (In house/Outsource) -**
 - Magnetic Particle Examination (MPI/MPT/MPE)
 - Visual Examination (VT/VE)
 - Ultrasonic Examination (UT/UE)
 - Radiography Examination (RT/RE)
 - Liquid Penetrant Examination/Dye Penetrant (LPT/LPE/DP)
 - Helium Leak Test (HLT)/Fugitive Emission Test.
- **Blasting and Painting (Out Source)**

CLIENTS



ExxonMobil



CARIGALI HESS

MURPHY
OIL CORPORATION

REPSOL

TechnipFMC

sapura
energy

PETRA

Lundin

JX
JX Nippon Oil & Gas Exploration

Petrofac

M H B

WOOD GROUP

EQ
enQuest

PBJV
GROUP

HYUNDAI
HEAVY INDUSTRIES CO., LTD.

SBM
OFFSHORE

MUhibbah
ENGINEERING (M) BHD

NOTES



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Delivering Engineering Excellence



ISO 9001:2015



MS ISO/IEC 17021: 2015
ACB 015