AIO

ABDUL AZIZ I. ALOUFY
TRADING EST.

HDPE & FIRE PROTECTION

PIPING SERVICES & INDUSTRIAL MATERIALS

COMPANY CAPABILITY PROFILE



AL KHOBAR, SAUDI ARABIA

www.aio.com.sa

01 / COMPANY

Built around your project.

HDPE piping capabilities supported by a broad industrial supply portfolio.

Abdul Aziz I. Aloufy Trading Est. (AIO) is based in Al Khobar, in Saudi Arabia's Eastern Province. The establishment supplies industrial products and provides project support across oil and gas, mining, water, construction and industrial services.

01

Materials

HDPE pipes, fittings, valves, transitions and related accessories selected against project requirements.

02

Site execution

Butt-fusion and electro-fusion installation support, field inspection, handling and project coordination.

ONE COORDINATED SCOPE

From procurement and material checks to joining and testing support, AIO coordinates HDPE requirements with the related industrial materials needed on site.

Industry coverage

Oil & Gas / Mining / Water / Construction / Industrial Services

02 / HDPE MATERIALS

The HDPE product range.

Pipes, fittings and joining equipment coordinated for each project.



HDPE pipes

PE100 piping, selected grade, SDR and pressure class.



HDPE fittings

Elbows, tees, reducers, caps, stub ends and backing rings.



Electro-fusion fittings

Couplers and electro-fusion fittings to the approved schedule.



Fusion equipment

Butt-fusion equipment and related installation support.

Product images are illustrative references. Brands, models and approvals are subject to the approved project submittal.

03 / CAPABILITIES

A complete HDPE scope.

Materials, connections and field support aligned with approved project documents.

01

Pipes & fittings

PE100 pipes, stub ends, backing rings, reducers, tees and project accessories.

02

Butt fusion

Controlled pipe and fitting fusion with alignment, heating and fusion pressure.

03

Electro-fusion

Compatible fittings and control units, used to manufacturer procedures.

04

Flanged transitions

Gaskets, bolts, rings and connections to valves and metallic piping.

05

Testing & inspection

Visual joint inspection, hydrostatic testing support and joint records where required.

06

Site support

Handling, installation planning, work-area preparation and safety coordination.

Pipe grade, SDR, pressure rating, joining method and test requirements are governed by client specifications and approved project documents.

04 / JOINING METHODS

Precision at every joint.

Two joining methods, each with defined preparation and process controls.

BUTT FUSION

01 Prepare & align

Inspect, clean, align and clamp the pipe and fitting ends.

02 Face

Produce clean, square and parallel mating surfaces.

03 Heat

Apply the heater plate using the specified temperature and melt criteria.

04 Fuse

Remove the heater and join the molten ends at controlled pressure.

05 Cool & inspect

Keep the joint clamped for the required cooling period; inspect and record.

ELECTRO-FUSION

Embedded heating coils within the fitting create the joint using a compatible electro-fusion control unit.

Prepare

Cut square, clean and scrape the fusion area.

Secure

Mark insertion depth, align and clamp.

Control

Use fitting data / barcode for the fusion cycle.

Protect

Observe cooling time and retain required joint data.

Parameters follow the approved procedure

Fusion settings and cooling periods must follow pipe / fitting manufacturer instructions and the project specification.

05 / QUALITY

Control. Inspect. Record.

Quality checkpoints from incoming materials through completed joints and testing.

01 **Material verification**

Confirm approved grade, dimensions, SDR / pressure class and fitting compatibility.

02 **Condition checks**

Inspect for cuts, gouges, contamination, deformation and handling damage.

03 **Equipment readiness**

Check fusion equipment condition and required calibration / certification status.

04 **Joint inspection**

Maintain clean tools; inspect finished fusion beads and pipe alignment.

05 **Testing & traceability**

Follow approved hydrostatic test procedures and maintain records required by the quality plan.

06 / SITE PRACTICE

Safe work. Protected materials.

Practical controls for people, equipment and HDPE materials on site.

HEALTH, SAFETY & ENVIRONMENT

Personal protection

Use task-appropriate helmets, eye protection, gloves, safety footwear and hearing protection.

Equipment & work area

Protect equipment from water and unsafe electrical conditions. Control hot plates, moving clamps and hydraulic components.

Lifting & access

Use suitable lifting methods, keep clear of suspended loads, and follow permits, trench controls and barricading requirements.

Ventilation

Provide adequate ventilation where heated polyethylene fumes may be generated.

HANDLING & STORAGE

Unload on stable, level ground with equipment of adequate rated capacity. Prevent uncontrolled pipe movement and keep personnel clear.

Use wide, non-damaging slings. Protect ends and fusion surfaces from dirt, oil, deep scratches and impact. Preserve identification and prevent distortion during storage.

07 / PROJECT APPLICATIONS

Connected to industry.

HDPE network applications with the supporting materials for an integrated package.

01

Water networks

Potable and utility water distribution, pumping and transmission.

02

Fire water

HDPE sections where permitted by approved design and project requirements.

03

Industrial utilities

Utility and cooling water services subject to material compatibility.

04

Infrastructure

Irrigation, pressure sewer, selected drainage and mining water transfer.

INTEGRATED INDUSTRIAL SUPPLY

Pipes, valves, flanges, gaskets and fittings

Test and measurement equipment

Safety products and electrical safety materials

Conduits, cables, lugs and glands

Hydraulic hoses and fittings

Welding machines, consumables, power and hand tools

Instrumentation fittings, valves and pressure gauges

Final suitability is subject to service conditions, the design basis, material compatibility and client-approved specifications.

08 / HYDRANTS & VALVES

Fire water essentials.

Hydrants, isolation valves and visual position indicators.



Wet barrel hydrants

Hydrant assemblies with specified inlets, outlets and caps.



Dry barrel hydrants

Dry barrel assemblies and connection accessories.



Fire protection valves

NRS, OS&Y; and butterfly valves; check valves as specified.



Post indicators

Post and wall indicators with operating accessories.

Product images are illustrative references. Brands, models and approvals are subject to the approved project submittal.

09 / RESPONSE EQUIPMENT

Ready for the response.

Access, firefighting equipment and dedicated hose storage.



Valve boxes & extensions

Access covers, extension spindles and operating tools.



Fire monitors

Monitor assemblies, nozzles and specified mounting arrangements.



Fire hose cabinets

Cabinets with hose reels and the specified internal equipment.



Hydrant hose cabinets

Cabinets for lay-flat hoses, nozzles and required accessories.

Product images are illustrative references. Brands, models and approvals are subject to the approved project submittal.

10 / ALARM CHECK VALVES

The alarm valve package.

Alarm check valve assemblies and coordinated trim for wet sprinkler systems.



ALARM CHECK VALVE & TRIM

Valve body, trim piping, gauges, test and drain connections, retard chamber and water motor alarm where specified. Pressure switches, isolation valves and related accessories are supplied to the approved material schedule.

Illustrative assembled product reference. Final configuration, compatibility, pressure rating and approvals are subject to project requirements.

11 / STEEL PIPING

Pipes, sprinklers & fittings.

Steel fire piping with grooved and threaded connections.





Steel fire pipes

Black, galvanized or coated steel pipes as specified.

Fire sprinklers

Pendent, upright and sidewall types with selected ratings.





Grooved fittings

Couplings, elbows, tees, reducers, caps and mechanical tees.

Threaded fittings

Elbows, tees, sockets, unions, nipples, plugs and caps.

Product images are illustrative references. Brands, models and approvals are subject to the approved project submittal.

12 / ACCESSORIES

The details that complete it.

Hose equipment, discharge accessories and pipe supports.





Fire hoses & couplings

Lay-flat hoses, couplings and connection adaptors.

Nozzles & branch pipes

Discharge nozzles and branch pipes to the required configuration.





Pipe supports & hangers

Hangers, clamps, threaded rods, brackets and anchors.

Transitions & fittings

Stub ends, backing rings, flanges and connection materials.

Product images are illustrative references. Brands, models and approvals are subject to the approved project submittal.

13 / VISUAL REFERENCES

Product image references.

Illustrative catalogue photography used to identify product families.

Product photographs show example configurations only. They do not represent a claim of agency, authorised distribution, stock availability or approval of every illustrated model. Final makes, models, sizes, ratings and certifications are confirmed through the client-approved material submittal.

Hydrants & valves	AVK Saudi / American AVK
Indicators & valve accessories	AVK / INTERSCHUTZ
Monitor & hose cabinet	NAFFCO / Youmats
Alarm check valve	Champ Marketing / Victaulic
Grooved & threaded fittings	Flow Way Trading / PipingX
Sprinklers & pipe hanger	Safe Pro / SupplyHouse
Other product photography	Supplier catalogue references

Additional references: Axis Safety, DirectIndustry, Pavlis a Hartmann, Gokul Poly Valves and Pipa HDPE. Cover: AI-generated marketing illustration; product pages use supplier catalogue photography.

AIO

14 / CONTACT

Let's discuss your next project.

HDPE piping, fire protection materials and coordinated industrial supply.

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