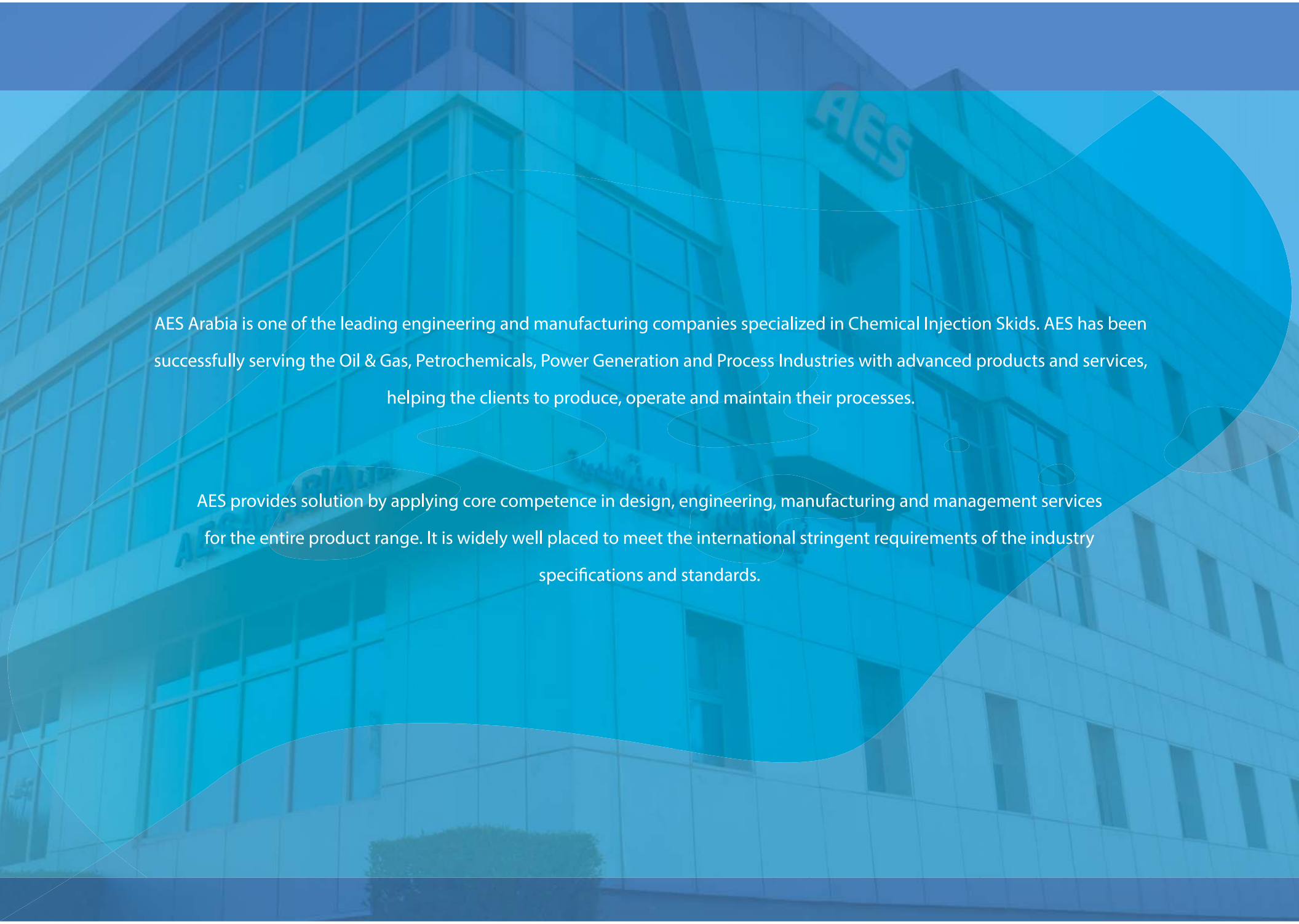

AES
Chemical Injection Skids



AES Arabia is one of the leading engineering and manufacturing companies specialized in Chemical Injection Skids. AES has been successfully serving the Oil & Gas, Petrochemicals, Power Generation and Process Industries with advanced products and services, helping the clients to produce, operate and maintain their processes.

AES provides solution by applying core competence in design, engineering, manufacturing and management services for the entire product range. It is widely well placed to meet the international stringent requirements of the industry specifications and standards.

The Chemical Injection Skids accommodate Pumps, Instruments, Tanks, Mixers, Panels, Valves and related accessories. It is fabricated from steel and is of continuously welded structure and it can be protected against direct sunlight with sunshade structure.

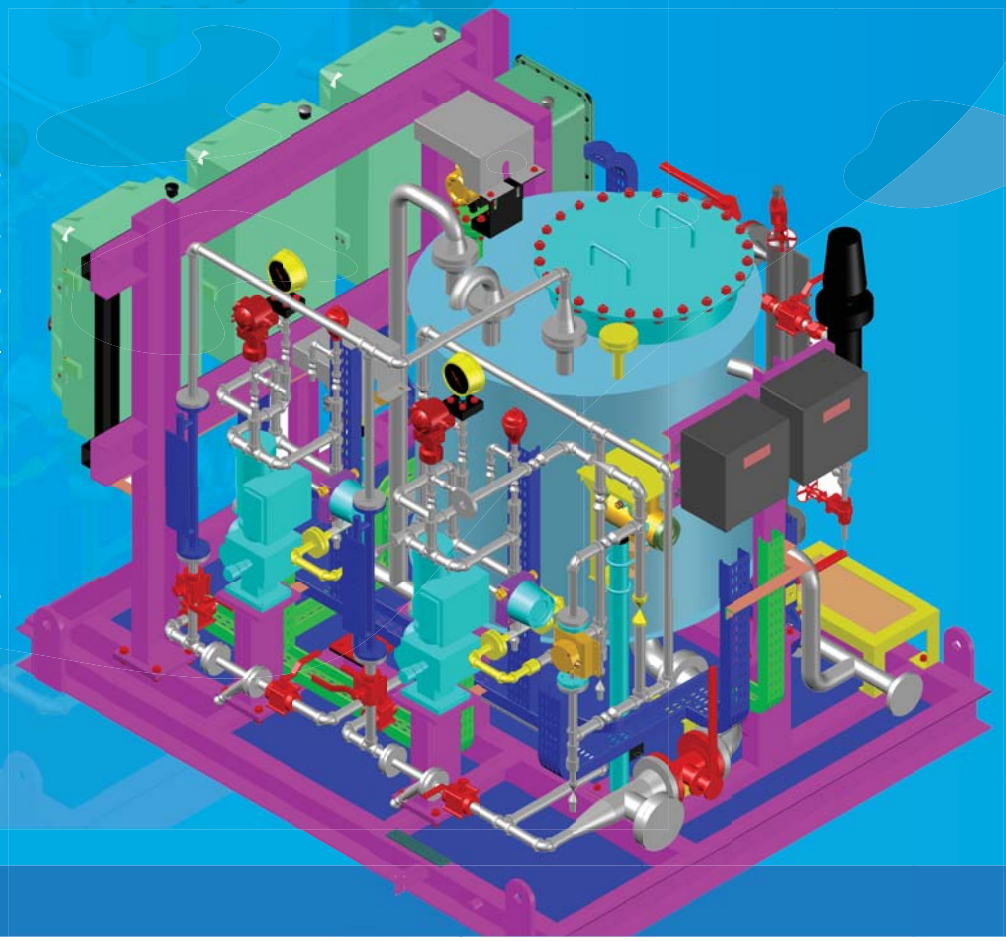
PUMP is the source of flow & pressure and the main equipment of chemical injection skid. The pumps are designed as per API 675. Depending on the requirement, the pumps can be of diaphragm or plunger type with manual / automatic stroke control and run by electric, solenoid driven or air operated motors.

TANK store the chemicals which need to be injected into the process or systems. The tanks usually are either of horizontal cylindrical having dished end or vertical cylindrical with flat/conical/ dished bottom and flat/dished top or of rectangular construction. The applicable design codes can be as per the ASME Sec VIII U-stamped, API 650, UL 142, BS 2654, BS 4994. The material of construction can be CS, SS304, SS316, SS316L or GRP. Tanks can be coated as per the client's requirement.

Valves, Instrumentation and Panels are part of chemical injection skids for safe and trouble free operation. Each skid is provided with set of valves and instrumentation for different defined applications. Each skid is usually provided with level gauge for visual indication of liquid level inside the tank. Level transmitter for alarm or trip function in case of low liquid level inside the tank. Calibration pot to calibrate the flow rate, pressure gauge/ switch/ transmitter for diaphragm rupture detection, strainer/filter to prevent any impurity from the tank suction pressure gauge/ transmitter discharge pressure gauge, to measure the pressure relief valve to protect the line from over pressurization, pressure transmitter for high pressure alarm/trip, check valves to protect the system from any back flow. Flowmeter to measure the injection flowrates and other accessories as per clients specifications and requirements.

The signals are terminated into junction boxes and all controls such as pump running local/ remote indication, local start/ stop of the motor, remote start/stop of the motor, remote stop, Emergency stop of the complete system, process trip and any other controls can be implemented from local control panel. All electrical components are certified as per the area classification requirements.

Usually the skids are suitable for operation in both Safe as well as Hazardous Zones/ Area.



Multi Head Pump Chemical Injection Skids

The multi head pumps injection system can be used to inject two or more chemicals / liquids using one pump only. The pump having a single drive mechanism coupled in parallel with multiple pumping chambers containing each capable of handling different types of chemicals are used. Instead of using several pumps for pumping different chemicals, one single pump with multi number of heads can be used.

Multi head pumps are normally used where there is a space constraint. This type of skid is mainly integrated with multi compartment tank that can store different types of chemicals.

APPLICATIONS:

Oil & Gas Industries (Onshore/Offshore)

Antifoam

Antiscale

Asphaltene Dispersant

Biocides

Boiler Feed Treatment

Corrosion Inhibitor

Demulsifier

Drag Reducer

Glycol

H_2S Scavenger

Hydrate Formation Inhibitor

Methanol and Glycol

Methanol Injection

Pour Point Depressants

Reverse Emulsion

Wax Inhibitor

Refining & Petrochemicals

Water Treatment chemicals

The injection of inhibitor and gasoline to fuel oils

Chemical Plant Industry

Boiler treatment

Water Treatment

Handling of liquefied gases

Water & Wastewater Tratment

Antiscalant

Chlorination & De-Chlorination

SMBS Dosing

Polyelectrolyte Dosing

Acid Dosing

SERVICES:

Oil & Gas Process

Demulsifier - Breaks down oil emulsions to aid oil / water separation.

Reverse emulsion breaker / deoiler - Will coalesce oil droplets in produced water systems.

Anti-foam - Prevents or minimises build-up of foam in production / test separators (prevents possible carry-over, improves separation efficiency).

Pour point depressant - Reduces crude pour point to improve / maintain crude fluid characteristics.

Wax formation inhibitor - Modifies wax crystal structure and minimises wax build-up in oil systems.

Anti-scale - To prevent scale build-up in oil lines / equipment.

Corrosion inhibitor - To prevent / minimise corrosion in oil & gas systems.

H2S scavenger - To reduce H2S content.

Asphaltene dispersant - To treat / prevent asphaltenes

Drag Reducer - To reduce flowing back pressure

Hydrate formation inhibitor - Inhibits formation of hydrates.

Glycol - Eliminates potential of hydrates.

Water Process

Anti-foam	: To prevent foaming in deaerator (thereby maintaining efficient operation).
Oxygen scavenger	: To reduce oxygen content in water to prevent corrosion in various systems and equipment.
Filter aid (e.g. ferric chloride)	: To assist in final filtration of water prior to injection.
Biocide	: To reduce / eliminate the bacterial load in water to prevent undesirable biological growth and subse quent operational downtime for different equipment and devices.
Scale inhibitor	: To minimise formation of scale in reservoir and other water applications.

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