

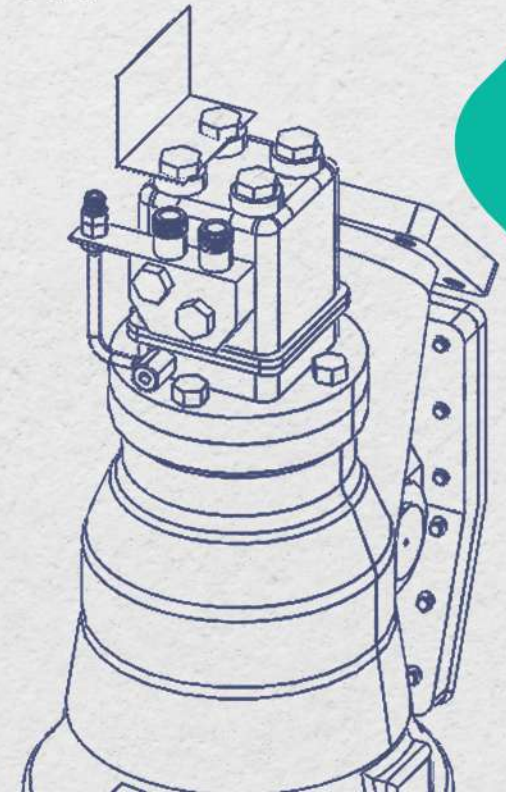
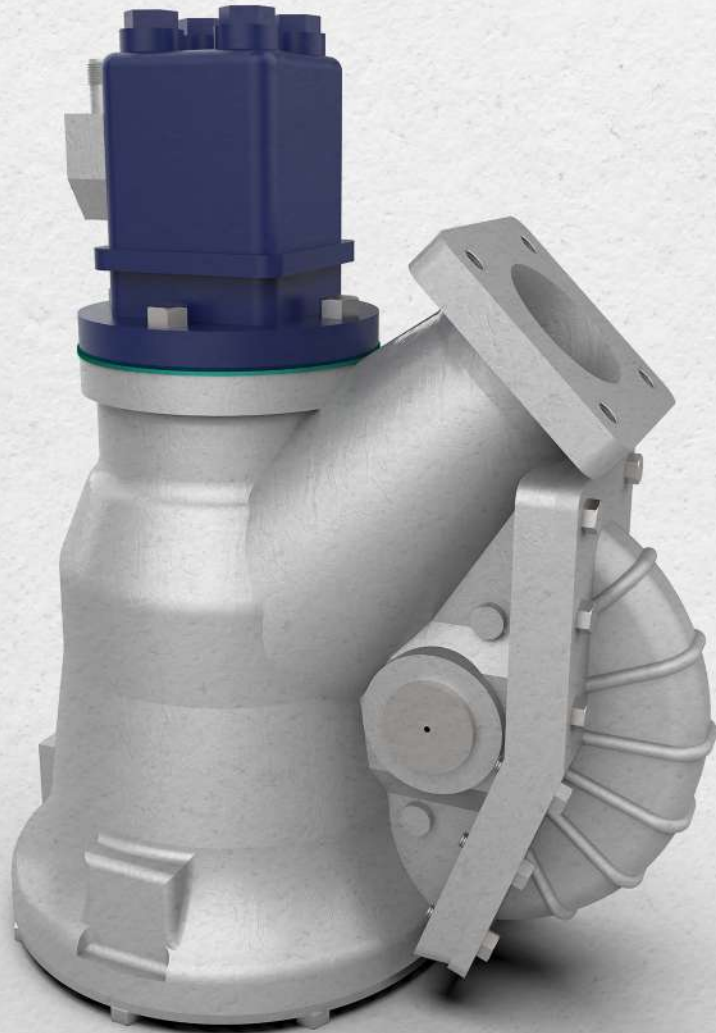


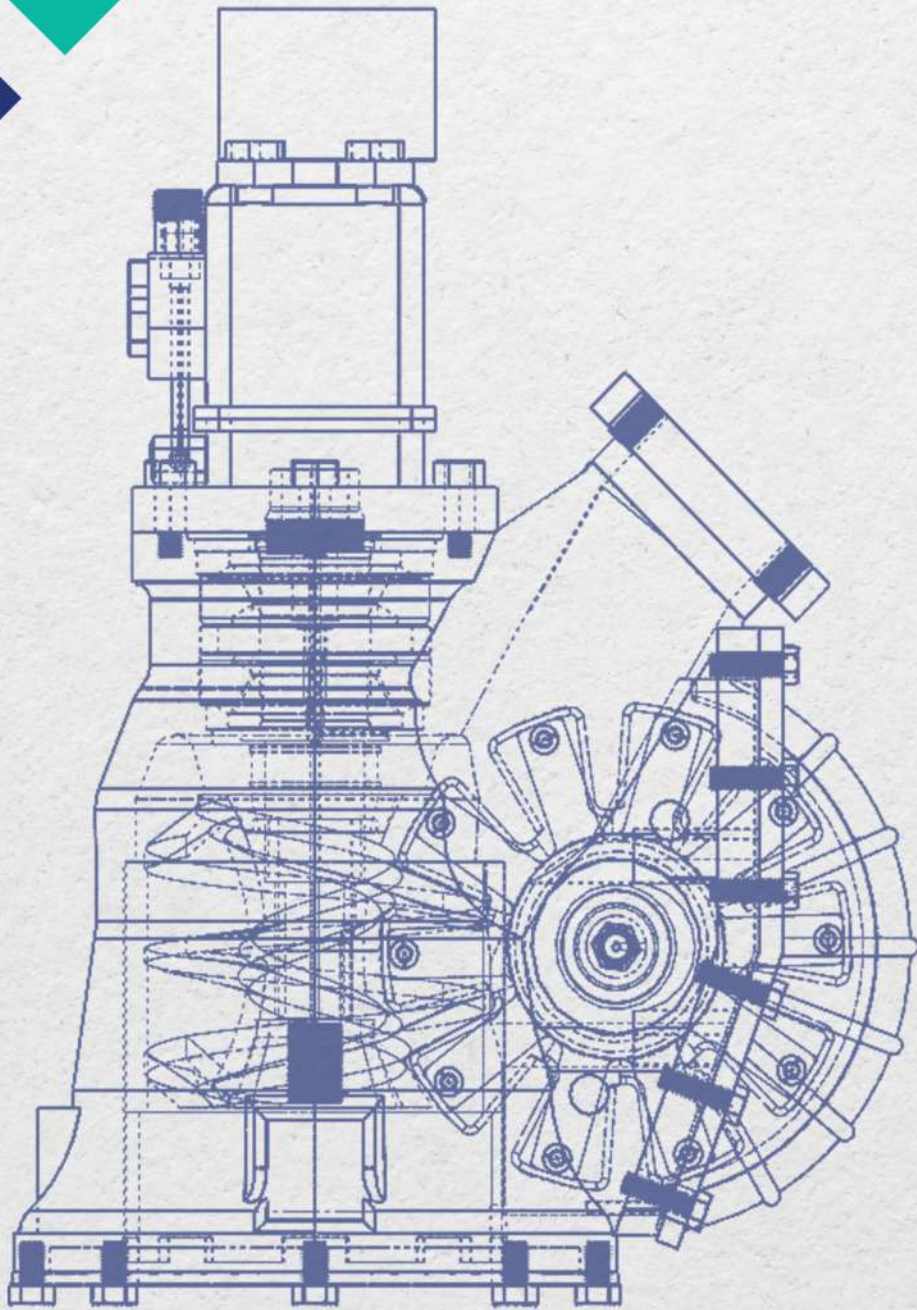
# SCREW PUMP

A Submersible Pump System

# SPDAS-SUBMERSIBLE POSITIVE DISPLACEMENT ARCHIMEDES SCREW PUMP

PE - SPDAS pumps are multipurpose submersible Archimedes screw pumps with a pumping capacity of 20 to 110 m<sup>3</sup>/hr. Pumps are designed for use in skimmers and offloading applications. This hydraulic driven positive displacement pump with low screw speed avoids further emulsification of the recovered product thus making further separation more efficient. Pump can handle solids up to 30 mm in diameter. Stainless steel casings also enables the pump to be used in acid content liquids and other harsh environment. Well suited for many applications i.e. emergency pumping of heavy crude, bunker oil, bitumen, for tank cleaning, pipeline maintenance, sludge removal from waste oil pits.





# ABOUT PROBLEM



## Operation in Hazardous Zone

Hazardous area fluids (Eg. crude oil, chemicals) possess a risk of ignition due to sparking during an operation.



## Handling Extremely high Viscous Fluid

Waste water treatment plant, Oil and Gas Industrial site contain fluid of different viscosities which becomes a challenge using single equipment



## Pumping solids such as seaweed, plastics, ropes

Fluids at the pumping site normally contain debris or semi solids which are difficult to isolate before pumping. Transporting such fluids is a challenge.

# OUR SOLUTION

## Hydraulic Motor

Hydraulic motors used to drive the pump which makes it suitable for application in hazardous area.

## Impeller

Our Archimedes screw type impeller makes it possible to transfer fluids of different viscosities.

## Inlet

Optional arrangement of inlet side hot /cold water injection nozzle to deal with high and extreme viscosity oil



## Bearing

To counter the axial and radial loads develop during an operation.

## Seal

To protect shafts and bearings from ingress of dirt and foreign matter and egress of oil or grease.

## Wear Ring

Wear Ring helps to increase pump efficiency and reduce metal to metal contact.

- ✔ Suitable for hazardous working environmental conditions.
- ✔ Handles fluids having varying viscosities.
- ✔ Customized fluid contact parts depending on the nature of fluids
- ✔ Optional cutting knife provision on Inlet
- ✔ Optional Hot water / steam provision at inlet and outlet
- ✔ Multiple discharge options like flange, camlock couplings etc

# TECHNICAL SPECIFICATION



	<b>PE-SPDAS-1</b>	<b>PE-SPDAS-2</b>	<b>PE-SPDAS-3</b>
capacity	30 m <sup>3</sup> / hr	68 m <sup>3</sup> / hr	110 m <sup>3</sup> / hr
length	375mm	475 mm	575 mm
width	250mm	300 mm	350 mm
height	510 mm	570 mm	665 mm
weight	30 Kg	52 Kg	75 Kg
discharge pressure	10 bar	10 bar	10 bar
hydraulic flow(max)	82 LPM	95 LPM	170 LPM
hydraulic pressure(max)	210 bar	210 bar	210 bar



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