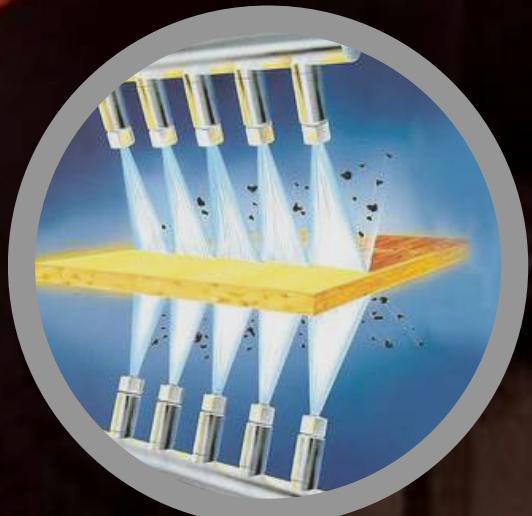


PressureJet®

EXPLORE THE WATER POWER

HOT STEEL DESCALING SYSTEM



"COMPLETE SOLUTION PROVIDER FOR HOT STEEL DESCALING NEEDS"



ABOUT US

- PressureJet Systems Pvt. Ltd., founded in 1996 by Mr. Vishal Shah, has been offering best quality products to clients for more than 25 years.
- PressureJet systems Pvt. Ltd is the India's Largest manufacturer of high pressure triplex plunger pump.
- Our top priority is to provide high-quality products at affordable pricing.
- We are offering widest range of triplex plunger pumps from 60 bar to 1400 bar pressure for various Applications.



- We offer complete end to end solutions for Hydro jetting, Hydro Blasting, High pressure cleaning, Hydro-static pressure testing, Descaling, Sewer jetting, Fire-fighting, misting and fogging, paint and rust removal.
- We have stringent quality controls across all manufacturing, assembling, and testing processes.
- PressureJet has Global Presence in more than 50 Countries worldwide.

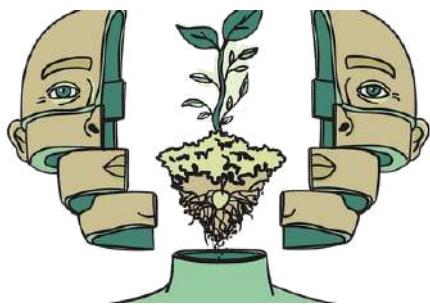
RECOGNITIONS



Hawk Champion
Distributor Since 2013

એન્સાઇસી
NSIC
ISO 9001 : 2008

IDEOLOGY



- At PressureJet, **transparency** is a fundamental principle that we follow. We feel proud to inform our customers about our products, fair pricing, and ethical business practices. In this digital era, there are no secrets in technology, and we rely on organized management and procedures. We assure complete openness and honesty about the quality of our services to help our customers compare and choose the best option.

VISION

- "Our goal is to become a globally recognized brand for high pressure reciprocating plunger pumps and complete systems. As a professionally managed and governed Indian multinational, we aim to prioritize reliability, affordability, accessibility, and excellence in everything we do."
- **"Our objective is to be the market leader in the USA, Germany, Japan & China."**



MISSION



- Be the **most technologically competent** Engineering Company by Designing, Developing, and manufacturing products which delivers **Highest** Value for Money and Reliability.
- Be the **most innovative** marketer to create an ecosystem where every buyer/consumer can evaluate PressureJet products and services to develop full confidence and buy with minimal efforts.
- We will **grow our personnel** through competency-based, systematic learning programs, as meritocracy is at the foundation of the business.

WHY PRESSUREJET?

QUALITY PRODUCTS MADE BY USING WORLD-CLASS MACHINERY



Hofler HF 4000



Mazak INTEGERX -
i200st 9 Axis Mill-Turn



KAFO BMC-3122
Double Column

- Thanks to these machinery, we can offer unmatchable 8-10 micron efficiency



Mazak HCN-
6800 HMC



Doosan LYNX 220
LSYC



CMM
Machine

WHY HIGH TECH MACHINE IMPORTANT FOR ACCURACY ?

- Designed for precision and consistency in their operations.
- Equipped with advanced sensors, software, and precision components to measure, cut, drill, or perform other actions accurately.
- High Tech machines come with smaller tolerances which indicates higher accuracy.
- In High pressure pumps, even small deviations can cause product defects or safety issues.
- Essential for ensuring products meet required standards of quality and performance.



WHY PRESSUREJET?

WELL EQUIPPED DESIGNING TEAM

- Passionate and innovative In house designing team
- Equipped with licenced 3-D SOLIDWORKS software.
- which Increases accuracy reduces costs overall
- 16+ dedicated staff for development of new products



DUST-FREE ASSEMBLY - SAY NO TO BREAKDOWN

- Every pump is assembled under the monitored environment to ensuring the longer life of the pump. Dust free assembly will lead to minimal breakdown of pump in longer run.
- For ensuring proper working of pump we use, state-of-the-art computerized torque wrenches to tighten all bolts in your pump.

ADVANCED IT

- PressureJet has Oracle EBS 12.1.3, to ensure best possible automation in accounting as well as procurement. 80% of pump spares have automatically generated purchase orders. Ultimately It reduces human intervention .
- PressureJet also has In house developed Datadoc software, which helps in smoothening business processes.



BARE PUMP

LIQUID END

CRANK CASE

(FG 260 210-1993-GR)

- Crosshead bore, Single piece housing
- Ra value: 0.2 μm , G.D. & T : 10 μm .
- Testing: physical



STUFFING BOX

(MARTENSITIC PH STAINLESS STEEL)

- RA value : 0.4 μm
- G.D. & T : 10 micron accuracy
- Testing : Chemical and UT tested



PLUNGER SEAL

- Special Teflon base seal
- Moulded with low pressure seal for plunger cooling systems

COMPLETE VALVE ASSEMBLY

(IMPORTED STAINLESS STEEL)

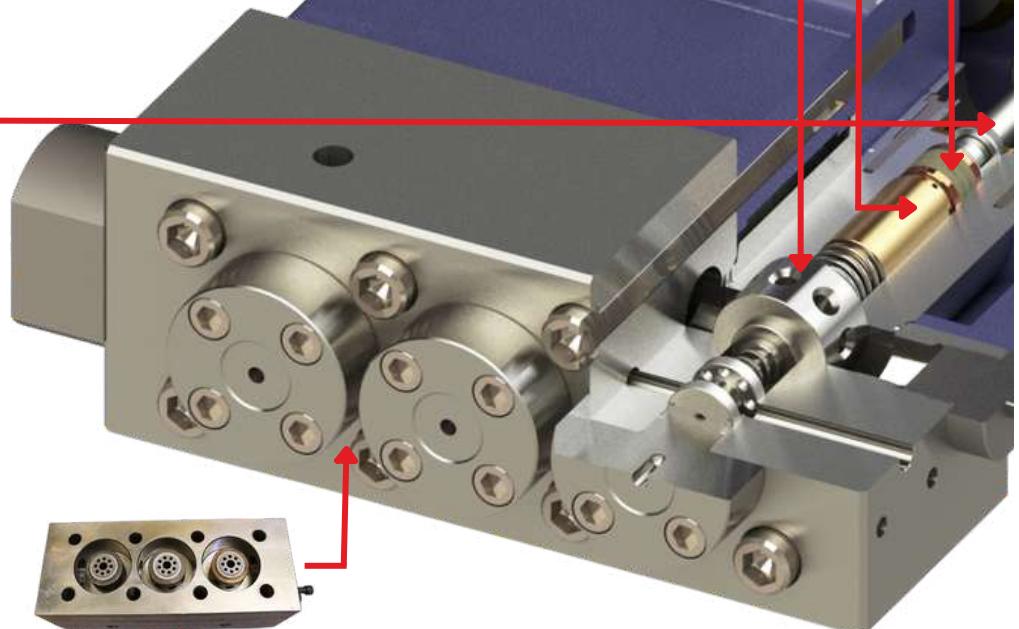
- Valves made of special - hardened & anti corrosion hardsurface coated for long life.
- Ease of access to suction-discharge valve assembly for maintenance.



PLUNGER

(SOLID CERAMIC)

- Ra Value : 0.05 μm
- G.D & T : 10 μm



PUMP HEAD

(FORGED STAINLESS STEEL)

Testing: - chemical and UT test

BARE PUMP

POWER END

CROSSHEAD ASSEMBLY

(CAST DUCTILE IRON + STAINLESS STEEL)

- Ra value: 0.2 μm
- G.D. & T : 10 μm
- Anti-corrosion treatment on a surface hardness of 50 HRC.

WHITE METAL BEARING



CONNECTING ROD

(FORGED ALLOY STEEL)

- G.D. & T : 10 μm .
- Heavy pin area construction, which added load strength.



CRANKSHAFT

(FORGED ALLOY STEEL)

- Ra value: 0.3 μm
- G.D. & T : 10 μm .
- Raw material testing: physical test, chemical test, ultrasonic test, hardness test, and M.P.T. Test.



BEARING

- Oversized for maximum life and load disbursement.
- Roller bearing enables it to handle 26% more load than other Pumps.

PINION SHAFT

- Alloy steel Double helical, nitride hardened and precision ground for extremely long life with low noise and durability. Accuracy class DIN-6.

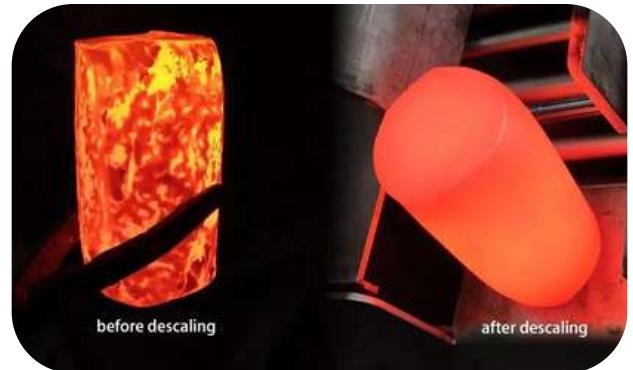


ABOUT DESCALING

DESCALING SYSTEM

Descaling is a metal cleaning process that removes Scale (unwanted surface deposits) on metals to provide a smooth surface finish.

- Scale forms due to high temp and gases during heating of metal
- High-pressure water used to wash away scale.
- Scale removed due to contraction rates



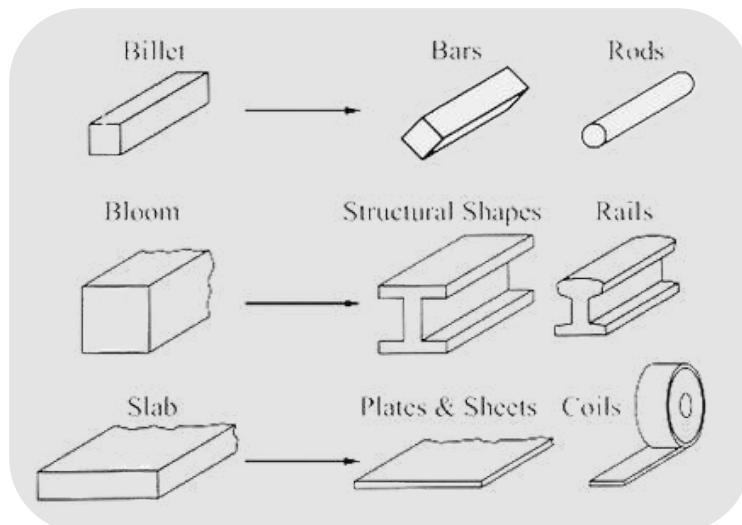
WHY IS IT REQUIRED?

The use of hydraulic descaling system in production processes is key measure for the quality of the steel. Increasing demand of reduction in energy consumption, the high demand on quality of the hot rolled product with maximum output, and the increasing proportion of high alloy steel qualities, have to be met by modern descaling systems.

MAJOR APPLICATION:

Descaling of

- 1.Billets
- 2.Blooms
- 3.Plates
- 4.Seamless pipes
- 5.Slabs
- 6.Strips
- 7.Profiles



ABOUT DESCALING

DESCALING PROCESSES

①

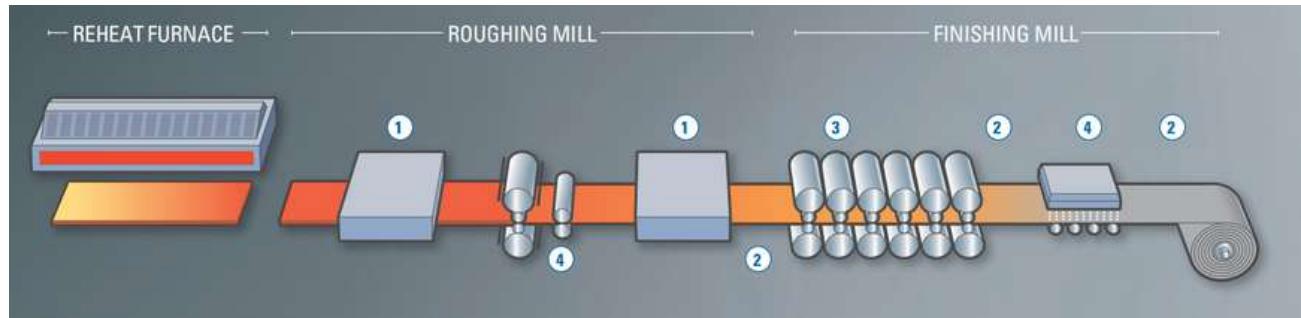
PRIMARY DESCALING

- Primary Descaling required when the scale formed during heating of materials in furnace hence primary descaling must immediately after billet coming out from furnace.

②

SECONDARY DESCALING

- Secondary Descaling required to remove scale generated during rolling operation when material passing through rolling stand.
- This scale is due to temperature difference of materials & atmospheric temperature.



FACTORS AFFECTING FOR DESCALING

FURNACE TYPE

TYPES OF FURNACE	AMOUNT OF SCALE
OIL FIRED	HIGH
GAS FIRED	MEDIUM
INDUCTION FIRED	LOW

MATERIAL TYPE

COMPONENT MATERIAL	TYPE OF SCALE
CARBON STEEL & MILD STEEL	THICK & NON STICKY
ALLOY STEEL	THICK & STICKY
STAINLESS STEEL	THIN & STICKY

ABOUT DESCALING

HIGH PRESSURE PUMP SYSTEM

Whole Pump system includes below mentioned things :

WATER TANK

CONTROL PANEL

HEAT EXCHANGER

BARE PUMP

BASKET FILTER

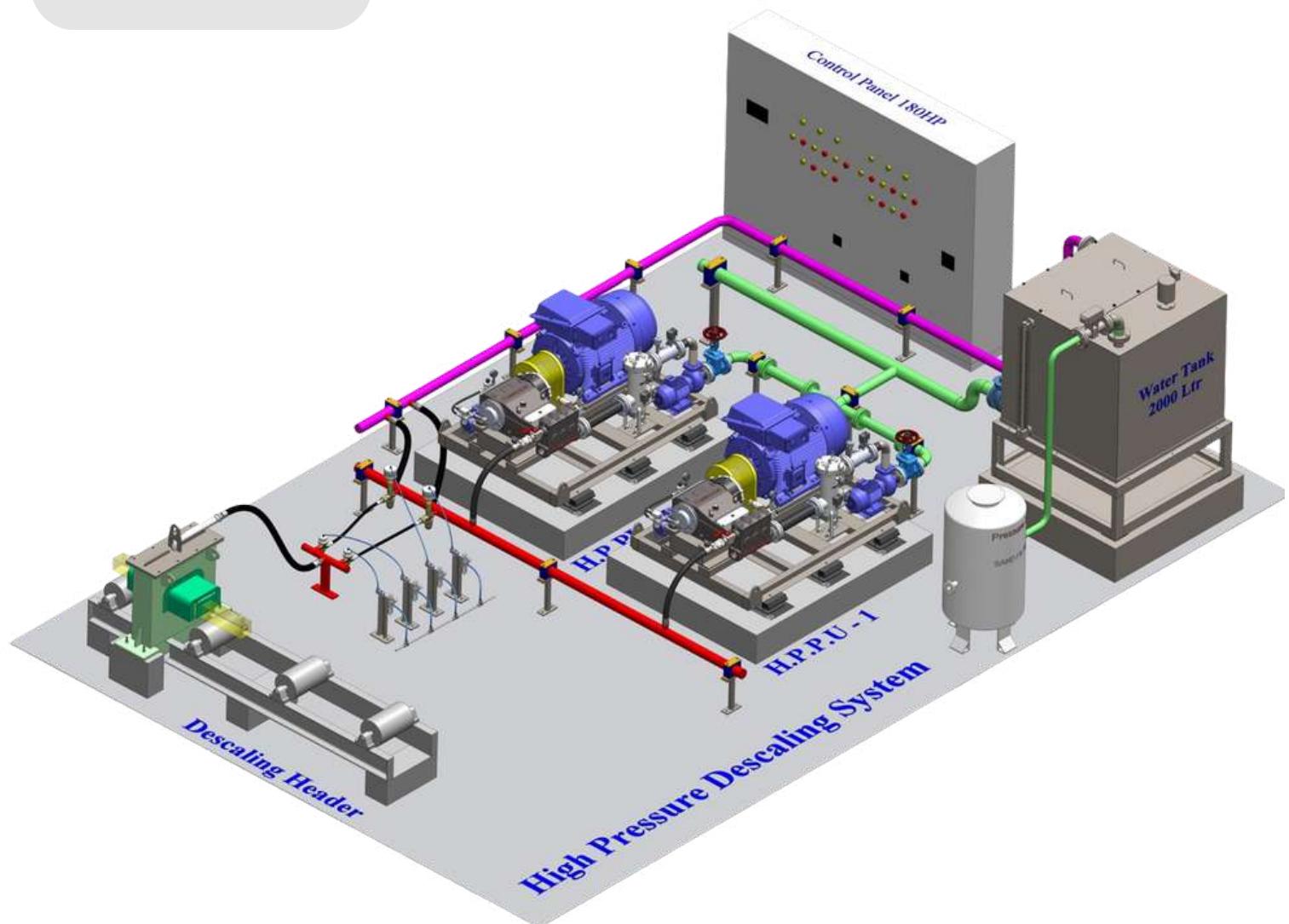
BOOSTER PUMP

BARE PUMP ACCESSORIES

HEADER

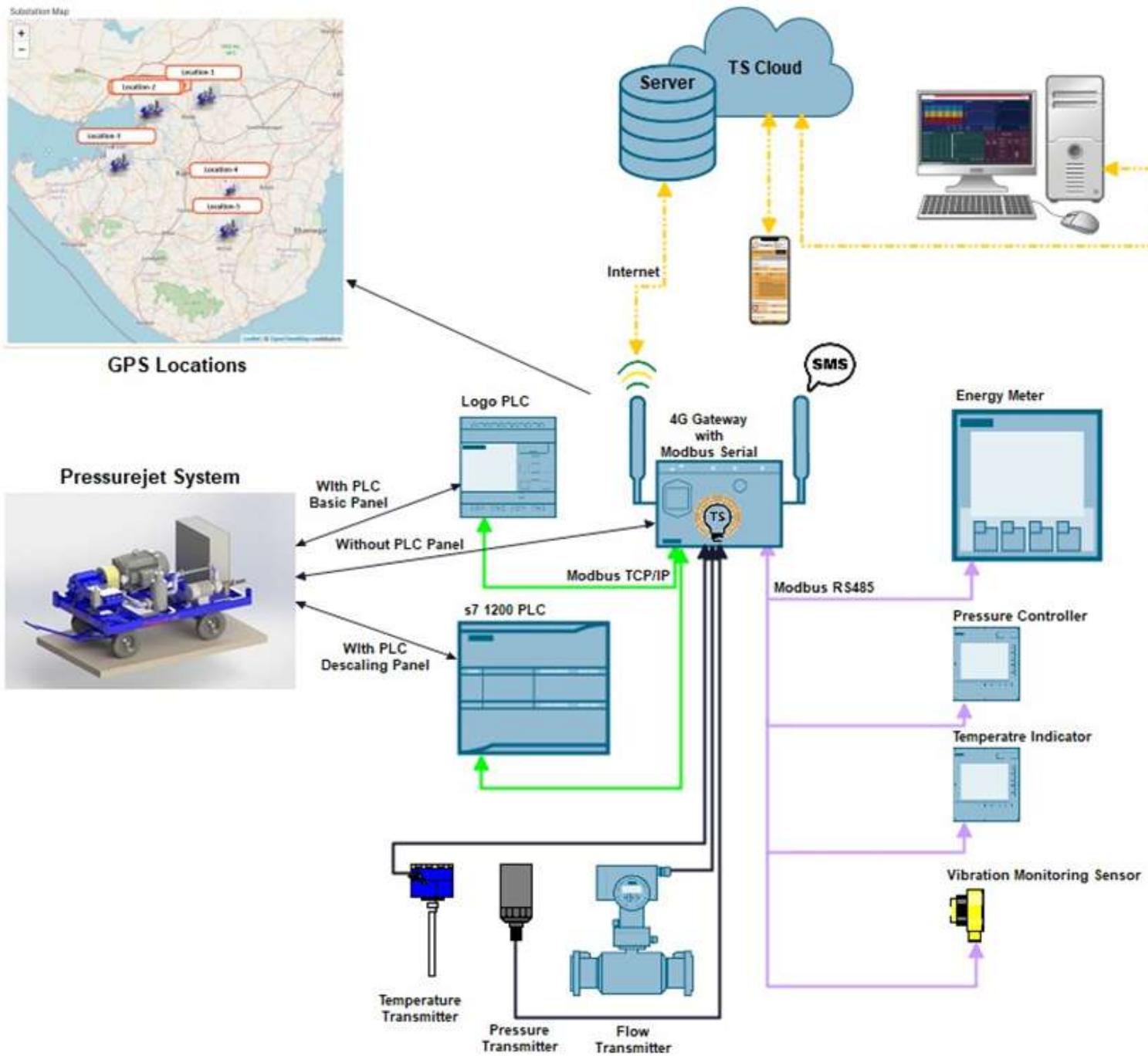
SETTLING TANK

HOT METAL DETECTOR



DESCALING COMPLETE SYSTEM

TELEMATIC SYSTEM



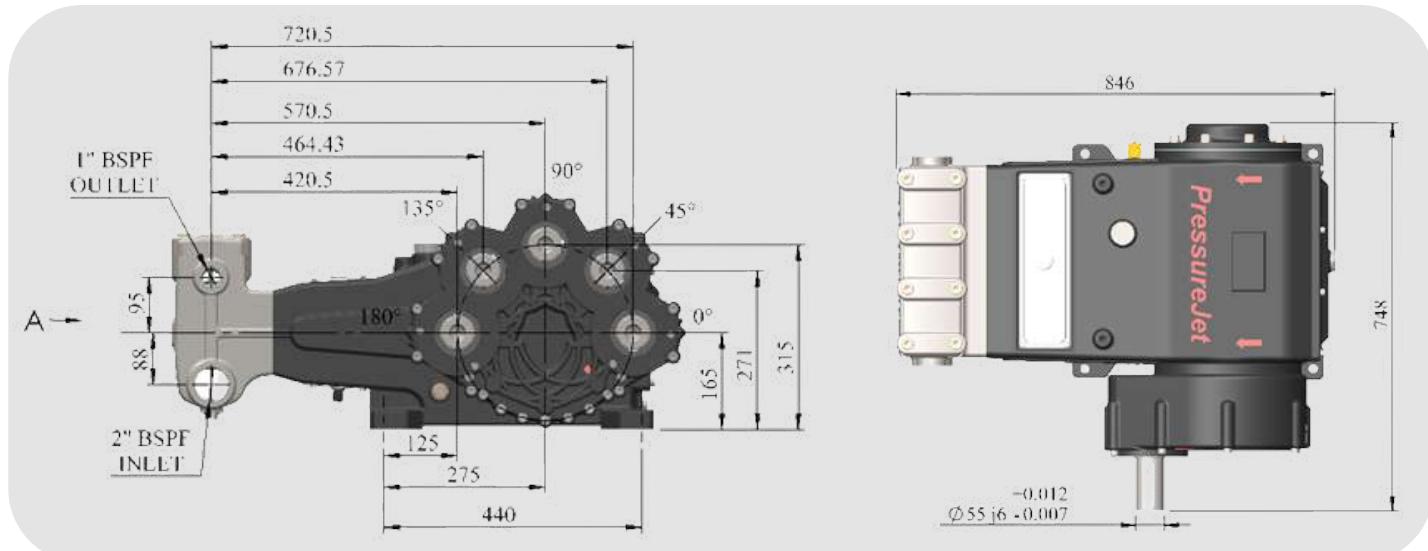
Telematics system used for data recording, analysis and real time error, maintenance notifications which ensures maximum saving with Long-life of your pump system as not facing unplanned maintenance and heavy breakdown of the descaling system.

ES SERIES SYSTEMS



- Plunger stroke : 72 mm
- Max. Plunger speed: 1.62 m/s @ 675 SPM
- Plunger force : 49.268 kN (5024 kgf)
- Required inlet pressure: Min. 2 bar
- Required inlet flow rate: Booster pump flow require min. 2 times of rated flow rate
- Oil type : SAE - 220
- Oil capacity : 10 litters
- Max. Liquid temp.: 60 °C
- Discharge & Suction connection: 1" BSPF & 2" BSPF
- Weight : 420 kg. Approx.
- Overall dim. (L*b*h) : 846 (L) * 748 (B) * 335 (H) mm

MODEL	SPM	INPUT RPM	FLOW RATE (LPM)	PRESSURE IN BAR (POWER IN HP*)		
ESB-72-40	565	1500	153	375 (150)	300 (120)	250 (100)
	675	1500/1800	182	400 (190)	310 (150)	250 (120)
ESB-72-45	565	1500	195	290 (150)	230 (120)	200 (100)
	675	1500/1800	230	300 (180)	250 (150)	200 (120)
ESB-72-50	565	1500	240	240 (150)	190 (120)	160 (100)
	675	1500/1800	285	250 (186)	200 (150)	160 (120)

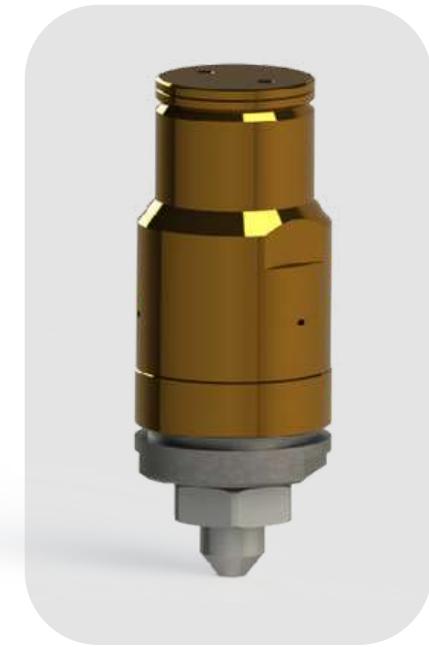


DESCALING ACCESSORIES

SAFETY VALVE

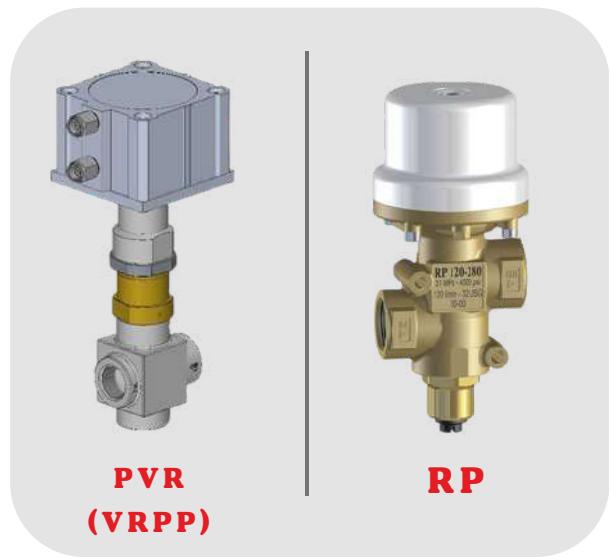
Safety valve is a very important accessory. It prevents major accidents from occurring in case of problem arising out of high pressure built up in line. It is standard on all PressureJet Pumps for temporary relief of excess system pressure.

- Provides over-pressure protection.
- Ensures safety for operator.
- Intentionally designed weak part to avoid major loss.
- Pressure range up to 400 bar - 5801.5 PSI.
- Flow rate range up to 450 LPM - 118.87 GPM.

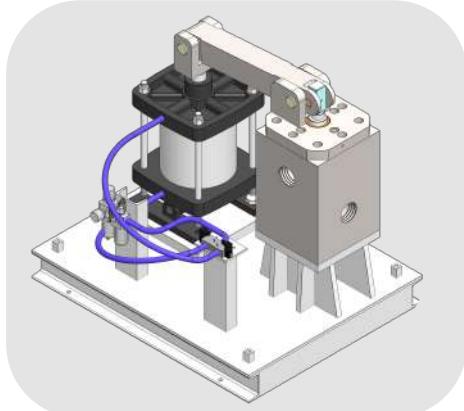


VRPP - RP

- Regulates output pressure as required
- Bypasses excess water
- **VRPP :**
 - Pressure range up to 300 bar - 4351.13 PSI.
 - Flow rate range up to 200 LPM - 52.83 GPM.
- **RP :**
 - Pressure range up to 300 bar - 4351 PSI.
 - Flow rate range up to 120 LPM - 31.7 GPM.



DUMP VALVE



- We provide two types of Dump Valve with Different Specifications for descaling
- **DV 50 :**
 - Pressure : 350 bar - 5076.32 PSI
 - Flow Rate : 800 LPM - 211.34 GPM
- **DV 80 :**
 - Pressure : 350 bar - 5076.32 PSI
 - Flow Rate : 1500 LPM - 396.26 GPM

DESCALING ACCESSORIES

PRESSURE GAUGE

Glycerin Filled Pressure Gauge, ideal for dampening the effect of pulsation and vibration. Widely demanded, it has a stainless steel case filled with glycerin to offer protection against harsh environments. It enhances the integrity and reliability of measuring system for long periods under extreme operating condition.

Note: - Available in various size as per requirement.

- Approx. 1.5 - 2 times pump operating pressure
- Glycerin filled
- Easy to read dial
- With needle valve



CONTROL PANEL

A control panel is a flat, often vertical area where control or monitoring instruments are displayed. It has many controls like on/off button, Emergency switch, Voltage and Ampere readings etc....



- For over and under voltage protection
- Electric control panel has important and necessary controls like hour meter, volt meter, over load protection, etc.
- It comes with single phase and short circuit protection
- Control panel is also available with VFD.
- Control panel is supplied with PLC, HMI for the monitoring the performance of the system.

DESCALING ACCESSORIES

BOOSTER PUMP

- There are two types of booster pump
 - Horizontal
 - Vertical booster pump
 - Single Stage
 - Multi Stage



HORIZONTAL BOOSTER PUMP



VERTICAL BOOSTER PUMP



BASKET FILTER

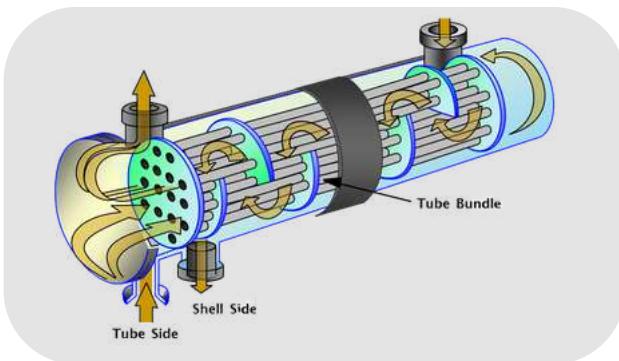
- Basket filter specially designed to ensure even small particles did not enter inside the bare pump. It will help to reduce the wear and tear of bare pump.

DESCALING ACCESSORIES

WATER TANK

- Generally 6x or 10x than required flow rate.

Example : If the required flow rate is 500 lpm for descaling than the suggested capacity of tank is 5000 liter or more.



HEAT EXCHANGER

- On the top of the Heat Exchanger there is
 - Pressure switch
 - Temperature Sensor

SAND FILTER

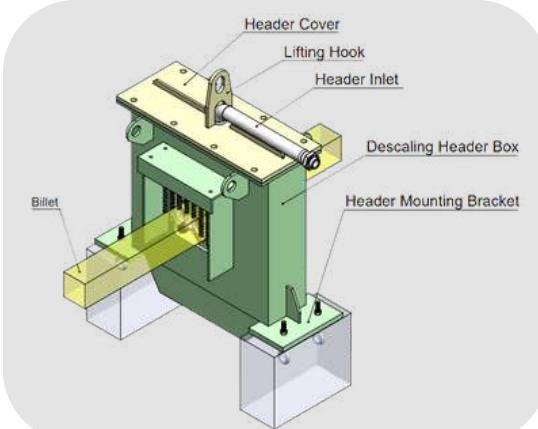
- Used to remove impurities and debris from the water used for descaling.
- The sand filter works by trapping particles and debris in the sand bed, allowing clean water to pass through. The sand bed is periodically backwashed to remove the accumulated debris, and the filtered water is returned to the descaling system.



DESCALING ACCESSORIES

HEADER

- Header is an arrangement which includes HP nozzles, Cover and mounting arrangement.
- Precision mounting of the Header ensures the accurate Nozzle profile which is essential for the descaling process.
- Our designed team will provide customized header arrangement client to client basis.

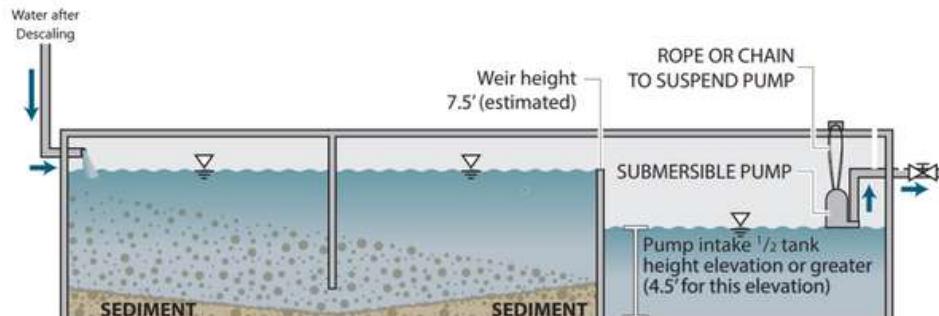


HOT METAL DETECTOR

- Hot metal detector will sense the high temperature metal when its in the range, the functionality is used for the automation.

SETTLING TANK SYSTEM

- A settling tank is commonly used in descaling systems to separate the solid particles and debris that have been removed from the water during the descaling process. The settling tank allows these particles to settle to the bottom of the tank, where they can be easily removed and disposed of. After this process we can re-use this water for descaling.



FOR MORE INFORMATION

MORE ABOUT PRESSUREJET

We are the largest manufacturer of high pressure triplex plunger pump. For virtual factory tour scan the below mentioned QR code.



COMMISSIONING

We provide on-site commissioning of your pump upon your request. Have a look at our commissioning policy for more information, scan the QR code.



MAINTENANCE & TROUBLE SHOOTING

We ensure hassle-free troubleshooting of your pump with a lot of information available on our website. Don't want to read the information? Head out to our website for videos. Still facing problem? Contact us.



WARRANTIES & GUARANTEES

Our standard warranty is 1-year from date of supply or 1000 working hours whichever is earlier. Find out all our warranty policies and conditions in detail. Scan the QR code!



SATISFIED CLIENTS

5000+ SATISFIED CLIENTS OVER 50+ COUNTRIES





PressureJet
EXPLORE THE WATER POWER

21-24, PanchRatna Industrial Estate Near
Oad Village, Paldi Kankaj, Satpanth Mandir
Pirana Rd, Ahmedabad, Gujarat 382427



www.pressurejet.com [✉ sales@pressurejet.com](mailto:sales@pressurejet.com) [📞 +91 6353534917](tel:+916353534917)

LOCATION