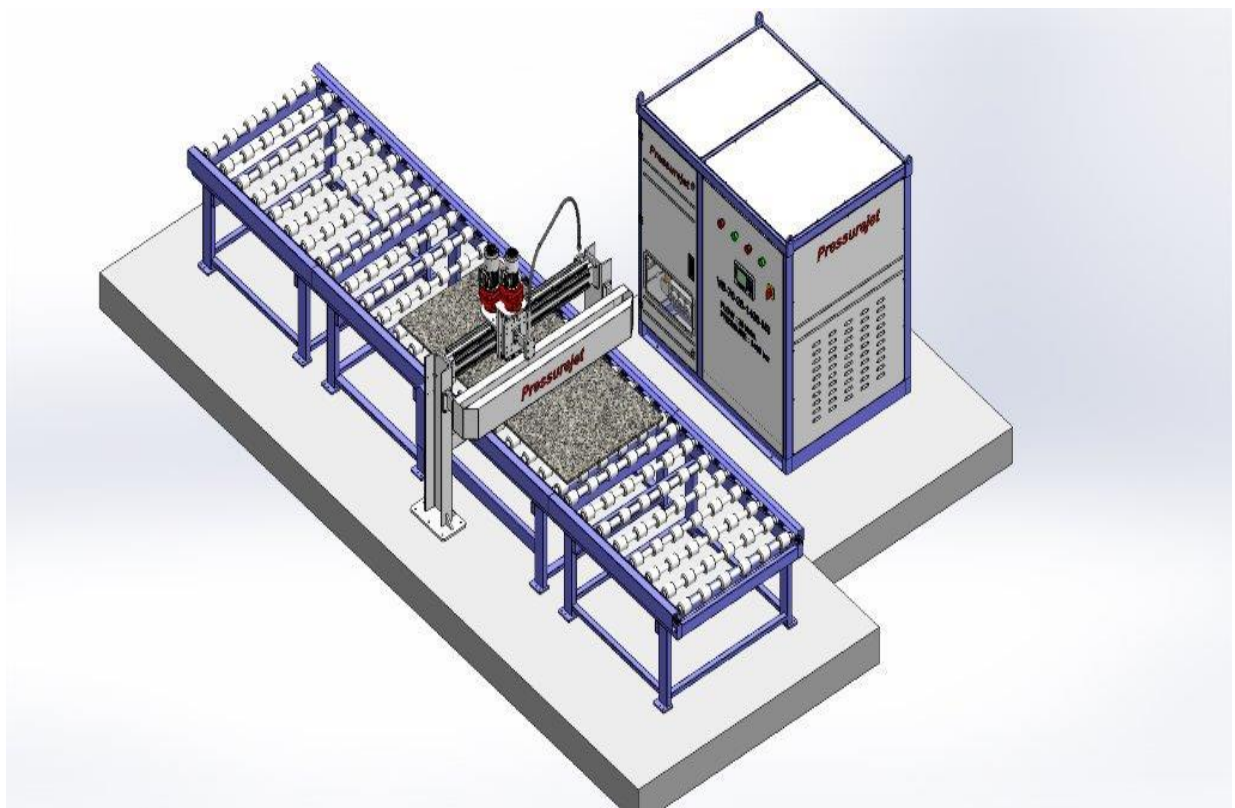




# Stone Texturing System With High Pressure Water Jet Pump



**2016**

## Stone Texturing System

### About Company



PressureJet Systems Pvt. Ltd. was established in 1996 in Ahmedabad, India. PressureJet (an ISO 9001:2008 certified company) is a leading manufacturer of High Pressure, Positive Displacement, Reciprocating Triplex Plunger Pumps, Systems and relevant accessories. These pumps are widely used for various applications like Granite & Marble Texturing, Wet Sand Blasting, Sewer Jetting, Hydro Blasting, Water Jet Cleaning, Hydro test, Reverse Osmosis, Descaling, Fire Fighting, Misting-Fogging, Transfer & many more.

Today, PressureJet has a workforce of more than 70 dedicated people. We have 11000 Sq. ft. area in Asia's premier industrial estate in Ahmedabad. Out of which, 5000 Sq. ft. area has been allocated for manufacturing activities.

### Our Quality



All components are quality checked in the controlled environment of the QC department. We have the most modern measurement equipment such as 3D CMM (Coordinate Measuring Machine), Surface Roughness Tester, Hardness Tester etc. All components are tracked by barcode system with oracle ERP.



3D modelling is an important aid in designing the technical aspects of engineering product.

Simulation can really help in making the correct design decisions during the development stage.

At PressureJet, we are using all latest Design Softwares.

## Stone Texturing System

### Machine Shop



Our Ultra-modern machine shop enables us to manufacture an extremely wide range of components. We can be very flexible in our production planning, while maintaining a high standard of quality with fully automatic machining station. Computer controlled machining stations ensure constant dimensional accuracy.

### Assembly & Testing



In this area, all components for the various pump units come together. Pumps and engine or motors are assembled on the skid frame, Accessories such as booster pump, Strainers, PRV, Safety Valve etc. are assembled.

PressureJet products are subject to stringent quality control. All pumps are tested at maximum load prior to dispatch for decided time period. All measurement taken during the testing are electronically stored in computer through fully Automatic Test Bench and then it can be printed. Test report is always provided with the pump.

### Store / Service

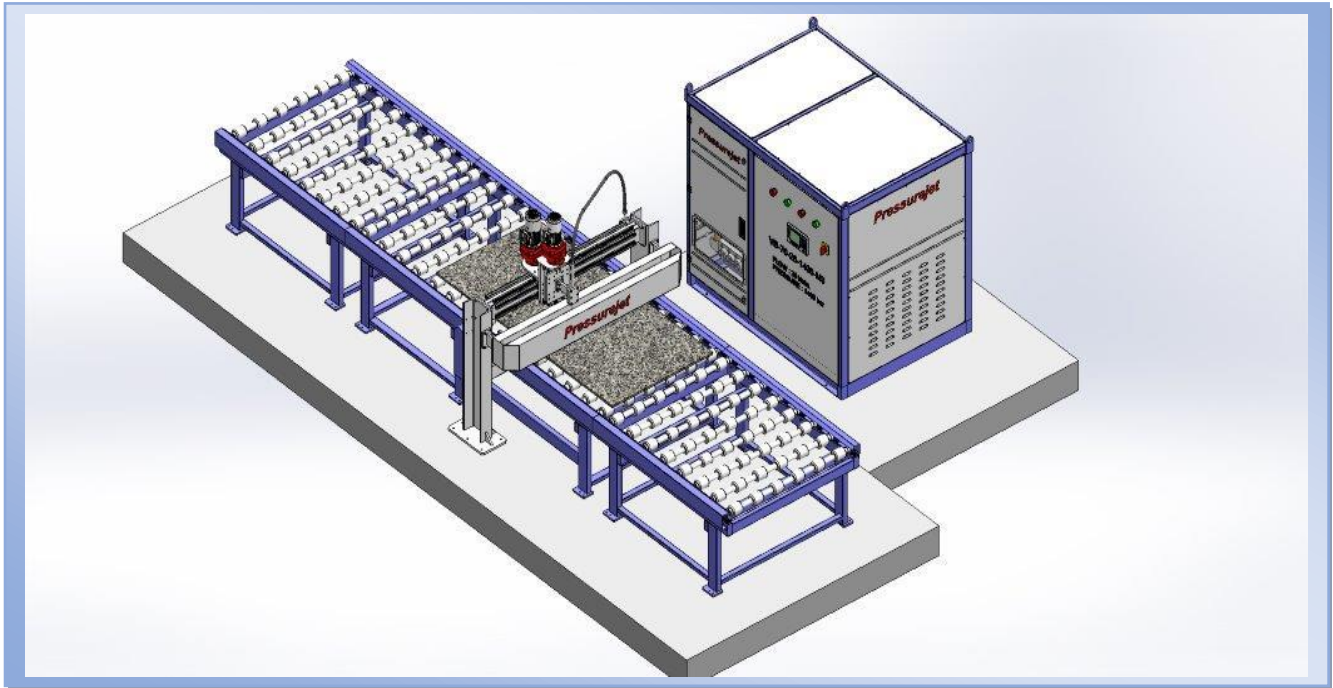


A product is only as good as the service backing it. We have a dedicated team of technicians available for 24 X 7. We keep majority of spares Ex-stock to reduce down time.



## Working of System

### Stone Finishing/Texturing System



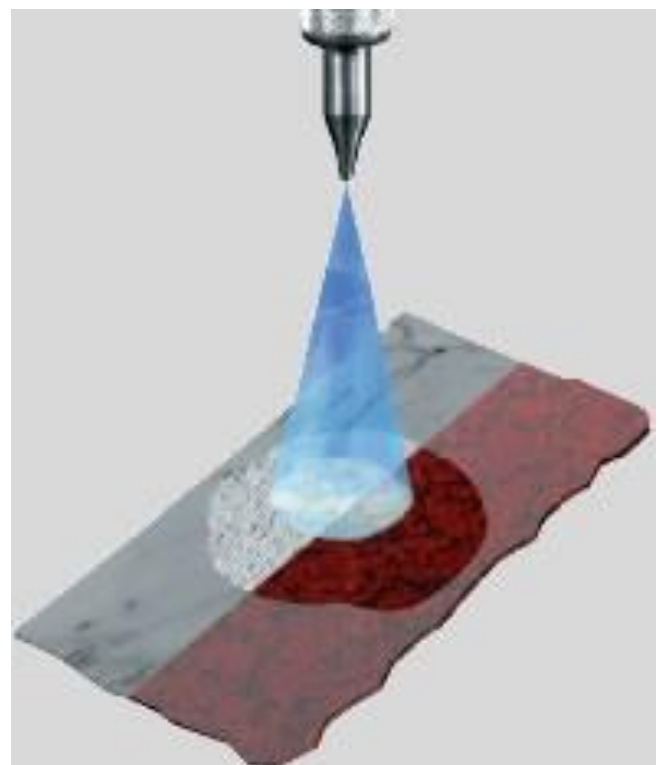
**PressureJet Proudly announces to launch Stone Texturing Machine in India which will bring revolution in Granite and Marble Market.**

**PressureJet has introduced Stone Finishing cum Texturing Machine in India. The desired texture finishing can be obtained by varying speed of Conveyor, Travelling speed of Nozzle, Height of Nozzle and Working pressure.**

**Stone is a tactile and versatile material and it is an exciting experience to watch finished stone emerge in multifarious forms from a piece of rock.**

### Working of System

- The High Pressure pump pushes water at ultra-high pressure into a nozzle supervised by a PLC water ejected through a gauged orifice, located into a rotating body, allows to process superficially all stone material generating an accelerated erosion.
- This technology is the most ecological and easy to operate surface texturing process, Further processing is not needed and it doesn't produce mechanical and thermal deformation. It is really easy to operate because the same tools and the same conditions can be used with the majority of materials.
- All of the above allows reduction of manufacturing time and costs in every sector, Also the PLC database that provides with a simple click a customized work plan for any material.
- Moreover the final product after machining is far better than sandblasting and shot blasting techniques.
- Also this technique is hugely popular as it is fire proof and require very less maintenance.



## About System

### Advantages of this System:-

- High pressure jet texture only
- Standing out of the original colour of the material: (no yellowing)
- Smoke, pollution and heat free
- High performances
- Low production cost
- Maximum working processing flexibility
- New texture process for marble, stones and all kinds of Granite

### This System Consists of following:-

- High Pressure Triplex Plunger Pump Motor Unit (Fully Covered)
- Loading and Unloading lift
- Electric Panel with A.C drive
- PLC ( Programmable Logic Controller )
- HMI ( Human Machine Interface )
- High Pressure Rotary Nozzle ( Make: StoneAge Tools USA)
- Stainless Steel storage tank(300 liters) with 100 micron filter
- Water Level Indicator in the Tank.
- Suction Booster Pump
- Basket Type Filter 20 micron in Water Tank
- Pressure switch for low/high water level safety in water tank to avoid dry run of pump
- Solenoid Valve, for water supply
- Pressure Transducer

### Automation:-

- Electric Control Panel with A.C Drive.
- HMI with PLC.
- Conveyor speed can be controlled.
- Nozzle Height can be adjusted.
- Loading and Unloading of the lift can be done.
- Pressure Transducer will sense the pressure.
- Nozzle Travelling Speed can be controlled.

## Technical Specification

Sr. No.	Parameters	Description
1	Power supply (Ph/V/Hz)	3ph/415V/50Hz
2	Power	120 hp (90 Kw) for pump Unit & 8 hp (6 Kw) for Conveyor Unit.
3	Dimensions (LxWxH) (mm)	(PUMP UNIT) 2200 x 1555 x 1915- (CONVEYOR UNIT) 7200 x 1570 x 1900
4	Conveyance rate (mm/min)	0-100
5	Spray lance moving rate (mm/s)	0-100
6	Max. Stone width (mm)	1200
7	Stone Thickness (mm)	>10 mm
8	Spray head adjustment	Automatic
9	Waiting table	YES
10	Water filter	YES
11	Pump Working Pressure (max)	1400 bar (20,000 Psi )
12	Pump Flowrate (max)	30 LPM
13	Total Weight	3600 Kg

## Nozzle

### StoneAge Barracuda Nozzle



Our system has the world reknown M/s StoneAge Tools- USA make Barracuda Nozzle suitable for high Pressure water Jet. The Nozzle is of very Special Stainless Steel Material, which prevents corrosion.

## Pump Specification



### PUMP SPECIFICATIONS

Sr. No.	Parameters	Description
1	Model	KDD
2	Pump Speed	500 SPM
3	Plunger Stroke	95 mm
4	Max. Plunger speed	1.58 m/sec.
5	Max. Thrust On Plunger	20331 kg.
6	Required Inlet Pressure min. /max.	2-3 Bar (Required Booster Pump flow rate = min. 1.5 times of pump flow rate)
7	Oil Type	SAE 80 W 90
8	Oil capacity	12 Liters
9	Max. Liquid Temp.	70 °C (158 °F)
10	Discharge Connection	½" BSPF
11	Suction Connection	1-½" BSPF
12	Inlet Water condition	Clean Water, Filtration 80- 100 Micron at 2-3 Bar Pressure.



## Stone Texturing System

### Types of Finish with this System



Antiqued Finish Granite



Antiqued Finish Marble



Leathered Finish Granite







Leathered Finish Marble



Natural Finish Granite



Natural Finish Marble

	
Sand blasted Granite	Sand blasted Marble
	
Water Blasted Finish Granite	Water Blasted Marble

**Note:**

- 1. This System is suitable for max. 1.2 M (width) Stone slab.**
- 2. We Provide Pumps with all its Accessories for Gang saw Cleaning.**
- 3. We also provide hopper and nozzles for wet sand blasting.**

**PressureJet Systems Pvt. Ltd.**

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