

SJ - SERIES | TRII-PLEX

PUMP MANUAL



MATERIAL OF CONSTRUCTION:-

- >**CRANKSHAFT** - Alloy steel: Crankshaft is made of nitrated, hardened and precision ground for extremely long life and durability.
- >**MAIN BODY(CRANK CASE)** - Spheroidal Graphite Iron: Main body in spheroidal graphite Iron casting with honned surface finish bore.
- >**PISTON (CROSSHEAD)** - Grey Iron & Stainless Steel: Alloy steel casting piston & stainless steel piston rod are hardened & super finish surface.
- >**CONNECTING ROD** - Alloy Steel: Forged steel connecting rods with antifriction bearings. Heavy pin area construction, for added load strength.
- >**BEARING** - Oversized for maximum life and load disbursement. Selfalignment roller bearing enables it to handle 26% more load than other pumps.
- >**PUMP HEAD** - Stainless Steel: Liquid end is made of high corrosion resistant. Forged stainless steel.
- >**COMPLETE VALVE** - Stainless Steel: Valves made stainless steel for hardened & anti corrosion hard surface coated for long life. High volumetric efficiency valves operate at 95% efficiency plus.
- >**PLUNGER (SOLID CERAMIC)** - Surface roughness is extremely good i.e. <0.2 Ra. (99.5% Alumina Grade)
- >**PLUNGER SEAL** - PTFE Aramide: Aramide fibre yarn packing with PTFE fibre face or carbonaceous aramide yarn packing with GFO fibre face for high compressive & tensile strength ensure effective sealing.

->**WHITE METAL BEARING** - Antifriction bearings for long life of crankshaft

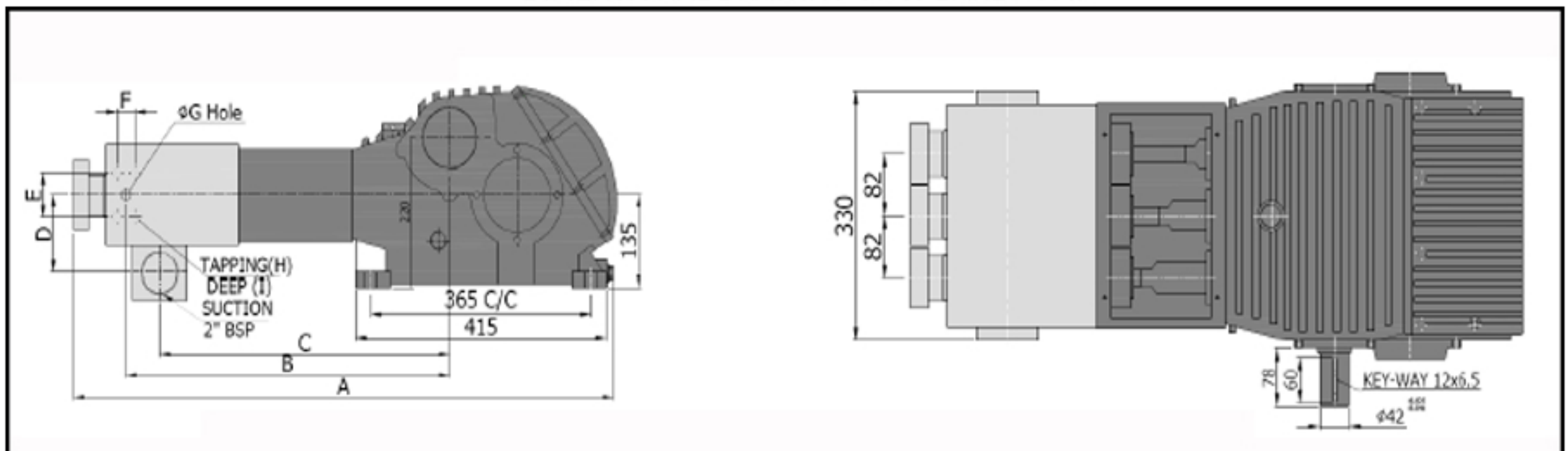
->**HELICAL GEAR** - Alloy steel: Helical gear is nitride hardened and precision ground for extremely long life and durability.

->**PINION SHAFT** - Alloy steel: Pinion shaft is nitride hardened and precision ground for extremely long life and durability.

TECHNICAL DETAILS:-

- >**Plunger Stroke** - 75mm
- >**Plunger Force** - 31.28 KN (3190 Kgf)
- >**Max. Plunger Speed** - 1.32 m/sec. @ 530 spm
- >**Inlet Pressure min./max** - 2 to 3 bar
(Booster Pump flow require min. 1.5 times of rating flow)
- >**Oil Type** - 80W90
- >**Oil Capacity** - 5 Ltr
- >**Max. Liquid Temp.** - 70°C (160°F)
- >**Suction Connection** - 2" bspf
- >**Discharge Connection** - 1/2" bspf
- >**SJ Series** Designed in Built Gear.
- > Splash Lubrication / Forced Feed Lubrication

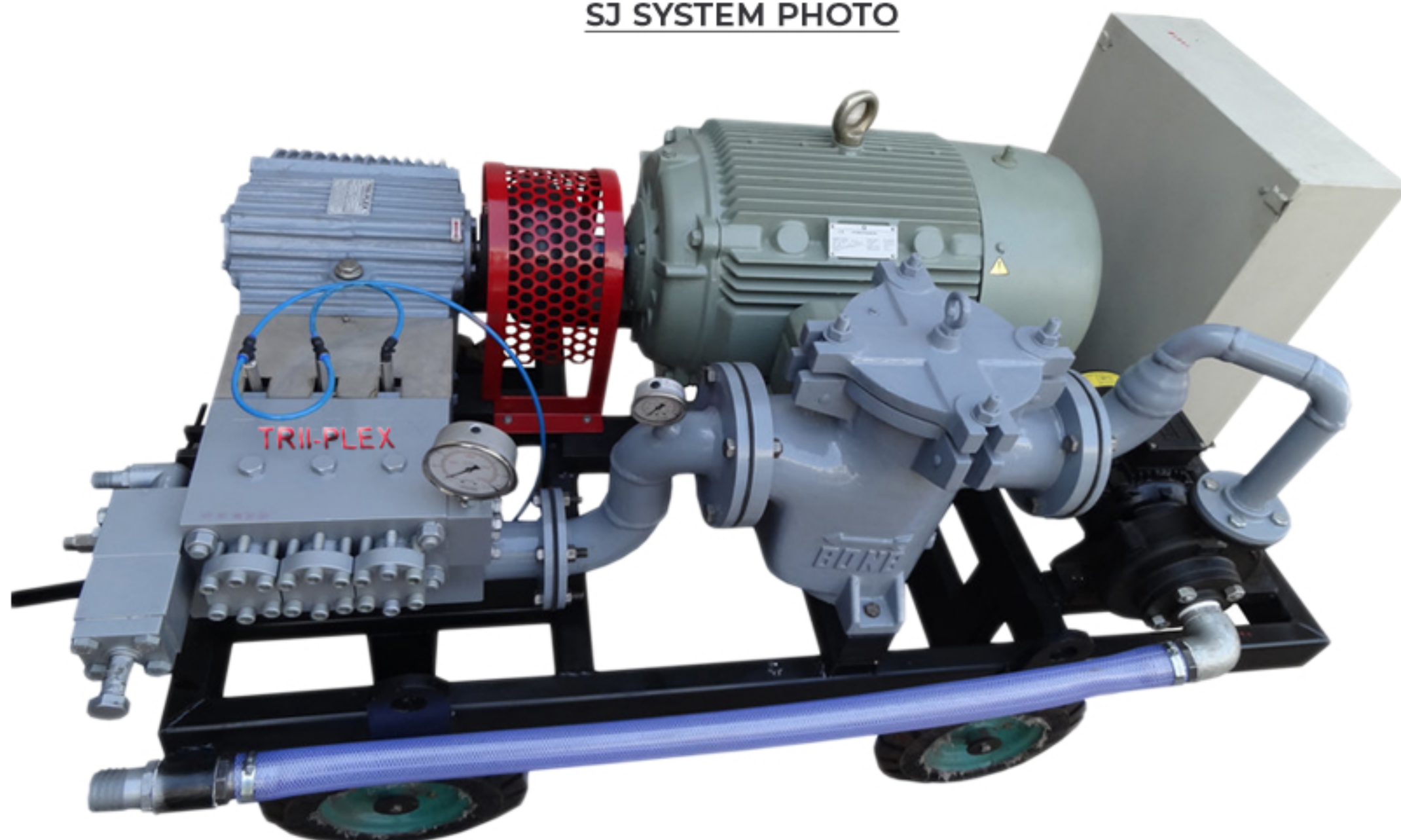
DIMENSIONAL DRAWING OF SJ BARE PUMP



- Note:** - (1) Flow rates indicated are at 100% volumetric efficiency. Actual flow rate will be $\geq 90\%$
(2) All models are suitable for 50 Hz (1450-RPM) and 60 Hz (1800-RPM) power specification

PUMP MANUAL | TRII-PLEX JETTECH SYSTEMS

SJ SYSTEM PHOTO



SJ SERIES - 10000 PSI (750 BAR) Pump				
Pump Model	Plunger Dia.	Flow Rate	Crank Shaft speeds 530 Min with	
			60 HP	75 HP
SJ-20	20	35	620	750
SJ-22	22	42	520	680
SJ-24	24	52	430	530
SJ-26	26	62	360	450
SJ-28	28	70	310	375
SJ-30	30	80	270	330
SJ-32	32	90	240	300
SJ-36	36	115	190	230

1. Maximum permissible fluid temperature is 70° C.
2. Power Calculations shown in the table is based on maximum rated pressure. However, for low pressure requirement, power will also be proportionally reduced. Pump speed lower than specified in above chart is also available for special application.
3. Volumetric efficiency is considered @ 100% where not specified.

SUITABLE APPLICATIONS OF SJ SERIES RANGE

HYDROBLASTING, TUBE CLEANING, PAINT REMOVAL, HYDRO TEST, SURFACE PREPARATION