



P1 Series High Accuracy Chemical Injection Skids Data Sheet Model Numbers:

P1-7-DA-SK (MWP 13,000 psig)
P1-9-DA-SK (MWP 7,000 psig)
P1-13-DA-SK (MWP 3,700 psig)

The P1 series skids are heavy duty chemical injection units. P1 series skids are modular in design to incorporate any one of the three available P1 pump units in the range regardless of the pressure and flow making it a versatile and cost effective skid & pump package.

P1 series skids are available in three different pump models, 7mm, 9.5mm & 13mm to provide a wide range of pressures and flows up to 13,000 psig.

The P1 pump utilises a common air motor, shuttle valve assembly, hydraulic section housings and check valves and has been designed to be modular using interchangeable inserts, pistons and components permitting the pump to be economically reconfigured to either the 7mm, 9.5mm or 13mm model for different pressures and flows within a short period of time.

All P1 series pumps are CE marked, ATEX compliant (94/9/EC) II 2 Gc T6 & NACE compliant as standard and suitable for H2S fluid service.

Skid Overview Standard Sale/Rental Build Unit:

Frame Construction	316 stainless steel 25x25x2mm box section frame, drip tray, Two earth bonding points, Stainless steel wheels for ease of movement and portability.
Pump Selection	CP-P1-7-D, MWP 13,000 psig or CP-P1-9-D MWP 7,000 psig or CP-P1-13-D, MWP 3,700 psig
Air Drive	3/8" NPT SS (F) bulkhead, Norgren series 73 filter/regulator/lubricator c/w 63mm pressure gauge & slide valve (start/stop/throttle), Norgren pilot air filter, pneumatic panel mounted stroke counter, 1/4" OD interconnecting SS fittings and pipework, Swagelok SS low flow air control valve or Hylok SS high flow air control valve.
Fluid Inlet	3/8" NPT SS female bulkhead, Hylok 3/8" OD SS isolation valve, 50 mesh SS Y strainer, 3/8" OD (0.065") SS pipework and interconnecting fittings. (Calibration Pots; low volume 60cc or high volume 250cc)
Fluid Discharge	(9.5mm & 13mm piston) 3/8" NPT SS female bulkhead, Hylok 3/8" OD SS isolation valve, Hylok 3/8" OD SS non return valve, Hylok 3/8" OD SS adjustable PRV, Stewart 63mm SS filled pressure gauge, 3/8" OD (0.065") interconnecting SS pipework & fittings. (No vent valve) (7mm Piston): 3/8" MP SS female bulkhead, Hylok 3/8" MP SS isolation valve, Hylok 3/8" MP SS non return valve, BIS 3/8" MP SS adjustable PRV, Stewart 63mm SS pressure gauge, 3/8" MP interconnecting SS pipework & fittings. (No vent valve)
Total Net Weight	34.5Kg
Maximum Noise Level	80 db

Skid Connection Sizes:

Air Inlet	3/8" NPT (F) Bulkhead
Fluid Inlet	3/8" NPT (F) Bulkhead
Fluid Discharge	3/8" NPT (F) Bulkhead
System Vent	3/8" NPT (F) Bulkhead
PRV Vent	3/8" NPT (F) Bulkhead
Fluid Discharge	3/8" MP (F) 7mm only

Pump Performance:

Max Pump Air Supply	100 psig		
Max Pilot Air Supply	100 psig		
Max Air Consumption	25 scfm		
Air Quality Required	Cooled & dry plant air		
Pump Ratio	7mm: 129 - 1	9.5mm: 70 - 1	13mm: 37 - 1
Max Discharge Pressure Static	7mm: 13,000 psig	9.5mm: 7,000 psig	13mm: 3,700 psig
Discharge Volume per Stroke	7mm: 1.62cc	9.5mm: 2.7cc	13mm: 5.3cc
Max Discharge Flow @ 0 psig	7mm: 48 ltr/hr	9.5mm: 90 ltr/hr	13mm: 175 ltr/hr

General Arrangement Drawing:

