

HP Flush & Test Rigs



- Harben® flushing pump suitable for low viscosity water based oils i.e. Oceanic HW series, Castrol Brayco, Transaqua, MEG, water
- NAS 1638 Class 6 cleanliness standard
- Trolley and skid versions
- Flush up to 700bar/ 175 lpm, Test up to 1400 bar
- Basic, PLC and HMI control options

Model	HP Onshore Flush & Test Rigs
Pressure and Flow	The Harben® Onshore flushing rigs are available with a wide range of pressure and flow combinations. See reverse of brochure for details
Flushing Pump	Harben® radial piston diaphragm pump suitable for low viscosity water and oil based fluids. Capable of pumping low lubricity fluids at high pressure. Seal-less design for long service intervals. Harben® pressure control valve with replaceable stem and seats
Motor/Starter	Typically safe area TEFC motor with flange mount for ideal alignment and IP55 rating for ingress protection. Options available are 400v/3ph/50Hz, 440-460v/3ph/60Hz or multi voltage 400/690v 50Hz - 400v 60Hz - 440-480v 60Hz - 660-690v 60 Hz. Star delta and DOL starting options available to match supply requirements. ATEX options available
Test Pump	Pneumatic intensifier type high pressure test pump with operating pressure available up to 1,400 bar all piped through a common outlet with the flushing pump allowing lines to be flushed and tested in one operation
Pneumatic supply	A compressed air supply will be required to operate the test pump from 7 bar at 75 scfm
Supply Tank	Header tank manufactured from 316 stainless steel. Low level and high temperature fluid sensing
Cooling	Thermostatically controlled water cooled plate cooler to maintain flushing fluid at required temperature (optional air blast cooler available)
Frame	316 stainless steel or mild steel shot blasted and powder coated
Filtration	Up to 700 bar 3 micron high pressure filter, 40 bar 3 micron low pressure filter. Fitted with clogging indicators
Flow meter	Analogue and digital flow meter options are available
Pressure gauge	Analogue and digital pressure gauges are available
Dimensions	To suit application and area available
Weight	Dry weight: From 850 kgs *

* All weights and dimensions are subject to change and should be confirmed with Flowplant at time of quotation and ordering

Motor kW ratings are those stamped for 50Hz operation. 60Hz ratings will be proportionally higher

All performances are approximate.

Harben Flushing/Test Pump Options

The tables below show the performance in l/min that can be expected when operating on 50 Hz and 60 Hz electrical supplies with a 6 pole motor with the pump operating at listed pressures

If running on a VFD the Harben P type can be run at up to 1,300 rpm and the Century at 1,200 rpm. Both have a turndown ratio of 4:1

	Century	700 Bar	600 Bar	500 Bar	550 Bar	450 Bar	350 Bar	400 Bar	300 Bar	200 Bar
		4.22.5	4.22.5	4.22.5	4.25.0	4.25.0	4.25.0	4.27.5	4.27.5	4.27.5
Motor Power kW / 6 pole / 50 Hz / 980 rpm	37 kW	29	33	36			54			72
	45 kW				46	50		55	65	

	Century	700 Bar	600 Bar	500 Bar	550 Bar	450 Bar	350 Bar	400 Bar	300 Bar	200 Bar
		4.22.5	4.22.5	4.22.5	4.25.0	4.25.0	4.25.0	4.27.5	4.27.5	4.27.5
Motor Power kW / 6 pole / 60 Hz / 1180 rpm	37 kW									
	45 kW	35	39	43			65			86
	55 kW				56	60		70	78	

	Century	700 Bar	600 Bar	500 Bar	550 Bar	450 Bar	350 Bar	400 Bar	300 Bar	200 Bar
		8.22.5	8.22.5	8.22.5	8.25.0	8.25.0	8.25.0	8.27.5	8.27.5	8.27.5
Motor Power kW / 6 pole / 50 Hz / 980 rpm	75 kW	58	64	69			110			150
	90 kW				94	101				140
	110 kW							131		

	Century	700 Bar	600 Bar	500 Bar	550 Bar	450 Bar	350 Bar	400 Bar	300 Bar	200 Bar
		8.22.5	8.22.5	8.22.5	8.25.0	8.25.0	8.25.0	8.27.5	8.27.5	8.27.5
Motor Power kW / 6 pole / 50 Hz / 1180 rpm	75 kW			84						175
	90 kW	70	77				131			164
	110 kW				112	121		155		

	P Type	415 Bar				350 Bar				275 Bar			
		3x18	4x18	6x18	8x18	3x20	4x20	6x20	8x20	3x22	4x22	6x22	8x22
Motor Power kW / 6 pole / 50 Hz / 975 rpm	11 kW	9.2	12.6			12.1				17.8			
	15 kW			18.9			17				23.3		
	18.5 kW							25.3					
	22 kW				26.4				33.9			36	
	30 kW												45.5

	P Type	415 Bar				350 Bar				275 Bar			
		3x18	4x18	6x18	8x18	3x20	4x20	6x20	8x20	3x22	4x22	6x22	8x22
Motor Power kW / 6 pole / 60 Hz / 1180 rpm	11 kW	11.1	15.2			14.6							
	15 kW					21				21.5			
	18.5 kW				22.8							28	
	22 kW						30.5						
	30 kW				31.9			40.9				43.4	54.8