# Pump Rental Catalogue

# **SELWOOD**





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#### MISSION STATEMENT

"Selwood is proud to deliver to you the highest quality contractors pumps with support from local teams committed to outstanding levels of service"

Richard Brown

Managing Director Pumping Solutions Chris Garrett

(Marrett

Group Chief Executive Officer



#### **CORE VALUES**

- To provide and promote an environmentally safe and accident free work place.
- 2. To build, maintain and develop profitable business relations with our customers and stakeholders through honesty and integrity.
- To excel in the delivery and innovation of high quality products, services and technical expertise.
- 4. To work as a team, demanding the best of ourselves and to understand the impact of our words and actions on each other.
- To value and promote learning and personal development, committing to recognise the efforts of everyone.



#### Accreditations & Memberships

With a commitment to quality, safety and the environment, Selwood is proud to be one of the few companies within the UK that holds all three recognised standards.

#### ISO 9001:2008

The Quality Management System ISO 9001 was the first to be achieved in 1993.

# SGS UKAS NOW WHITE HE WAS NOW WHIT HE WAS NOW WHITE HE WA

#### BS OHSAS 18001:2007

More recently, in its endeavours to provide safe equipment and a healthy working environment for its customers and staff alike, Selwood achieved BS OHSAS 18001 in 2004.



#### ISO 14001:2004

Finally, following a review of its Environmental Management Systems, Selwood was accredited to the Environmental Standard ISO 14001 in October 2005.



The above standards encompass all locations and cover every operation within the company. The fully integrated Management Systems are controlled by Selwood's own in-house QHSE department.

#### **BSI**

BSI provides best practice solutions and standards that supports the needs of business and society in the UK and worldwide.



#### Accreditations & Memberships

#### **UVDB**

Selwood is registered with the Achilles Utilities Vendor Database (UVDB) and has been for many years. The UVDB verify and assessment service, used by the UK utility industry to source suppliers of major products and services, focuses on risk critical issues associated with Safety, Health, Environment and Quality requirements.



#### **RISQS**

Selwood is an approved Achilles Rail Industry Supplier Qualification Scheme (RISQS) registered and verified supplier. RISQS is the UK rail industry supplier qualification scheme, providing a single common registration, qualification and audit process for suppliers that are shared by the UK rail industry.



#### **CHAS**

Selwood is also an approved accredited member of the Constructors Health & Safety scheme at all branch locations.



#### **Construction Line**

Selwood is accredited to the Construction Hire Certification Scheme, a UK Government owned certification service for construction-related contractors, consultants and material suppliers.



#### Selwood - The Complete Package



Founded in 1946, Selwood is one of the largest private companies serving the Water, Environmental and Construction industries. It is the leading pump supplier in the UK as well as a leading distributor of construction equipment on the south coast.

Selwood has built a reputation on the quality of its extensive plant and pump fleet together with the services provided by its dedicated local teams. Operating from a nationwide branch network, Selwood offers an unrivalled depth of technical expertise and on-site service to all of the market sectors served.

#### **Plant & Pump Hire**

Recognised today as one of the leading plant and pump hire companies, Selwood is the No. 1 Pump Hirer in the UK with the ability to adapt, respond and provide bespoke solutions to its customers pumping requirements quickly, safely and efficiently.

# Pump Manufacturing & Sales

Selwood has designed and manufactured mobile site pumps since 1953 and now has some of the quietest and most environmentally friendly pumps on the market with 75% exported through a worldwide distribution network.

#### **Plant Sales**

One of the major distributors of construction equipment on the south coast for a number of top name manufacturers with comprehensive after sales service, parts distribution and technical advice.

The Selwood pump success story is one of continuous growth, innovation and enterprise. Since the first Selwood pumps were produced in 1953, the company has seen consistent expansion into new market areas both in the UK and overseas. Over the years it has developed a specialist pump hire division to subsequently become the No.1 pump hirer in the UK.

The Selwood pump fleet encompasses some 4,000 units that span from 2" to 12" pumps, surface, electro-submersible and hydro-submersible, capable of moving a variety of substances including bentonite, water, sewage and sludge. The units are suitable for a wide range of industrial and construction applications and the company can provide advice on any pumping requirement.

All Selwood hire agreements include a 7 day a week, 24 hour call out facility which gives customers immediate access to a trained Service Engineer.







#### Installation & 24/7 Cover

#### Installation

Selwood can provide a bespoke installation service package including site surveys, risk assessments, method statements, site installations, pump management and decommissioning.

In 2013/2014 Selwood introduced a unique in-house employee safety training scheme to incorporate its own 'Selwood Site Installation Safety Card'. The 'Site Installation Training Course' raises awareness of potential hazards on site and covers best practices that must be used on site.



Criterion	Training Covered	Duties Covered
Criteria 1	Selwood She installation Safety Day plus CSCS/CPCS or ECS card holder	Installation using Generic RAMS Specialised Installation under Supervison
Criteria 2	IDSH Managing Safely and pass c	Site Specific RAMS
Criteria 3	SSSTS and Supervisor Responsibilities	
Criteria 4	NVQ L3 Supervisor or equivalent	Site Supervisor

#### 24/7

Selwood understands the importance of offering an emergency service to its customers. For over 60 years it has been offering a 24/7, 365 day service on all of its pumping equipment from all locations and any emergency situation is treated as priority.



#### Selwood Pump Benefits

#### Selprime

The unique original Selwood self priming system utilises a water tolerant diaphragm air pump. An environmentally friendly design that has none of the problems of oil vapour emissions and oil emulsification associated with other priming systems.

Selwood pumps within the 'D', 'S', 'C' and 'H' ranges are designed to incorporate the Selprime system.



#### **Fully Bunded**

In response to environmental concerns, all Selwood Super Silent units are fully bunded, ensuring that any fuel or oil leakage is retained within the unit and does not contaminate the surroundings.

Drain plugs within the units chassis can be used to remove the fluids.









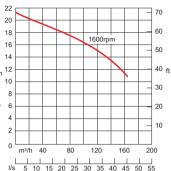




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#### **S100**

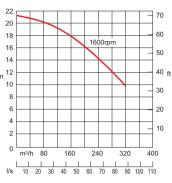




Model		S10	00
Capacity	m³/h	165	
Total Head	m	21.3	
Solids Size	mm	75	
Self Priming Lift	m	8.8	
Air Handling	I/s	s 24	
Pump Speed Max.	rpm	1600	
Inlet / Outlet	mm	100	
Prime Movers		Diesel, Electric	
Dimensions (LxWxH)	cm	Site Skid Super Silent	264 x 122 x 144 175 x 100 x 129 233 x 13 x 178
Dry Weight	kg	Site Skid Super Silent	1300 845 1620
Super Silent Model	db(A) @ 7m	59	9



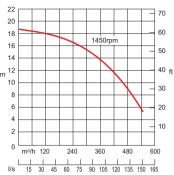




Model		S1	50
Capacity	m³/h	320	
Total Head	m	21.3	
Solids Size	mm	10	00
Self Priming Lift	m	8.8	
Air Handling	I/s	24 (48 Twin Prime)	
Pump Speed Max.	rpm	1600	
Inlet / Outlet	mm	150	
Prime Movers		Diesel, Electric	
Dimensions (LxWxH)	cm	Site Skid Super Silent	272 x 122 x 144 200 x 100 x 148 239 x 149 x 173
Dry Weight	kg	Site Skid Super Silent	920 995 1763
Super Silent Model	db(A) @ 7m	62	2

#### **S200**

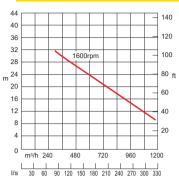




Model		<b>S2</b>	00
Capacity	m³/h	540	
Total Head	m	18.5	
Solids Size	mm	100	
Self Priming Lift	m	n 8.8	
Air Handling	I/s	s 24	
Pump Speed Max.	rpm	1450	
Inlet / Outlet	mm	n 200	
Prime Movers		Die	sel
Dimensions (LxWxH)	cm	Skid Super Silent	257 x 138 x 210 281 x 162 x 210
Dry Weight	kg	Skid Super Silent	2200 2340
Super Silent Model	db(A) @ 7m	6	2

#### **S300**





Model		S300
Capacity	m³/h	1100
Total Head	m	32
Solids Size	mm	120
Self Priming Lift	m	8.8
Air Handling	l/s	24
Pump Speed Max.	rpm	1600
Inlet / Outlet	mm	300
Prime Movers		Diesel
Dimensions (LxWxH)	cm	Super Silent 442 x 232 x 275
Dry Weight	kg	Super Silent 4650
Super Silent Model	db(A) @ 7m	64

Super Silent version available as standard. Fuel cube required.

Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.

# 'C' Range

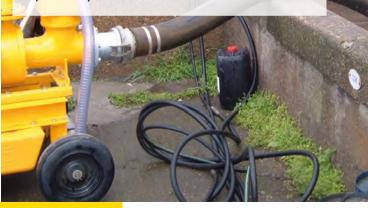
The Selwood C150 chopper pump is the ideal solution for pumping solids, sludge and rags.

Building upon Selwood's market leading reputation, the Selwood C150 chopper pump has been developed with our key partners in the process, industrial and water sectors. All have a common requirement to pump and condition liquids that contain a high proportion of solids, organic matter or rags.

The Selwood C150 chopper pump, with its hardened impeller and cutter (60 rockwell) plus a cutting action giving 3000 cuts per minute, is more than capable of meeting these arduous applications.

The C150 automatic self-priming diesel has the choice of either a skid mount or mobile site chassis for on-site flexibility. It also comes with **Selprime** as standard.

Super Silent option available.



# 'C' Range - Chopper Pump

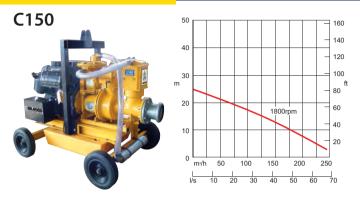








# 'C' Range - Chopper Pump

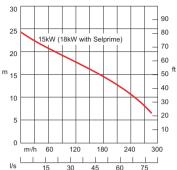


Model		C1	50
Capacity	m³/h	240	
Total Head	m	24.5	
Solids Size	mm	38	
Self Priming Lift	m	8.8	
Air Handling	I/s	24	
Pump Speed Max.	rpm	1800	
Inlet / Outlet	mm	150	
Prime Mover		Diesel	
Dimensions (LxWxH)	cm	Site Skid Super Silent	261 x 122 x 144 175 x 100 x 129 215 x 155 x 182
Dry Weight	kg	Site Skid Super Silent	790 760 1800
Super Silent Model	db(A) @ 7m	5.	8

### 'C' Range - Chopper Pump

#### C150 - Electric





Model		C150 -	Electric
Capacity	m³/h	285	
Total Head	m	24	
Solids Size	mm	n 38	
Self Priming Lift	m	n 8.8	
Air Handling	l/s	's 24 (Selprime only)	
Pump Speed Max.	rpm	n 1470	
Inlet / Outlet	mm	m 150/100	
Prime Mover		Electric (1:	5 or 18kW)
Dimensions (LxWxH)	cm	Electric Selprime	155 x 49 x 60 180 x 57 x 94
Dry Weight	kg	Electric Selprime	400 550

Pumps equipped with Selprime require more power to operate.

Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.





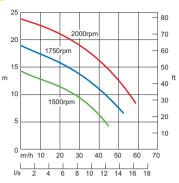






#### **D75**





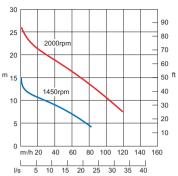
Model		D75
Capacity	m³/h	59
Total Head	m	23.5
Solids Size	mm	29
Self Priming Lift	m	8.8
Air Handling	I/s	4.25
Pump Speed Max.	rpm	2000
Inlet / Outlet	mm	75
Prime Movers		Diesel, Electric
Dimensions (LxWxH)	cm	144 x 77 x 109
Dry Weight	kg	252



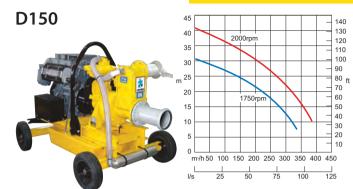
Model		D8	30
Capacity	m³/h	90	)
Total Head	m	23	3
Solids Size	mm	29	9
Self Priming Lift	m	8.	8
Air Handling	l/s	4.2	25
Pump Speed Max.	rpm	n 2000	
Inlet / Outlet	mm	n 80	
Prime Movers		Diesel,	Electric
Dimensions (LxWxH)	cm	Site Super Silent	192 x 100 x 129 176 x 107 x 152
Dry Weight	kg	Site Super Silent	612 932
Super Silent Model	db(A) @ 7m	58	3

#### D100





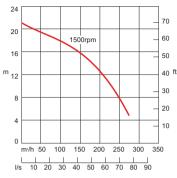
Model		D1	00
Capacity	m³/h	120	
Total Head	m	26	
Solids Size	mm	29	
Self Priming Lift	m	8.8	
Air Handling	I/s	4.25	
Pump Speed Max.	rpm	2000	
Inlet / Outlet	mm	100	
Prime Movers		Diesel, Electric	
Dimensions (LxWxH)	cm	Site Skid Super Silent	203 x 100 x 126 192 x 100 x 129 176 x 107 x 152
Dry Weight	kg	Site Skid Super Silent	612 1015 942
Super Silent Model	db(A) @ 7m	5	8



Model		D1	50
Capacity	m³/h	38	30
Total Head	m	40.5	
Solids Size	mm	45	
Self Priming Lift	m	8.8	
Air Handling	I/s	s 24	
Pump Speed Max.	rpm	2000	
Inlet / Outlet	mm	n 150	
Prime Movers		Diesel, Electric	
Dimensions (LxWxH)	cm	Site Skid Super Silent	265 x 122 x 144 200 x 102 x 160 240 x 158 x 180
Dry Weight	kg	Site Skid Super Silent	910 1025 1845
Super Silent Model	db(A) @ 7m	62	2

#### **D150WP**

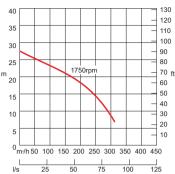




Model		D150WP	
Capacity	m³/h	275	
Total Head	m	21	
Solids Size	mm	45	
Self Priming Lift	m	8.8	
Air Handling	I/s	48	
Pump Speed Max.	rpm	1500	
Inlet / Outlet	mm	150	
Prime Movers		Diesel, Electric	
Dimensions (LxWxH)	cm	Site Super Silent	271 x 120 x 144 247 x 157 x 181
Dry Weight	kg	Site Super Silent	910 2000
Super Silent Model	db(A)@7m	59	

#### **D150R**





Model		D150R
Capacity	m³/h	315
Total Head	m	27
Solids Size	mm	45
Self Priming Lift	m	8.8
Air Handling	I/s	24
Pump Speed Max.	rpm	1750
Inlet / Outlet	mm	150
Prime Mover		Diesel
Dimensions (LxWxH)	cm	359 x 156 x 172
Dry Weight	kg	1275
Super Silent - Fast Tow	db(A) @ 7m	69

Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.



Model		D2	00
Capacity	m³/h	600	
Total Head	m	37.5	
Solids Size	mm	55	
Self Priming Lift	m	8.8	
Air Handling	I/s	24	
Pump Speed Max.	rpm	1500	
Inlet / Outlet	mm	200	
Prime Movers		Diesel	
Dimensions (LxWxH)	cm	Skid Super Silent	257 x 138 x 210 298 x 175 x 210
Dry Weight	kg	Skid Super Silent	1690 2390
Super Silent Model	db(A)@7m	62	

Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.

120

100

80

60

40

20

200 300 400 500 600 7 60 80 100 120 140 160 180











These specialist pumps are ideal for high head dewatering in quarrying and mining as well as pipeline pressure testing and cleaning, water boosting and temporary fire protection in markets such as construction, oil and gas, marine and water and waste water. With a proven design, their simplicity offers easy operation and unparalleled reliability coupled with inherent safety.

The environmentally friendly high head range has the unique **Selprime** automatic air pump priming.

Super Silent options available on some models.



# 'H' Range - High Head







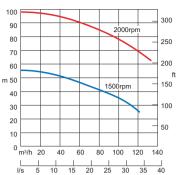


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# 'H' Range - High Head

#### H80

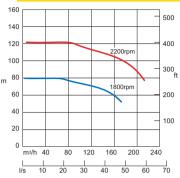




Model		H80	
Capacity	m³/h	95	
Total Head	m	95	
Solids Size	mm	19	
Self Priming Lift	m	8.8	
Air Handling	l/s	24	
Pump Speed Max.	rpm	2000	
Inlet / Outlet	mm	80	
Prime Movers		Diesel	
Dimensions (LxWxH)	cm	Site Skid Super Silent	305 x 134 x 150 237 x 104 x 173 231 x 141 x 173
Dry Weight	kg	Site Skid Super Silent	1300 1575 1545
Super Silent Model	db(A) @ 7m	62	

#### H100





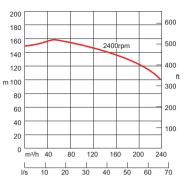
Model		H100	
Capacity	m³/h	225	
Total Head	m	120	
Solids Size	mm	30	
Self Priming Lift	m	8.8	
Air Handling	I/s	24	
Pump Speed Max.	rpm	2200	
Inlet / Outlet	mm	100	
Prime Movers		Diesel	
Dimensions (LxWxH)	cm	Skid Super Silent	242 x 123 x 164 275 x 155 x 210
Dry Weight	kg	Skid Super Silent	1685 2785
Super Silent Model	db(A) @ 7m	66	

Fuel cube required.

### 'H' Range - High Head

#### H125





Model		H1	25
Capacity	m³/h	240	
Total Head	m	160	
Solids Size	mm	30	
Self Priming Lift	m	8.8	
Air Handling	l/s	24	
Pump Speed Max.	rpm	2400	
Inlet / Outlet	mm	125	
Prime Movers		Diesel	
Dimensions (LxWxH)	cm	Skid Super Silent	320 x 137 x 200 320 x 137 x 208
Dry Weight	kg	Skid Super Silent	2275 2950
Super Silent Model	db(A)@7m	66	

Fuel cube required.

Note: Specification shown for older version.

Note: Picture may not correspond to the current configuration.



Model		H1	50
Capacity	m³/h	45	0
Total Head	m	11	4
Solids Size	mm	30	0
Self Priming Lift	m	8.	8
Air Handling	l/s	24	4
Pump Speed Max.	rpm	180	00
Inlet / Outlet	mm	15	0
Prime Movers		Diesel,	Electric
Dimensions (LxWxH)	cm	Skid Super Silent	330 x 150 x 210 368 x 163 x 260
Dry Weight	kg	Skid Super Silent	3800 3900
Super Silent Model	db(A) @ 7m	TB	A

Fuel cube required.

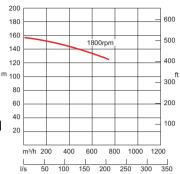
Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.

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# 'H' Range - High Head

#### H200





Model		H200
Capacity	m³/h	750
Total Head	m	158
Solids Size	mm	45
Self Priming Lift	m	8.8
Air Handling	l/s	24
Pump Speed Max.	rpm	1800
Inlet / Outlet	mm	200
Prime Movers		Diesel
Dimensions (LxWxH)	cm	420 x 245 x 231
Dry Weight	kg	6400

Fuel cube required.

# 'H' Range - High Head

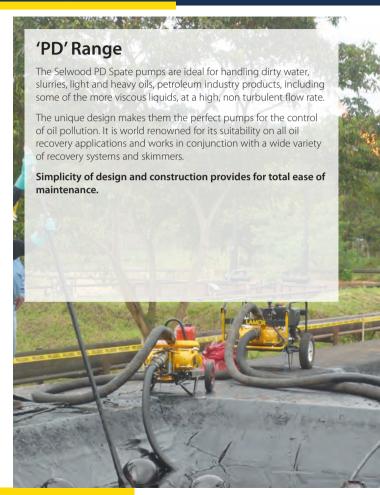








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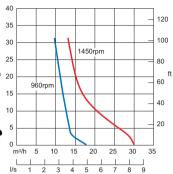




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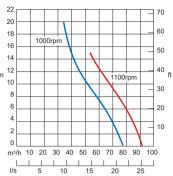
#### **PD75**





Model		PD75
Capacity	m³/h	30
Total Head	m	30.5
Solids Size	mm	6
Self Priming Lift	m	8.8
Air Handling	l/s	3.77
Pump Speed Max.	rpm	1450
Inlet / Outlet	mm	75
Prime Movers		Petrol
Dimensions (LxWxH)	mm	2 Wheel Site - 1000 x 640 x 690
Dry Weight	kg	2 Wheel Site - 95





Model		PD100
Capacity	m³/h	77
Total Head	m	20
Solids Size	mm	16
Self Priming Lift	m	8.8
Air Handling	l/s	11.8
Pump Speed Max.	rpm	1000
Inlet / Outlet	mm	100
Prime Movers		Diesel
Dimensions (LxWxH)	mm	4 Wheel Site - 2240 x 1110 x 1230 Skid - 2020 x 1000 x 1480
Dry Weight	kg	4 Wheel Site - 525 Skid - 670

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# 'HS' Range

The high performance hydraulic submersible Selwood Hydrosub pumps comprise 50mm to 200mm models with electric start diesel driven hydraulic power packs fully protected by an automatic shutdown system. A unique feature of this range of pumps is their versatility and are capable of a high flow and low head or a low flow and high head.

The hydraulic system can run on synthetic biodegradable or vegetable oil which significantly reduces harmful environmental pollution. The hydraulics incorporate a large return filter ensuring that any contaminants are captured and the fuel tank has flushing panels and a drain facility as well as providing 24hr running capability.

Super Silent options available.



\*SE

# 'HS' Range - Hydraulic Submersible









# 'HS' Range - Hydraulic Powerpacks

Model		HSP10	HSP10 Super Silent	HSP20	HSP20 Super Silent
Length	cm	200	168	267	166
Width	cm	97	97	123	97
Height	cm	133	161	153	179
Dry Weight	kg	400	865	800	1010
Hydraulic Flow	lt/min	20	20	30	30
Hydraulic Pressure	bar	118-165	118-165	190-241	190-241
Super Silent db(A	) @ 7m	-	62	-	62
Wet Ends Available	e	HSS HSS HSS	25B 50B 50D 50H 75D		00C 00D
HS75D HS100SC					

# 'HS' Range - Hydraulic Powerpacks

Site Model		HSP35	HSP35 Super Silent	HSP110
Longth	cm	267	225	Super Silent 260
Length	cm			
Width	cm	123	120	142
Height	cm	159	173	221
Dry Weight	kg	840	1675	2750
Hydraulic Flow	lt/min	60	60	2 x 60 1 x 20
Hydraulic Pressure	bar	155-240	155-240	118-210
Super Silent db(A	) @ 7m	-	62	62
Wet Ends Availabl	e	HS10 HS1 HS1	50D 50C	HS200D Seldredge
HS150SC				*SELWOOD Super Silent

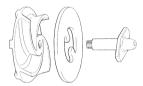
#### 'HS' Range - Hydraulic Wet End Impellers

All Selwood wet end designations are followed by a letter which indicates its supplied impeller and primary use, as follows:

**S** - Vortex, suitable for larger solids handling, which pass beneath the impeller. Its straight blades help self cleaning.



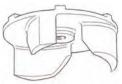
**C** - Chopper pump also suitable for solids, with hardened impeller and chopping blade giving long life in arduous conditions.



**H** - High head pump with high performance. Smaller solids can normally be handled.



**D** - Drainer pump for high volume. Larger solids can pass straight through the volute past the nonblock impeller.



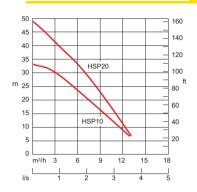
**SC** - Screw pump. Sludge pump , handles fluids other pumps would stop pumping.



- **J** Jetting pump. Super high pressure.
- L Low head pump. Good pumping solution when end suction pumps cannot be placed near fluid. Engine and pack can be up to 100m away.
- **B** Borehole pump for leachate.

#### HS25B



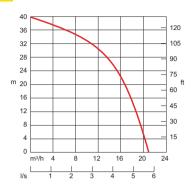


Model		HS25B
Capacity	m³/h	14.3
Total Head	m	34
Solids Size	mm	3
Dimensions (WxH)	mm	117 x 600
Weight - Cast Iron	kg	16
Power Pack		HSP10 or HSP20

Borehole pump for leachate.

#### HS50B





Model		HS50B
Capacity	m³/h	22
Total Head	m	40
Solids Size	mm	3
Dimensions (WxH)	mm	192 x 600
Weight - Aluminium	kg	17
Weight - Cast Iron	kg	30
Power Pack		HSP10

Borehole pump for leachate.

#### HS50D



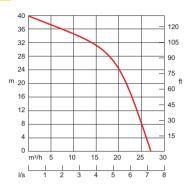


Model		HS50D
Capacity	m³/h	50
Total Head	m	26
Solids Size	mm	10
Dimensions (WxH)	mm	260 x 280
Weight - Aluminium Weight - Cast Iron	kg kg	13.5 20
Power Pack		HSP10

Drainer pump for high volume. Larger solids can pass straight through the volute past the non-block impeller.

#### HS50H



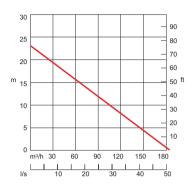


Model		HS50H
Capacity	m³/h	27
Total Head	m	40
Solids Size	mm	3
Dimensions (WxH)	mm	260 x 280
Weight - Aluminium Weight - Cast Iron	kg kg	13.5 20
Power Pack		HSP10

High head pump with high performance. Smaller solids can normally be handled.

#### **HS100D**



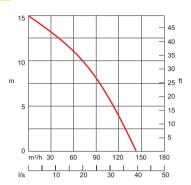


Model		HS100D
Capacity	m³/h	185
Total Head	m	23
Solids Size	mm	50
Dimensions (WxH)	mm	480 x 610
Weight - Aluminium Weight - Cast Iron	kg kg	47 54
Power Pack		HSP20

Drainer pump for high volume. Larger solids can pass straight through the volute past the non-block impeller.

#### **HS100S**



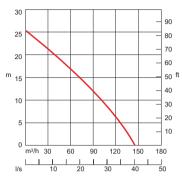


Model		HS100S
Capacity	m³/h	145
Total Head	m	15
Solids Size	mm	50
Dimensions (WxH)	mm	480 x 610
Weight - Aluminium	kg	47
Weight - Cast Iron	kg	54
Power Pack		HSP20

Vortex, suitable for larger solids handling, which pass beneath the impeller. Its straight blades help self cleaning.

#### HS100C



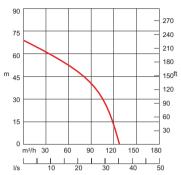


Model		HS100C
Capacity	m³/h	146
Total Head	m	26
Solids Size	mm	50
Dimensions (WxH)	mm	480 x 610
Weight - Aluminium Weight - Cast Iron	kg kg	47 54
Power Pack		HSP20

Chopper pump also suitable for solids, with hardened impeller and chopping blade giving long life in arduous conditions.

#### HS100H



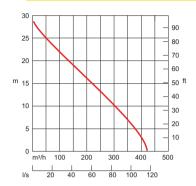


Model		HS100H
Capacity	m³/h	130
Total Head	m	69
Solids Size	mm	10
Dimensions (WxH)	mm	480 x 575
Weight - Aluminium Weight - Cast Iron	kg kg	47 54
Power Pack	Ng	HSP35

High head pump with high performance. Smaller solids can normally be handled.

#### **HS150D**



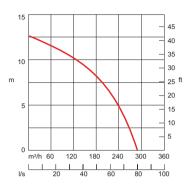


Model		HS150D
Capacity	m³/h	420
Total Head	m	28.5
Solids Size	mm	75
Dimensions (WxH)	mm	800 x 790
Weight - Aluminium Weight - Cast Iron	kg kg	101 142
Power Pack		HSP35

Drainer pump for high volume. Larger solids can pass straight through the volute past the non-block impeller.

#### **HS150S**

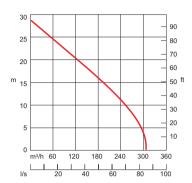




Model		HS150S
Capacity	m³/h	290
Total Head	m	12.7
Solids Size	mm	100
Dimensions (WxH)	mm	800 x 850
Weight - Aluminium Weight - Cast Iron	kg kg	101 142
Power Pack		HSP35

Vortex, suitable for larger solids handling, which pass beneath the impeller. Its straight blades help self cleaning.





Model		HS150C
Capacity	m³/h	307
Total Head	m	28.5
Solids Size	mm	50
Dimensions (WxH)	mm	800 x 850
Weight - Aluminium Weight - Cast Iron	kg kg	101 142
Power Pack		HSP35

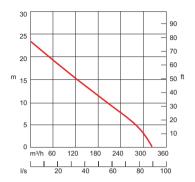
Chopper pump also suitable for solids, with hardened impeller and chopping blade giving long life in arduous conditions.

Note: Specification shown for current model. Older versions may vary. Note: Picture may not correspond to the current configuration.

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#### HS150SC

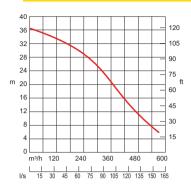




Model		HS150SC
Capacity	m³/h	323
Total Head	m	23
Solids Size	mm	75
Dimensions (WxH)	mm	772 x 1073
Weight - Aluminium Weight - Cast Iron	kg kg	101 142
Power Pack		HSP35

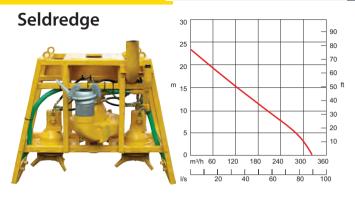
Screw Sludge pump, handles fluids which other pumps would stop pumping.





Model		HS200D
Capacity	m³/h	575
Total Head	m	37
Solids Size	mm	31
Dimensions (WxH)	mm	1000 x 1000
Weight - Aluminium Weight - Cast Iron	kg kg	175 250
Power Pack		HSP110

Drainer pump for high volume. Larger solids can pass straight through the volute past the non-block impeller.



Model		Seldredge	
Capacity	m³/h	323	
Total Head	m	23	
Solids Size	mm	75	
Dimensions (LxWxH)	mm	1591 x 600 x 1183	
Weight	kg	620 (inc. quick-hitch)	
Power Pack		HSP110	

The Seldredge is a modular system with a 150mm screw or chopper pump used to mix heavy sludges and pump them away. Rotors each side of the pump condition the sludge into a manageable liquid by breaking up solids. Extra water can be added from nozzles directed at the rotors to help condition less fluid materials.

#### Diesel Driven Pumps - Autostart Control Panel

This unique Selwood Autostart system gives automatic starting and stopping of the diesel driven pump depending on the level of liquid being monitored.

#### **Benefits**

# S Automatic Engine Control: Two level switches that monitor the liquid level and activate the pump to start and stop automatically



- **5** Fuel Saving: The diesel engine no longer has to constantly run. The pump only operates when there is sufficient liquid to pump
- **5** Emergency Use: The diesel pump can be utilised to serve as an emergency back-up to the main pump should the main pump fail or no longer be able to cope with an increased flow
- **S** A Package To Suit Your Individual Application:
  Example:- the pump may only be able to pump at certain times of the day
- **S Labour Saving:** Due to the automatic operation of the pump, labour attendance can be reduced, eg. fuel and starting
- **S** External Level Control Sockets: Easy plug and play installation



T: 03330 142000

#### **Telemetry**

#### **Pump Telemetry**

Selwood's telemetry system is a self-contained intelligent remote monitoring device, constantly monitoring pumping equipment.

#### **Telemetry Messages:**

- Emergency Stop Activated This signal will be sent when the equipment has been stopped by pressing the emergency stop system.
- High Level Alarm Activated This signal will be sent when the high level float control switch is installed and activated on site.
- Engine Fault Activated This signal will be sent when any engine fault accrues on the equipment on site.
- 4. Pump Failure To Start This signal will be sent after the unit tries to operate 3 times with no operation.

#### **Fuel Cube Telemetry**

The new fuel cube telemetry system has been designed with the capability to connect via plug and play. This system will give the customer total fuel management control with up to date data on fuel levels.

#### **Additional Telemetry Messages:**

Telemetry messages that have been designed into the new system are:

- 1. Fuel Tank ¼ Full.
- 2. Fuel Tank 1/2 Full.
- 3. Fuel Tank ¾ Full.
- 4 Fuel Tank Full Of Fuel



#### **Pump Refuellers**

Some large Selwood pumps require a fuel cube to operate as they have only a small internal priming fuel tank. Contact your local Selwood branch for details.

	Weight - Empty	Weight - Full
950 litre Fuel Cube (supplied with hand pump)	514kg	1377kg
2000 litre Fuel Cube (supplied with fuel line)	865kg	2665kg



#### Refuel

Selwood now provides a refuel service for existing on-hire refuellers or cubes. By calling **03330 142000** you will be put into contact with the closest Selwood branch who can arrange for a top up.

This service is of particular interest to pump users who need to ensure a constant supply of fuel during long pumping operations.







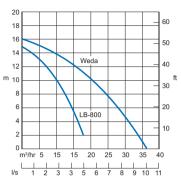




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#### Weda 10 & LB-800



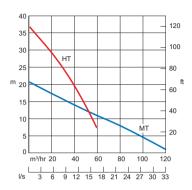


Model		Weda	LB-800
Rating	kW	1.0	1.5
Running Current	amps	13	13
Voltage	V	110	110
Discharge Size	mm	50	50
Weight	kg	12.5	17
Dimensions (max WxH)	mm	217 x 455	187 x 600

Pumping equipment cannot be installed in EXD areas.

**BS 2830** 





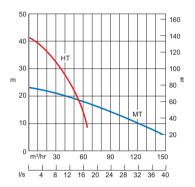
Model		MT	HT
Rating	kW	3.7	3.7
Running Current	amps	7.3	7.3
Voltage	V	415	415
Discharge Size	mm	100	80
Weight	kg	54	54
Dimensions (max WxH)	mm	590 x 762	550 x 762

Pumping equipment cannot be installed in EXD areas.

Note: Picture may not correspond to the current configuration.

#### **BS 2102**



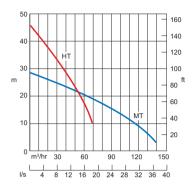


Model		MT	HT
Rating	kW	5.2	5.2
Running Current	amps	12	12
Voltage	V	415	415
Discharge Size	mm	100	80
Weight	kg	58	58
Dimensions (max WxH)	mm	420 x 510	420 x 510

Pumping equipment cannot be installed in EXD areas.

#### **BS 2840**





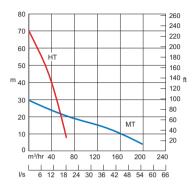
Model		MT	HT
Rating	kW	5.6	5.6
Running Current	amps	11	11
Voltage	V	415	415
Discharge Size	mm	100	80
Weight	kg	56	56
Dimensions (max WxH)	mm	590 x 762	550 x 762

Pumping equipment cannot be installed in EXD areas.

Note: Picture may not correspond to the current configuration.

BS 2125



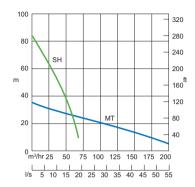


Model		MT	HT
Rating	kW	8	8
Running Current	amps	15	15
Voltage	V	415	415
Discharge Size	mm	150	80
Weight	kg	150	80
Dimensions (max WxH)	mm	535 x 850	465 x 850

Pumping equipment cannot be installed in EXD areas.

#### **BS 2860**



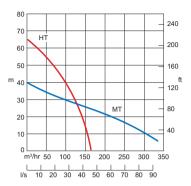


Model		MT	SH
Rating	kW	10	10
Running Current	amps	19	19
Voltage	V	415	415
Discharge Size	mm	150	100
Weight	kg	91	91
Dimensions (max WxH)	mm	666 x 889	645 x 889

Pumping equipment cannot be installed in EXD areas.

BS 2870



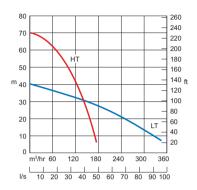


Model		MT	HT
Rating	kW	18	18
Running Current	amps	32	32
Voltage	V	415	415
Discharge Size	mm	150	100
Weight	kg	125	125
Dimensions (max WxH)	mm	739 x 991	718 x 991

Pumping equipment cannot be installed in EXD areas.

BS 2151



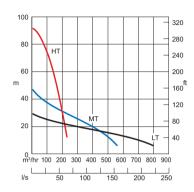


Model		LT	HT
Rating	kW	20	20
Running Current	amps	35	35
Voltage	V	415	415
Discharge Size	mm	150	100
Weight	kg	165	165
Dimensions (max WxH)	mm	640 x 930	590 x 930

Pumping equipment cannot be installed in EXD areas.

#### **BS 2201**



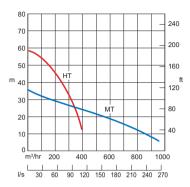


Model		LT	MT	HT
Rating	kW	30	37	37
Running Current	amps	56	65	65
Voltage	V	415	415	415
Discharge Size	mm	200	100	100
Weight	kg	280	280	280
Dimensions (max WxH)	mm	500 x 1160	500 x 1160	500 x 1160

Pumping equipment cannot be installed in EXD areas.

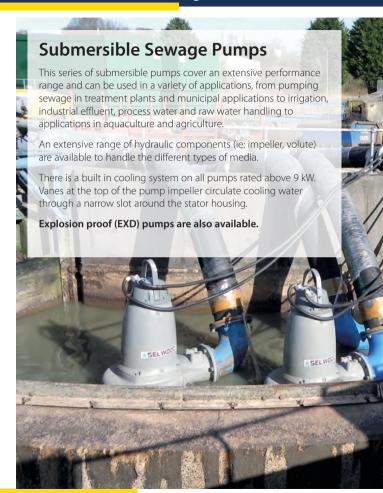
#### **BS 2250**





Model		MT	HT
Rating	kW	54	54
Running Current	amps	101	101
Voltage	V	415	415
Discharge Size	mm	300	150
Weight	kg	730	730
Dimensions (max WxH)	mm	1072x 1260	1060 x 1240

Pumping equipment cannot be installed in EXD areas.



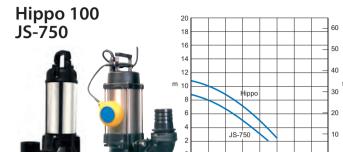








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Model		Hippo	JS-750
Rating	kW	0.75	0.75
Running Current	amps	13	13
Voltage	V	110	110
Discharge Size	mm	50	80
Weight	kg	17	33
Dimensions (max WxH)	mm	244 x 497	340 x 530

m<sup>3</sup>/hr 5

Pumping equipment cannot be installed in EXD areas.

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### C & N Pumps - Methods Of Installation

#### CP & NP



For semi-permanent wet well installations. The pump is installed with twin guide bars on a discharge connection.

#### CS & NS



For semi-permanent free standing installation. Transportable version with pipe or hose connection.

#### CT & NT



A vertically mounted permanent dry well or in-line installation with flange connection for suction and discharge pipework.

#### CZ & NZ



A horizontally mounted permanent dry well or in-line installation with flange connections for suction and discharge pipework.

### Differences Between C & N Pumps

#### **C Pumps**

These are equipped with a shrouded, single or multi-vane impeller that runs in a volute. The shape and size of the impeller are designed to minimize clogging, making this pump suitable for wastewater applications. This series has an extensive performance range and can be used in a variety of applications, such as:-

- **5** Wastewater pumping
- **S** Irrigation
- 5 Industrial effluent handling
- **5** Cooling water
- **S** Storm water
- S Process water
- **5** Raw water



### **N Pumps**

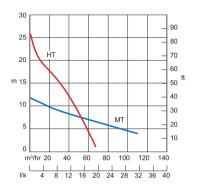
This hydraulic end type is superior to all other pumps regarding clogging and sustained efficiency in contaminated water. These patented pumps are equipped with a new open impeller design and a relief-groove in the volute. This combination ensures a self-cleaning pump. The broad range of pumping capacities offered by the N pump range opens up new possibilities for cost effective operation in a wide variety of applications, including:-

- S Wastewater pumping
- **5** Raw water pumping
- **5** Storm water handling
- Sludge handling
- **5** Irrigation
- **S** Cooling water
- **5** Industrial effluent handling
- Process water



### **CS 3085**



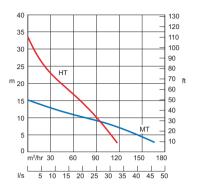


Model		MT	HT
Rating	kW	2	2.4
Running Current	amps	4.8	4.7
Voltage	V	415	415
Discharge Size	mm	80	80
Weight	kg	58	58
Dimensions (max WxH)	mm	445 x 610	365 x 520
Suitable for EXD areas	⟨Ex⟩	X	<b>✓</b>

Note: Picture may not correspond to the current configuration.

### CS 3102

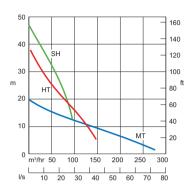




Model		MT	HT
Rating	kW	3.1	4.2
Running Current	amps	6.8	8.3
Voltage	V	415	415
Discharge Size	mm	100	80
Weight	kg	116	114
Dimensions (max WxH)	mm	610 x 705	605 x 695
Suitable for EXD areas	<b>€x</b>	×	<b>✓</b>

### CS 3127

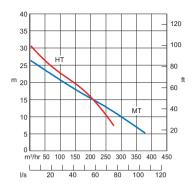




Model		MT	HT	SH
Rating	kW	5.9	7.4	7.4
Running Current	amps	12	14	14
Voltage	V	415	415	415
Discharge Size	mm	100	80	80
Weight	kg	232	170	160
Dimensions (max WxH)	mm	635 x 765	635 x 765	635 x 765
Suitable for EXD areas	⟨Ex⟩	×	X	<b>~</b>

### CS 3152



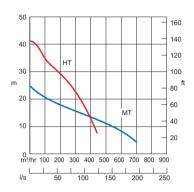


Model		MT	HT
Rating	kW	13.5	13.5
Running Current	amps	27	27
Voltage	V	415	415
Discharge Size	mm	150	150
Weight	kg	232	232
Dimensions (max WxH)	mm	885 x 1130	835 x 1090

Pumping equipment cannot be installed in EXD areas.

**CS 3201** 

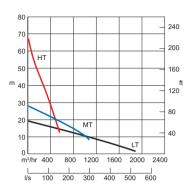




Model		MT	HT
Rating	kW	22	30
Running Current	amps	45	56
Voltage	V	415	415
Discharge Size	mm	200	150
Weight	kg	610	580
Dimensions (max WxH)	mm	1055 x 1455	955 x 1455

Pumping equipment cannot be installed in EXD areas.



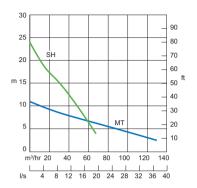


Model		LT	MT	HT
Rating	kW	37	44	54
Running Current	amps	77	82	100
Voltage	V	415	415	415
Discharge Size	mm	300	250	150
Weight	kg	1110	1030	920
Dimensions (max WxH)	mm	1440 x 1920	1410 x 1915	1230 x 1825

Pumping equipment cannot be installed in EXD areas.

### **NS 3085**





Model		MT	SH
Rating	kW	2	2.4
Running Current	amps	4.8	4.7
Voltage	V	415	415
Discharge Size	mm	80	80
Weight	kg	71	76
Dimensions (max WxH)	mm	445 x 625	465 x 600
Suitable for EXD areas	⟨Ex⟩	<b>V</b>	<b>✓</b>

Adaptive impeller available on request.

Note: Picture may not correspond to the current configuration.

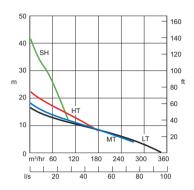


Model		MT	SH
Rating	kW	3.1	4.2
Running Current	amps	6.8	8.1
Voltage	V	415	415
Discharge Size	mm	100	80
Weight	kg	116	114
Dimensions (max WxH)	mm	610 x 705	605 x 695
Suitable for EXD areas	⟨Ex⟩	<b>✓</b>	<b>✓</b>

Chopper impeller available on request.

### NS 3127





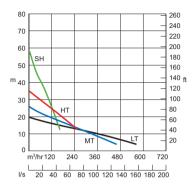
Model		LT	MT	HT	SH
Rating	kW	5.9	5.9	5.9	7.4
Running Current	amps	12	12	12	14
Voltage	V	415	415	415	415
Discharge Size	mm	150	100	80	80
Weight	kg	183	170	155	155
Dimensions (max WxH)	mm	745 x 780	636 x 765	635 x 765	630 x 715
Suitable for EXD areas	(ξ <sub>x</sub> )	~	~	~	~

Chopper impeller available on request.

Note: Picture may not correspond to the current configuration.

#### NS 3153



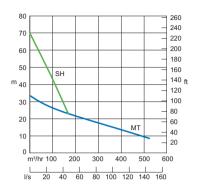


Model		LT	MT	HT	SH
Rating	kW	13.5	13.5	13.5	15
Running Current	amps	28	28	28	28
Voltage	V	415	415	415	415
Discharge Size	mm	200	150	150	80
Weight	kg	379	252	232	242
Dimensions (max WxH)	mm	1036 x 1195	834 x 1068	664 x 1050	652 x 1052
Suitable for EXD areas	<b>€x</b>	~	~	~	~

Chopper impeller available on request.

### NS 3171





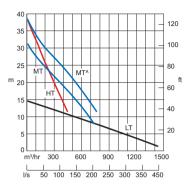
Model		MT	SH
Rating	kW	22	22
Running Current	amps	42	42
Voltage	V	415	415
Discharge Size	mm	150	100
Weight	kg	362	366
Dimensions (max WxH)	mm	884 x 1225	750 x 1179
Suitable for EXD areas	⟨Ex⟩	<b>/</b>	<b>✓</b>

Chopper impeller available on request.

Note: Picture may not correspond to the current configuration.

### **NS 3202**

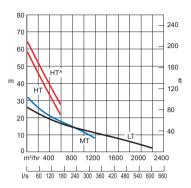




Model		LT	MT	MT^	HT
Rating	kW	22	30	45	30
Running Current	amps	43	56	82	54
Voltage	V	415	415	415	415
Discharge Size	mm	300	200	200	150
Weight	kg	900	605	605	580
Dimensions (max WxH)	mm	1333 x 1571	1059 x 1415	1059 x 1415	957 x 1406
Suitable for EXD areas	⟨Ex⟩	~	~	~	~

### NS 3301



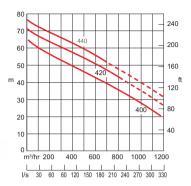


Model		LT	MT	HT	HT^
Rating	kW	55	45	55	70
Running Current	amps	119	93	103	132
Voltage	V	415	415	415	415
Discharge Size	mm	300	250	150	150
Weight	kg	1110	1035	920	920
Dimensions (max WxH)	mm	1330 x 1705	1286 x 1680	1242 x 1641	1242 x 1641
Suitable for EXD areas	⟨Ex⟩	~	~	~	~

Note: Picture may not correspond to the current configuration.

### NS 3231





Model		400	420	440
Rating	kW	125	125	125
Running Current	amps	234	234	234
Voltage	V	415	415	415
Discharge Size	mm	200	200	200
Weight	kg	1610	1610	1610
Dimensions (max WxH)	mm	1390 x 2045	1390 x 2045	1390 x 2045
Suitable for EXD areas	<b>€</b> x	<b>V</b>	~	~

### Electric Submersible Pumps - NZ Hybrid

Selwood's Specialist Submersible Centre has developed a range of pumps to give the "best of both worlds".

A selection of electric submersible pumps have been mounted onto a skid chassis, fitted with key components from the unique Selwood Selprime vacuum system, and controlled by a variable speed drive to ensure that the pump doesn't run faster than required or more often than needed. Power can be taken from either a generator set or a suitable adjacent 3 phase mains supply.

The hybrid concept is ideal when dealing with high flows from small chambers that preclude the use of conventional submersible pumps and where space in the vicinity deems a conventional diesel suction pump unpractical.

Much like a conventional suction pump, the unit will automatically prime as and when required then discharge flow to a selected point. However, unlike a conventional pump, the unit is smaller, lighter and considerably more power efficient.

The hybrid 12" pump system can deliver up to 500 l/sec, weighs only 1.5 tonnes and has a 37kw motor



#### Submersible Control Panels

Selwood starter panels provide easy use and offer different starting methods ranging from direct-on-line (DOL), star delta, auto transformer and soft start.

#### 2 to 15 kW DOL Panel

- **5** Pump starting current 5 x pump Full Load Current
- **5** One starter for pump up to 15kw
- **S** Variable overload protection up to 28amp
- **5** Operator flexibility
- **5** Telemetry output signals
- **5** IS Barriers fitted to make float control EX
- **5** Automatic control in conjunction with Ultrasonic or other level control systems.
- **5** Designed to IP54 protection

#### 5 to 55kW

- S Pump starting current 3 x pump Full Load Current
- S One starter for pump up to 55kw
- **5** Digital Variable overload protection up to 110 amp
- **5** Operator flexibility
- **5** Telemetry output signals
- 5 IS Barriers fitted to make float control EX
- **S** Automatic control in conjunction with Ultrasonic or other level control systems.
- **S** Designed to IP54 protection





#### **Inverters**

Selwood has invested heavily in state of the art inverter control panels to support its customers' needs with the most cost effective and energy efficient solution to their problems. The VSD (Variable Speed Drive) has the ability to adjust the pump or motor speed giving customers the means of controlling a process or pump delivery to suit each application. This allows the customer to reduce and save on energy consumption costs.

- **5** 3 to 320kw Inverter control panels
- **S** Pump starting current 1 x Full Load Current
- **5** One starter for pump up to 320kw
- **5** Digital Variable overload protection
- 5 Operator flexibility
- **5** Telemetry output signals
- **S** IS Barriers fitted to make float control EX
- **5** Automatic control in conjunction with Ultrasonic or other level control systems.
- **5** Designed to IP54 protection





### Submersible Control / Telemetry

### Ultrasonic Level Control

This can be used instead of float switches. It is the water industry standard and offers numerous benefits such as multi-pump function and telemetry link. Up to 6 pumps can be controlled by one ultrasonic controller

One transducer (head) is used in the wet well instead of multiple stop/start float switches. This monitors liquid levels in the same way that a ships sonar measures sea depth by sending a signal down and recording the echo.

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Where no power is available, solar panel telemetry systems (below) are available on request.



#### **Distribution Panels**

Most electrical installations will require one of the distribution boards shown below. Distribution panels allow the use of large electrical supplies for installations that require more than one electrical appliance.

Selwood equipment is fully tested to 17th edition IEE wiring regulations before each hire and all relevant paperwork can be supplied upon request.

	125 amp	300 amp	500 amp	1250 amp
Outlets	4	4	4	8
Outlet Amps	32	63	125	125
MCB Protection	~	~	~	<b>/</b>
Adjustable To Suit Application	×	<b>✓</b>	<b>~</b>	<b>✓</b>
Quick Connection Terminals	×	<b>✓</b>	<b>✓</b>	<b>✓</b>
Robust IP54 Design	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>

Supply cables are available upon request.



### Hose

Selwood has a comprehensive range of hose for all applications, complete with Bauer fittings. Branch members of staff will be happy to advise on any particular need.

Туре	Size	Lengths	Weight
Blue Layflat (lever lock couplings)	50 mm 80 mm 100 mm 150 mm 200 mm	25m - 100m 25m - 100m 25m - 100m 25m - 100m 25m - 50m	7 - 25 kg 13 - 38 kg 16 - 50 kg 34 - 10 7kg 47 - 78 kg
Poly Hose	50 mm 80 mm 100 mm 150 mm 200 mm	6 m 6 m 6 m 6 m 6 m	5 kg 16 kg 20 kg 28 kg 55 kg
Flanged Wire Armoured	100 mm 150mm 200 mm 300 mm	6 m 3 m 3 m 3 m	28 kg 86 kg 95 kg 216 kg
Wire Armoured (lever lock couplings)	50 mm 80 mm 100 mm 150 mm 200 mm 300 mm	6 m 6 m 6 m 3 m 3 m 3 m	11 kg 21 kg 29 kg 37 kg 66 kg 108 kg
Fire Hose	63 mm	20 m	11 kg
Galvanised Steel Pipe (lever lock couplings)	80 mm 100 mm 150 mm 200 mm 300 mm 400 mm	6 m 6 m 6 m 6 m 3 m 3 m	14 kg 19 kg 34 kg 46 kg 68 kg 118 kg

### Pump Hose Fittings

A wide range of pump hose accessories and fittings are available.

- **S** Bauer fittings up to 400mm
- **5** Flange fittings up to 800mm
- **S** Mechanical & magflow flow metres
- **S** Strainers up to 300mm
- **S** Valves up to 450mm











### Road Ramp

For use where pipe work extends over roads or footpaths

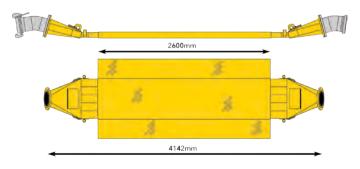


- 650 m³/hr flows
- 860 kg (inc. bauers)
- 13 ton axle weight
- Disruption reduced
- Minimal installation cost
- Road warning signs supplied
- Environmentally friendly









### Settlement Tank & Silt Bags

#### **Settlement Tank**

The use of settlement tanks is becoming more critical for applications where water with fines is to be discharged into a water course. The Environmental Agency is enforcing the requirement to separate solids before discharging.

Selwood can supply various sizes of settlement tanks and set them up in order to comply with current regulations.



The 1500 gallon tank shown is suitable for 150mm pumps.

Weight 1027 kg (unladen) Capacity 6819 litres

### Silt Bags

Simply attach the silt bag onto the settlement tank or on the end of the discharge hose and let the water pump through.

The solids (up to 100 microns) are retained in the silt bag allowing the water to flow away easily.



### Silt Trap & Drip Tray

### Silt Trap

The Selwood Silt Trap is the perfect solution to remove and break down sediments such as silt and sludge thus avoiding water and land contamination.

- **5** Flows up to 130m<sup>3</sup>/hr
- **5** 3 easily removable washable filter baskets available for different applications
- **5** Filter baskets can be used for different mediums
  - Standard Medium for Sand, Silt
  - Contaminated Mediums for Oil, Sludge, Hydrocarbons

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- **5** Two large access doors to aid with the easy removal of solids
- **5** Selwood Silt Trap can handle applications that require faster flows

Length 2300 mm Height 1620 mm Width 2300 mm

Capacity 5000 litres (1100 gallons) Weight 1450 kg (unladen) 6"NP16 Flange (inlet & outlets)

### **Drip Tray**

8ft x 5ft as standard although other sizes are available.

Some pumps come complete with a built-in drip tray and all Super Silent models are fully bunded. Drip trays with built-in interceptors are also available.



Weight 350 kg (unladen) Capacity 1360 litres

#### **Pressure Test Pumps**

These portable pumps are mostly diesel driven incorporating a 22 litre header tank with a ballcock that can be connected to a water bowser, the mains or any other supply that is available.

Pump output pressure can be regulated up to the maximum output and incorporates a pressure gauge so that pressure build up can be regulated to the desired level.

Alternatively, the pumps can be utilised as pressure washers and would be supplied with a lance plus 9m of 15mm outlet hose.

The 138 bar machine with a Kubota diesel engine option come with an electric start facility.

	34 bar	103 bar	138 bar	172 bar
Flow Rate	0.47 m <sup>3</sup> /h	0.47 m <sup>3</sup> /h	0.9 m³/h	1.08 m <sup>3</sup> /h
Pump Type	3 plunger	3 plunger	3 plunger	3 plunger
Engine	3 hp Honda Petrol	7 hp Lister	7 hp Kubota	9 hp Lister
Start	Cord Recoil	Crank Handle	Electric	Crank Handle
Frame	Carry Lightweight	Carry or Trolley	Trolley	Trolley
Mobility	Portable	Portable Wheels	Wheeled	Wheeled
Weight	15 kg	20 kg	60 kg	60 kg
LxWxH(cm)	46 x 38 x 38	56 x 41 x 49	89 x 69 x 71	89 x 69 x 71
Suction Hose	12.5 mm × 3 m	12.5 mm <b>x</b> 3 m	12.5 mm <b>x</b> 3 m	12.5 mm × 3 m
Discharge Hose	15 mm × 9 m	15 mm × 9 m	15 mm × 9 m	15 mm × 9 m

High pressure lance available for all of the above.

### Air Operated Pumps

#### **Air Operated Pumps**

		M4	M8	M15
Capacity	m³/h	19	41	63
Head	m	73	73	73
Discharge	m	38	50	75
Body Types		Aluminium	Aluminium Stainless Steel Polypropylene Cast Iron	Aluminium

- S Double diaphragm, compressed air pumps
- 5 Ideal for use in industrial applications, especially in hazardous areas. Complies to Zone 1 & Zone 2 groups IIA IIB
- S Various elastomers are available for diaphragms and check valves, such as Viton, PTFE etc
- 5 Ideal for use with hydrocarbons and both acidic and alkaline chemicals
- S Extremely powerful lightweight units capable of handling viscous sludges, abrasive sludges, heavy oils, screened sewage etc
- **S** Will operate submerged or surface mounted
- Simple and reliable construction, will run dry indefinitely without damage

**5** Low air consumption. – M4: 50cfm @ 5.5 bar, M8/M15: 120cfm @ 6.4 bar. Maximum pressure 8.6 bar



Common methods of starting AC motors mean that if they are to be supplied from a Generator supply, then this has to be sized to accommodate the high starting currents. A typical example of this is as follows:

55kw motor, 400 volts, 3 phase, 50 Hz with a full load current of 113 Amps using VSD control panel would be 89Kva. This would then be rounded up to the next size generator, ie. 100KVA. This figure is reached using the following calculation:

# Full load current (including starting current) 1.4

This would give the perfect KVA which would have to be divided by 0.9, the factor for an older generator.

Power Rating (kW)	Full Load Current (amps)	VSD Generator (KVA)	DOL Generator (KVA)	Soft Start Generator (KVA)	Full Load	e Motor d Current 415 VOLT
2.0	4.8	7.5	20	-	kW	(amps)
3.1	6.8	7.5	30	-	2.0	4.8
4.2	8.2	10	45	-	2.2	4.5
5.2	12	15	50	-	2.4	4.7
7.4	14	15	75	-	3.1	6.8
8	18	20	75	-	4.2	8.2
13.5	28	30	100	75	5.2	12.0
22	43	45	-	100	8.0	18.0
30	54	75	-	125	10.0	19.0
37	77	75	-	200	13.5	28.0
45	93	100	-	225	15.0	28.0
55	113	100	-	250	18.0	32.0
125	234	200	-	-	20.0	35.0
					22.0	43.0
Motor 9	Starter Type	s Typ	ical Starting	g Current	30.0	54.0
Dire	ect Online	5	x Full Load (	Current	37.0	77.0
Sta	ar / Delta	4	x Full Load (	Current	45.0	93.0
So	oft Start	3	x Full Load (	Current	55.0	113.0
Variable	e Speed Driv	e 1	x Full Load (	Current	125.0	234.0

# Checks & Trouble Shooting

### Check pump before starting

- a) Make sure pump will turn freely
- b) Check driver and pump rotations agree with driver uncoupled
- c) Make sure bearings are adequately charged with clean lubricant
- d) Make sure any external lubricating, cooling, sealing etc. services and connections are turned on and operative
- e) Check that pump runs without undue heating, noise or vibration; otherwise refer to detailed operating instructions for possible defects and rectify accordingly

### Pump will not start

Use the engine or motor manufacturer's guide supplied with the pump

### Pump will not prime

See page 109

### Pump will not discharge

- a) Check for closed valves in discharge line
- b) Check for kinks and blockages in discharge line
- c) Check the total head against pump performance specification

### Noise and/or vibration

- a) Delivery is too high (speed high or head low) Try closing delivery valve
- b) Suction lift too high for liquid temperature
- c) Blocked suction line or impeller
- d) Air or gas in liquid
- e) Misalignment
- f) Worn or defective bearings
- g) Refer to Selwood with full details if cause of defect cannot be traced

# Selwood Pump Will Not Prime

Please check for the following possible causes before contacting your Selwood branch



1. Is the strainer fully submerged in the liquid and not blocked?



 Is the drain cock under the pump volute closed? If not, close valve? Note: Use drain in cold weather to ensure liquid in volute does not freeze.



 Ensure all 'O' rings on the suction side of the pump are in place. If they are damaged - replace. This includes all suction hoses.

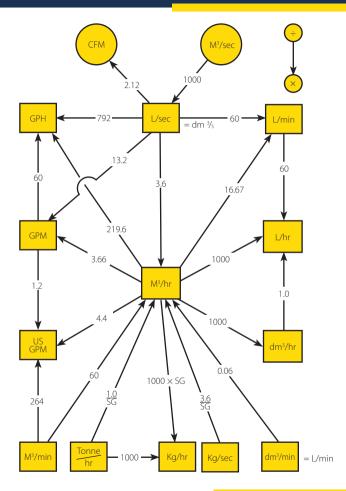


 Ensure non-return valve seat is clear of any debris. This can be done by opening the inspection plate.

To contact your local branch 24/7, call the number below

# Flow Conversions

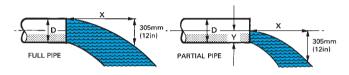
0 _	m³/h	l/sec	l/min i gpm		i gph
_	10 -		200		2,000 —
	20 —	5 —		100 —	4,000
	30	1	400 —		6,000 —
	40 —	10 -	600 —	450	8,000
	50 —		800	150 —	10,000 —
	60	15 —	1000 —	200	12,000 —
	70 -	20	1	250	14,000
	80 -	20 —	1200	250 -	16,000
	90 -	25	1400 —	300	18,000 —
	100 —	20	1600 —	350	20,000 —
	110	30 ~		330 -	22,000 —
	120		1800	400 —	24,000 —
	130	35 →	2000 —	450 -	26,000
			2200		28,000 —
	140 —	40	2400	500 —	30,000 —
	150 -	Ì		550 -	32,000 —
	160	45 —	2600	1	34,000 —
	170 —	1	2800 —	600 —	36,000
	180 —	50 —	3000 -	650 —	38,000 —
	190 —		3200 -		40,000
	200 —	55 —	1	700 —	42,000
	210	60	3400	750	44,000 -
	220 —	~~	3600		46,000
	230	65 —	3800 -	800 —	48,000 -
	240 —	- 1	4000 —	850 —	50,000
	250 —	70 —	4000 -	900	52,000 54,000
	260		4200 —	900 —	
	270 —	75 —	4400	950 —	56,000 — 58,000 —
	280 —		4600	1,000	60,000
	'	'	<del>-1000</del> –	7,000 —	60,000



# Estimate The Volume Discharge From A Level Pipe

**Full Pipe:** Measure horizontal distance X for water to fall 12 inches. Consult table for approximate flow.

**Partial Pipe:** Proceed as above to get approximate flow. Measure height Y of water in pipe. Calculate Y/D to get percentage of full pipe flow.



Approximate Flow Litres/Min (imp. GPM)							
DISTANCE'X'	102mm'D'	152mm'D'	203mm'D'	305mm'D'			
mm (in)	(4in)	(6in)	(8in)	(12in)			
305mm	568	1327	2273	5296			
(12in)	(125)	(292)	(500)	(1165)			
356mm	682	1518	2646	6055			
(14in)	(150)	(334)	(582)	(1332)			
406mm	755	1773	3028	6819			
(16in)	(166)	(390)	(666)	(1500)			
457mm	873	2005	3409	7955			
(18in)	(192)	(441)	(750)	(1750)			
508mm	982	2237	3787	8728			
(20in)	(216)	(492)	(833)	(1920)			
559mm	1059	2464	4164	9465			
(22in)	(233)	(542)	(916)	(2082)			
610mm	1173	2650	4546	10592			
(24in)	(258)	(583)	(1000)	(2330)			
660mm	1268	2882	4914	11365			
(26in)	(279)	(634)	(1081)	(2500)			
711mm	1364	3109	5296	12001			
(28in)	(300)	(684)	(1165)	(2662)			
762mm	1473	3337	5682	12865			
(30in)	(324)	(734)	(1250)	(2830)			
813mm	1546	3559	6060	14002			
(32in)	(340)	(783)	(1333)	(3080)			
864mm	1664	3707	6437	14774			
(34in)	(366)	(833)	(1416)	(3250)			

# **Smooth Bore Pipe**

Losses in m/100m or ft/100ft									
I.G.P.M.	2	3	4	6	8	10	12	m³/h	
50	10	1.4	0.3					10	
75	20	3	0.7					15	Ŧ
100	35	5	1	0.1				20	ictic
150		12	2.5	0.35				30	on h
200		18	4.5	0.6				50	Friction head
300		40	10	1.2	0.4			75	Ξ.
400			18	2.2	0.7			100	feet
500			28	3.5	1.1	0.35		125	per
600			38	4.5	1.5	0.5		150	100
700				6.5	2	0.7		175	feet per 100ft of pipe or metres
800				8	2.7	0.8		200	of pi
900				10	3.4	1	0.4	225	pe o
1000				13	4	1.4	0.5	250	Уπ
1200				18	6	2	0.8	300	etre
1400				28	8	3	1	350	d Se
1600				32	11	4	1.5	400	per 100m of
1800				36	14	4.5	2	450	00n
2000				38	17	5	2.5	500	n of
2500					25	9	4	650	pipe
3000					38	12	5	750	Ф
4000						21	8	1000	
5000						32	13	1250	
		n	n³/h x 4	g.p.m. a	pprox				

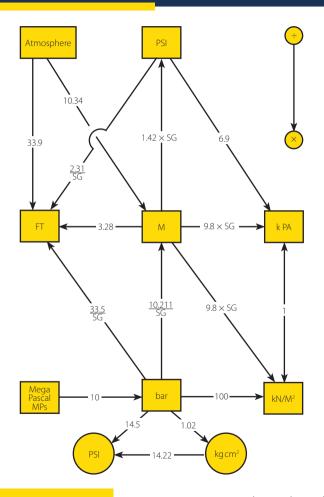
The above table refers to new pipes. Moderate corrosion may increase the resistance by 25%, severe corrosion by 50% to 100%.

# **Valve & Pipe Fittings**

To allow for resistance of bends and other fittings, an 'equivalent length' for each fitting should be added to the actual length of straight pipe. The length in feet can be estimated with sufficient accuracy by multiplying the factors in the following table by the pipe diameter in inches.

		Equivalent pipe length at -				
	Fittings	pipe diameter d = 10.50mm	pipe diameter d = 80-400mm			
	Sluice Valve	15 - 10 x d	10 - 5 x d			
	Check Valve	200 - 150 x d	150 - 100 x d			
ā	Angle Valve	400 - 200 x d	150 - 100 x d			
ā	Globe Valve	1000 - 500 x d	500 - 400 x d			
$\Box$	45° Bend	10 x d	10 x d			
	90° Bend	30 - 20 x d	15 - 10 x d			
	Outlet From Tank (square edged)	40 - 30 x d	40 - 30 x d			
	Outlet From Tank (bevelled)	10 - 5 x d	10 - 5 x d			
	T-piece	50 - 40 x d	40 x d			

ο.	kg/cm²	FtW.g.	psi	bar	kN/m²
٠.		10 —			İ
	.5 —	10 —		.5 —	50 —
	1	20 —	10 —	1 —	100 —
	•	30 —	_		
	1.5 —	40	20 —	1.5 —	150 —
		50	_		200
	2	60 —	30 —	2	200 —
	2.5 —	70 —		2.5 —	250
		80 —			
	3 —	90	40 —	3 —	300 —
		100 —	_	25	350 —
	3.5 —	110	50	3.5 —	350 —
	4 —	120 —		4 —	400
		130	60 —		
	4.5 —	140 —	-	4.5 —	450 —
	5 —	150 — 160 —	_	5 —	500 —
	•	170 —	70 —	_	
	5.5 —	180 —	_	5.5	550 —
		190 —	80 —		
	6 —	200 —	_	6 —	600 —
	6.5 —	210 —	90 —	6.5 —	650 —
		220 —	30		



Normal Bore	Table	Diameter Flange	P.C.D.	Bolt Dia	Number of Bolts	Flange Thickness Grey Cast Iron
1"	D&E	4.50"	3.25"	.50"	4	.50"
11/4"	D&E	4.75"	3.44"	.50"	4	.625"
11/2"	D&E	5.25"	3.88"	.50"	4	.625"
2"	D	6.00"	4.50"	.625"	4	.688″
2"	Е	6.00"	4.50"	.625"	4	.750"
50mm	NP16	165mm	125mm	M16	4	20mm
21/2"	D	6.50"	5.00"	.625"	4	.688"
2½" 3"	E D&E	6.50"	5.00"	.625"	4	.750"
80mm	NP10	7.25" 200 (7.87)	5.75" 160 (6.30)	.625" M16	8	.750" 21 (.83)
80mm	NP16	200 (7.87)	160 (6.30)	M16	8	21 (.83)
4"	D	8.50"	7.00"	.625"	4	.750"
4"	F	8.50"	7.00"	.625"	8	.875"
100mm	NP10	220 (8.66)	180 (7.09)	M16	8	22 (.87)
100mm	NP16	220 (8.66)	180 (7.09)	M16	8	22 (.87)
5"	D	10.00"	8.25"	.625"	8	.813"
5"	Е	10.00"	8.25"	.625"	8	.875"
125mm	NP16	250mm	210mm	M16	8	22 (.87)
6"	D	11.00"	9.25"	.625"	8	.813"
6"	E	11.00"	9.25"	.750"	8	.875"
150mm	NP10	285 (11.22)	240 (9.49)	M20	8	23 (.91)
150mm 7"	NP16	285 (11.22) 12.00"	240 (9.49) 10.25"	M20 .625"	8	23 (.91) .875"
7"	D E	12.00"	10.25	.750"	8	.875 1.00″
8"	D	13.25"	11.50"	.675"	8	.875"
8"	F	13.25"	11.50"	.750"	8	1.00"
200mm	NP10	340 (12.38)	295 (11.61)	M20	8	245 (.96)
200mm	NP16	340 (12.38)	295 (11.61)	M20	12	245 (.96)
9"	D	14.50"	12.75"	.625"	8	.875"
9"	Е	14.50"	12.75"	.750"	12	1.00"
10"	D	16.00"	14.00"	.750"	8	1.00"
10"	Е	16.00"	14.00"	.750"	12	1.00"
250mm	NP10	400 (15.75)	350 (13.78)	M20	12	26 (1.02)
250mm 12"	NP16	400 (15.75)	355 (13.98)	M25 .750"	12 12	26 (1.02)
12"	D E	18.00" 18.00"	16.00" 1.00"	.750"	12	1.00″ 1.125″
300mm	NP10	455 (17.91)	400 (15.75)	M20	12	27.5 (1.08)
300mm	NP16	455 (17.91)	410 (16.14)	M25	12	27.5 (1.08)

NP10 and NP16 are for cold water pressures of 10 bar and 16 bar and are the current British Standard. They are unnecessarily heavy for most contractors' pumps.

# Selection Requirement

Before specifying any particular pump type you will require to know basic facts related to the application. The following points will assist in assembling the information.

### 1. General

Quantity required. Nature of service – short description of application and environment

## 2. Capacity

State whether total or per unit

### 3. Suction Static Head

Distance between water surface and pump centre

### 4. Suction Friction Head

To calculate this, the following is required:-

- a) Pipe lengths, diameters and material
- b) Details of fittings, eg. bends, valves, strainers

### 5. Pressure

Is water surface at atmospheric pressure; if not, what is the pressure?

## 6. Discharge Static Head

Distance between water surface and pump centre

# 7. Discharge Friction Head

To calculate this, the following is required:-

Pipe lengths, diameters, materials and fittings

### 8. Pressure Head

Is end of pipe discharging to atmospheric pressure; if not, what is the pressure?

### 9. Total Head Against Pump

= Total Discharge Head + Total Suction Head

### 10. Nature Of Liquid

- a) Specific gravity
- b) Viscosity
- c) Temperature
- d) Corrosive and/or abrasive properties
- e) Nature, percentage and maximum size of any solid content

There are a number of factors that effect the suction performance of a pump attributed to the system dimensions and liquid characteristics.

These are briefly listed as follows and care should be taken to collate the relative data in order that the technical department have all the pertinent information.

### 5 Pressure On Liquid-Free Surface To Be Drawn Into The Pump

The reservoir from which the liquid is drawn may not always be at atmospheric pressure – it could be at an elevated pressure or under vacuum in a closed vessel

### S Vapour Pressure

Hydro-carbon mixtures or liquids at elevated temperatures and pressures which create surface evaporation will reduce suction performance

### **5** Liquid Density

Increasing density reduces suction performance

# **5** Viscosity And Friction Losses

These also reduce suction performance

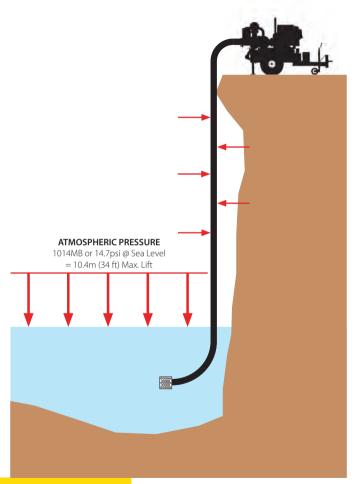
## **5** Flooded Suction/Suction Lift

Flooded suction will assist the pump's suction performance, conversely, suction lift will subtract

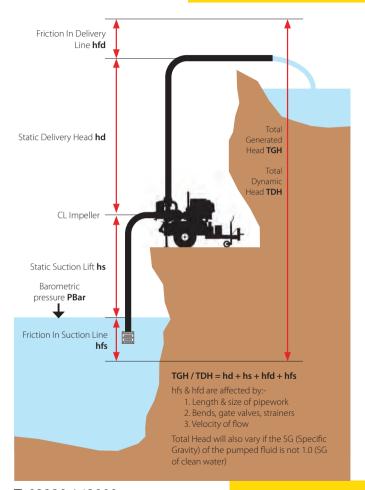
The above data is necessary to calculate the Nett Positive Suction Head available in a system (NPSHa).

The pump itself imposes a restriction on the suction lift by virtue of its design and the liquid flow characteristics through the pump. This is referred to as the Nett Positive Suction Head required (NPSHr).

For a pump to sustain a throughput without cavitation, NPSHa must be greater than or equal to the NPSHr.

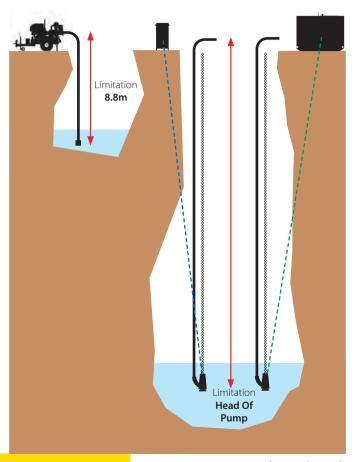


# Total Generated Head / Total Dynamic Head



# **Surface Pump**

# Electric / Hydraulic Submersible



# Applications & Solutions

Selwood specialises in dewatering, bypass and drainage for wastewater, storm water and effluent for the following applications.

- **S** Sludge handling / pumping
- **S** Wastewater collection and treatment
- **S** Low & high pressure sewer system
- **S** RAS / WAS / SAS pumping
- **5** Grit chambers
- 5 Treatment works over pumping applications for Raw Sewage, Screened Sewage, Final Effluent, Sludge/Activated Sludge Transfer
- S Aeration tanks
- Storage tanks
- **5** Chemical dosing
- **5** Effluent pumping
- **5** Raw water applications
- S Pump Stations Dry Well, Wet Well and Guide Rail Applications







# Dedicated Pump Rental Branch Locations



#### ABERDEEN

Site G, Kintore Business Park, Kintore, Aberdeenshire, AB51 0YQ T: 01224 063440 aberdeen@selwood.co.uk

#### BEDFORD

Hammond Road, Elm Farm Ind. Est., Bedford, Bedfordshire MK41 0RG T: 01234 865700 bedford@selwood.co.uk

### BRACKNELL

Kiln Lane, Western Ind. Est., Easthampstead Road, Bracknell, Berkshire RG12 1NA T: 01344 457171 bracknell@selwood.co.uk

#### BRIDGEND

Millers Avenue, Brynmenyn Ind. Est., Bridgend, Glamorgan, Wales CF32 9TD T: 01656 723823 bridgend@selwood.co.uk

#### BRISTOL

Unit C2, Greensplott Road, Chittening Estate, Avonmouth BS11 0YB T: 01179 822195 bristolpumps@selwood.co.uk

#### CONWY

Unit 5, Morfa Business Park, Conwy, Gwynedd LL32 8HH T: 01492 573777 conwy@selwood.co.uk

#### **EDINBURGH**

Edgefield Road Ind. Est., Loanhead, Edinburgh EH20 9TB T: 0131 448 2261 edinburgh@selwood.co.uk

# Branch Locations

#### GLASGOW

West Yard, 2236 London Road, Carmyle, Glasgow G32 8YF T: 0141 778 5155 glasgow@selwood.co.uk

### **GREAT YARMOUTH**

Salmon Road, South Denes Great Yarmouth NR30 3QS T: 01493 852927 greatyarmouth@selwood.co.uk

#### HULL

Unit 8, Wallingfen Business Park, 236 Main Road, Newport, Brough, East Yorkshire HU15 2RH T: 01430 472222 hull@selwood.co.uk

### **LEEDS**

Unit 36, Skelton Grange Road, Stourton, Leeds, Yorkshire LS10 1RD T: 0113 271 8456 leeds@selwood.co.uk

### LEWES (Specialist M+E Centre)

Unit 6, Cliffe Industrial Estate, South Street, Lewes, East Sussex BN8 6JL T: 02380 250300 lewes@selwood.co.uk

### LIVERPOOL

33 Lees Road, Knowsley Industrial Estate Liverpool L33 7SA T: 0151 545 4300 liverpool@selwood.co.uk

### LONDON

Penhall Road, Charlton, London SE7 8RX T: 020 8858 4476 charlton@selwood.co.uk

### MIDDLESBROUGH

Haverton Hill Road, Billingham Reach Ind. Est., Billingham, Stockton-on-Tees, TS23 1PX T: 01642 247051 middlesbrough@selwood.co.uk

#### NOTTINGHAM

Derby Road, Langley Mill, Nottingham NG16 4AA T: 01773 714227 nottingham@selwood.co.uk

### SALTASH

2/3 Forge Lane, Moorlands Ind. Est., Saltash, PL12 6LX T: 01752 973000 saltash@selwood.co.uk

### SOUTHAMPTON

Bournemouth Road, Chandler's Ford, Eastleigh, Hampshire SO53 3ZL T: 023 8025 0200 cfpumphire@selwood.co.uk

### **STAFFORD**

Church Lane, Hixon, Stafford ST18 0QB T: 01889 272800 stafford@selwood.co.uk

#### WEYMOUTH

30 Cambridge Road, Granby Ind. Est., Weymouth, Dorset DT4 9TJ T: 01305 787461 weymouth@selwood.co.uk

### WORKINGTON

Harbourside Chandlery, Stanley Street, Workington, Cumbria CA14 2JD T: 01900 68694 workington@selwood.co.uk

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#### **Head Office**

Bournemouth Road, Chandler's Ford, Eastleigh, Hampshire, SO53 3ZL T 023 8026 6311 E info@selwood.co.uk

