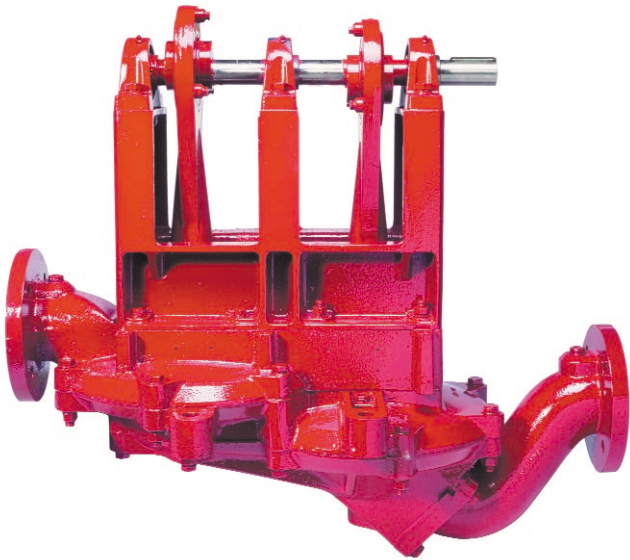




### **User Benefits**

---

- Self priming
- Robust construction
- Glandless
- Dry running capability
- Ability to pump abrasive media
- Cost effective easy maintenance



# *Dual Disc*

---

## Pumps for industrial and sludge applications

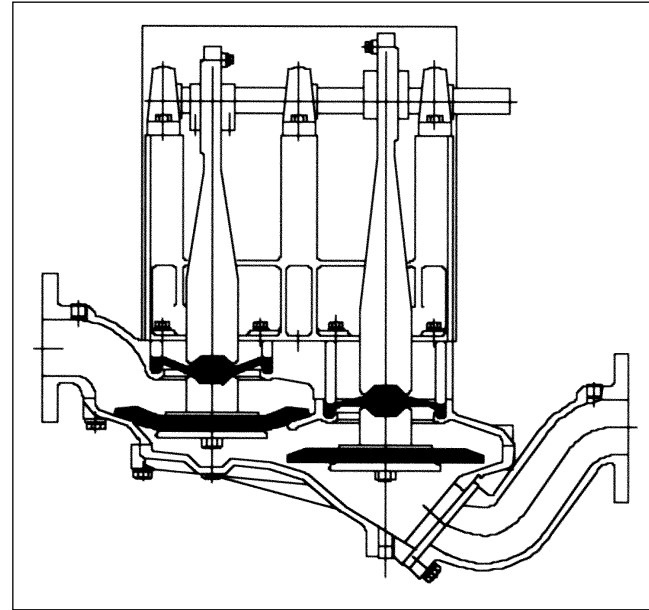
SSP Dual Disc pumps are designed for use within effluent and industrial treatment processes where arduous duties in harsh conditions exist.

The SSP Dual Disc pumps have a glandless disc design providing indefinite dry running capability. This design results in good self-priming performance and unparalleled tolerance of problem solids including rag, fibrous matter and grit. SSP Dual Disc pumps are ideal for primary tank manual and auto de-sludging duties. Other applications include digested and humus sludge, raw sewage, abattoir and poultry wastes, and other industrial waste products.

The Dual Disc design with its cost effective easy maintenance eliminates the shaft sealing and valve problems inherent in other pump types on arduous duties. Where dry running and high spares costs are known problems with other pump technologies, such as Progressing Cavity pumps which are traditionally used on lift applications, the use of SSP Dual Disc pumps can result in a reduced lifecycle cost (LCC).

## Operation

The pump's drive shaft has two connecting rods and rubber discs which are designed to oppose each other in a reciprocating action. A large cavity is formed in the chamber between the discs, opening at one end of the stroke and closing at the other end of the stroke. This produces a positive suction and discharge sequence within the chamber.



## Performance

- Flow rates up to 52 m<sup>3</sup>/h
- Differential pressures up to 3 bar
- Sludge thickness content up to 10%
- Suction lift up to 6 metres max.

Pump Model	Port Size	Maximum Flow Rate	Differential Pressure Water	Differential Pressure Sludge	Maximum Speed Water	Maximum Speed Sludge	Weight Bare Shaft Pump
	mm	m <sup>3</sup> /h	bar	bar	rev/min	rev/min	kg
DD50	50	22.5	2.0	1.0	1400	750	28
DD75PS	80	52	3.0	1.5	750	350	122
DD100PS	100	52	3.0	1.5	750	450	134

## Basic Design

The SSP Dual Disc range of pumps is constructed from a minimal number of parts. The pump housings are manufactured from cast iron and the high grade elastomer discs and gaskets are manufactured from Nitrile, Neoprene and EPDM. The discs and gaskets are low cost items and, being the main consumable parts, are easily replaceable on site without the need for highly skilled personnel.

The absence of close tolerance clearances in the pumping chamber means that SSP Dual Disc pumps have a high resistance to grit abrasion. This makes them ideal for arduous duties.

**Phased shaft** - SSP Dual Disc pumps have a patented 'phased' shaft design. This enables the pump to achieve maximum capacities and speeds thereby overcoming the high noise, vibration and pulsation levels experienced with similar reciprocating pump designs.

## Solids Handling Capability

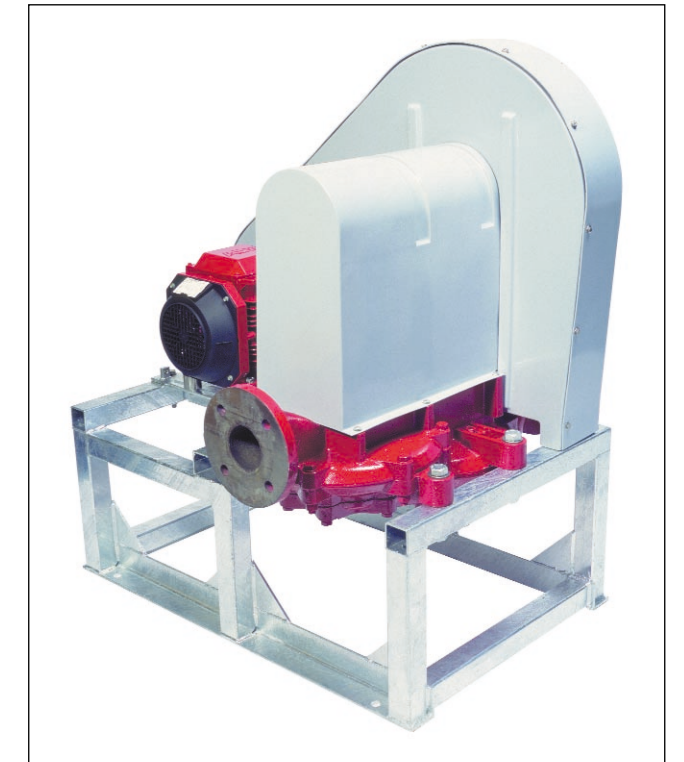
The SSP Dual Disc pump is ideal for solids handling. The flow path through the pump minimises the risk of blockage and allows the passage of solids, rags and fibrous media.

## Specification Options

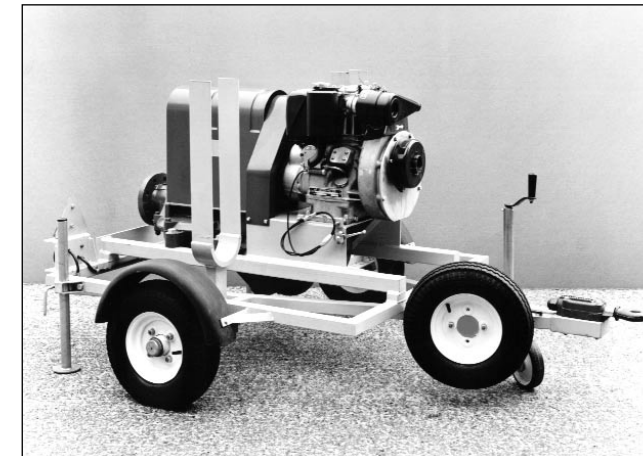
### Drive units

Pumps can be supplied fully guarded mounted on galvanised mild steel base frames. Prime movers include electric motor drives, either fixed or variable speed, that may be adapted for use with proprietary control systems if required. Other prime movers may be fitted such as pneumatic, hydraulic, diesel or petrol powered.

Typical SSP Dual Disc Pump fully guarded mounted on base frame driven by electric motor.



Typical SSP Dual Disc Pump mounted on trailer driven by diesel engine.



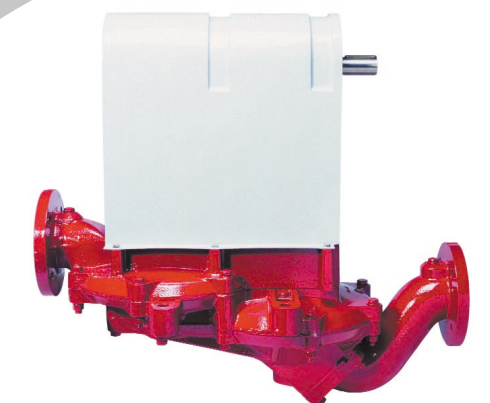
The option of a mobile Dual Disc pump unit provides greater versatility of application around the site or plant.

### GRP covers

For frost protection in exposed environments, Dual Disc pumps can be supplied with GRP covers to include heaters.

### Connections

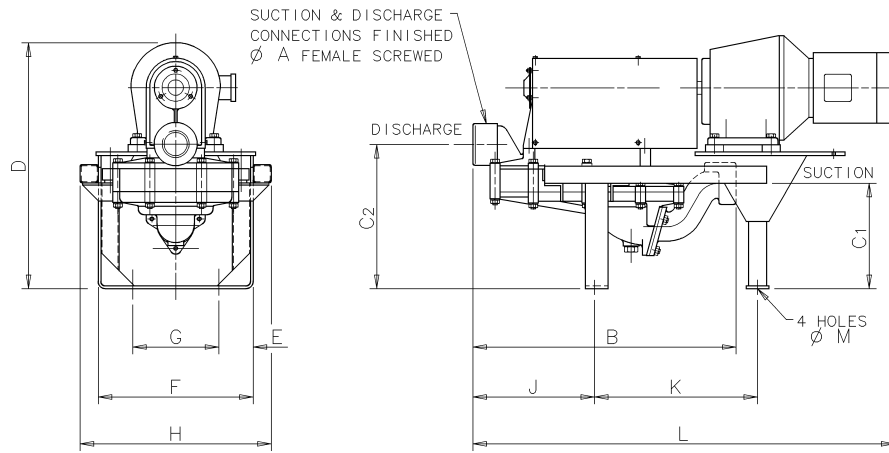
Flange connections to ASA/ANSI150 and BS4504/DIN2533 standards.



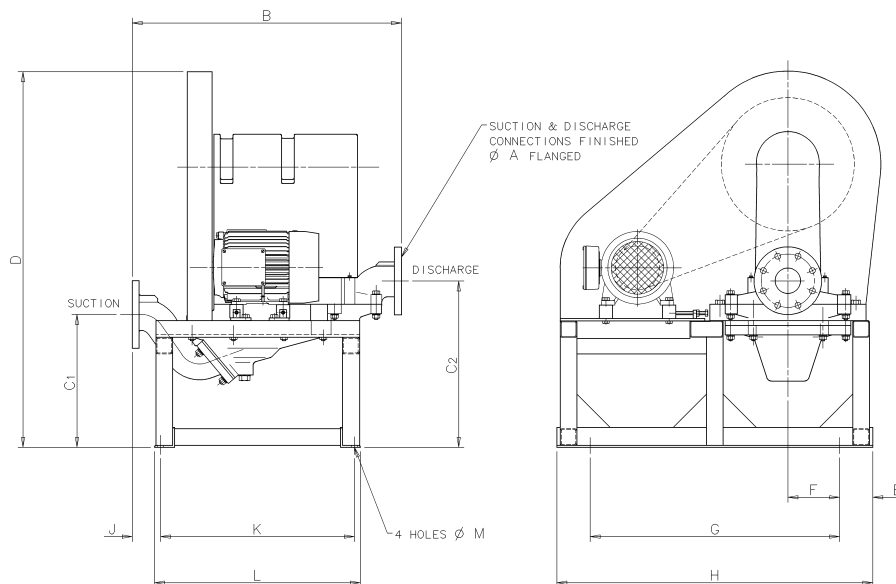
# Dual Disc

## Pump Dimensions

### Model DD50



### Model DD75PS and DD100PS



All dimensions in mm

Pump Model	A	B	C1	C2	D	E	F	G	H	J	K	L	M
DD50	50	581	232	318	541	76	342	190	422	268	360	931	14
DD75PS	80	820	403	507	1133	100	155	750	950	89	582	618	18
DD100PS	100	846	497	499	1133	100	155	750	950	106	582	618	18

**Sales - Pumps: +44 (0)1323 414600**  
**Spares: +44 (0)1323 414601**



The information contained herein is correct at the time of issue,  
 but may be subject to change without prior notice

[www.ssppumps.com](http://www.ssppumps.com)