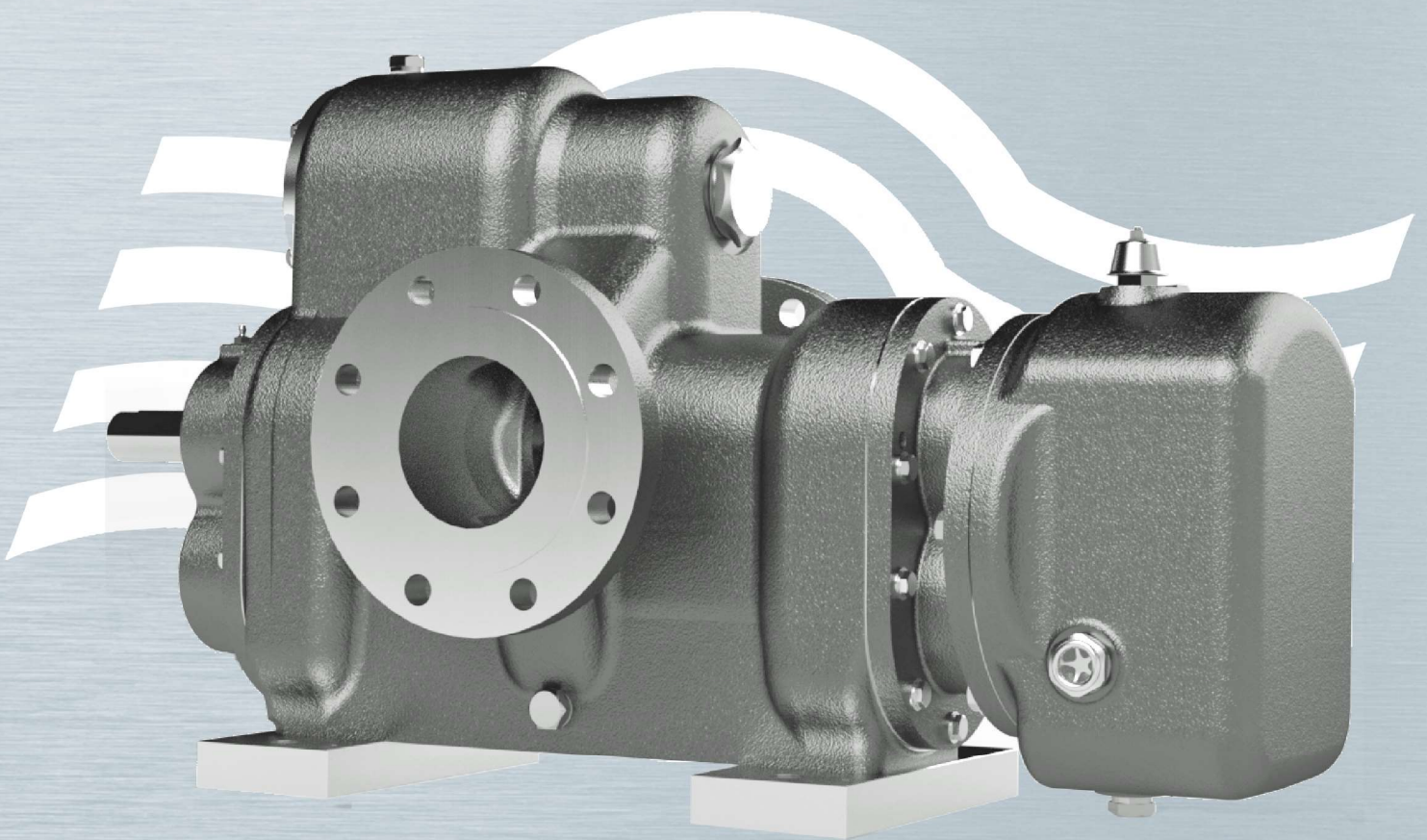


## Twin Screw Pump



## S: Twin screw type pump range

**S:** A; B; C; VA and VB style

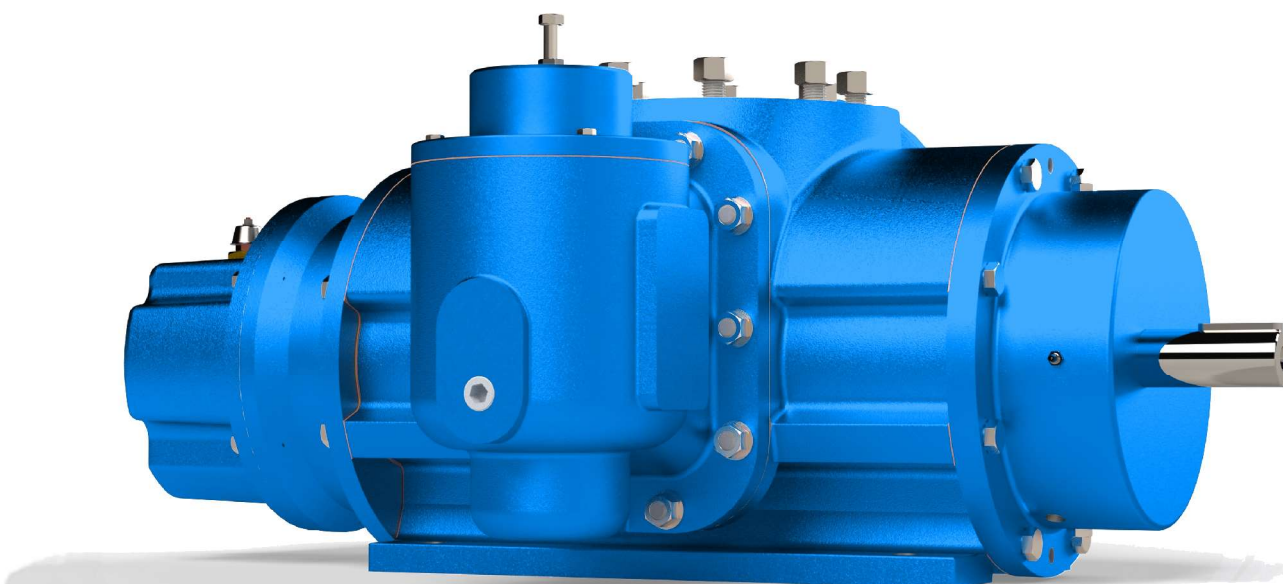


Materials: CI | CS | HY | SD | SS



# Albany and Stothert & Pitt twin screw type pump range

Albany Pump's S range is a versatile series of Screw pumps that can handle fluctuating flow rates and pressures without losing efficiency. This range is renowned for their low noise levels, high reliability and long life.



Maximum working pressure 30 barg	Pump size range 3" - 14"	Maximum temperature 300°C	Flow rate up to 1800 M <sup>3</sup> /HR
----------------------------------	--------------------------	---------------------------	---

AL Aluminium | CS Cast Steel | CI Cast Iron | GM Gunmetal | HY Hastelloy | NR Ni-resist | NY Nylon | PP Polypropylene | SD Super Duplex | SS Stainless Steel  
 General and Chemical | Bitumen | Fire | Dispenser Machines | Food Industry | Lubrication | Marine | Oil & Gas | Refrigeration | Sugar

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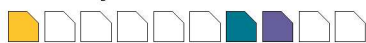


## S: Twin screw type pump range

Albany Pump's S range is a versatile series of Screw pumps that can handle fluctuating flow rates and pressures without losing efficiency. This range is renowned for their low noise levels, high reliability and long life.

### S: A Style: Internal seal/external bearing pumps

Materials: CI | CS | SS



Albany's standard design with internally flushed DIN mechanical seals and external bearings for liquids with non-lubricating properties. It has an excellent suction lift capability of up to 7 metres. With single piece screw shafts for mechanical integrity and low flex. Available with sump heating options on some sizes. Also with or without an internal relief valve to comply with API 676. This style has been designed as a modern replacement for the original Stothert & Pitt range. (Original model SH3)



API

Maximum working pressure 30 BARg	Pump size range 3" - 14"	Maximum temperature 200°C	Flow rate up to 1800 M³/hr
----------------------------------	--------------------------	---------------------------	----------------------------

### S: B Style: External bearing pumps

Materials: CI | CS | SD | SS



This is similar to the SA style but allows a greater choice of sealing arrangements including API676 types and higher temperature and pressure operation. Again with various heating options and internal relief valve choice. (Original model SH2)



API

Maximum working pressure 30 BARg	Pump size range 3" - 14"	Maximum temperature 300°C	Flow rate up to 1800 M³/hr
----------------------------------	--------------------------	---------------------------	----------------------------

### S: C Style: Internal bearing pumps

Materials: CI | CS | SD | SS



The SC style is only suitable for non-abrasive lubricating liquids. The bearings and timing gears are lubricated by the pumped liquid. It has only one mechanical seal making it a lower cost option with clean lubricating liquids. Heating and relief valve options are available. (Original model SH1)



Maximum working pressure 30 BARg	Pump size range 3" - 14"	Maximum temperature 200°C	Flow rate up to 1800 M³/hr
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### S: VA Style: Vertical internal seal/external bearing pumps

Materials: CI | CS | SD | SS



The VA range is mostly used for clean liquids of low viscosity and is similar to the SA style. This range is popular in maritime applications where space saving capability is a benefit. (Original model SV3)



Maximum working pressure 20 BARg	Pump size range 3" - 10"	Maximum temperature 200°C	Flow rate up to 600 M³/hr
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### S: VB Style: Vertical internal bearing pumps

Materials: CI | CS | HY | SD | SS



The VB range is for clean lubricating liquids and is based on the SC style. It has a small footprint and ideal for confined spaces. (Original model SV1)



Maximum working pressure 30 BARg	Pump size range 3" - 12"	Maximum temperature 200°C	Flow rate up to 1000 M³/hr
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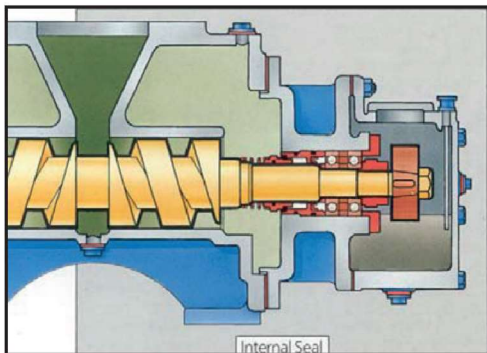
We can supply direct replacements for all of the Stothert & Pitt pumps made, using our library of their original drawings dating back to the 1930s.

Albany's 24-page brochure is available as a download at [www.albany-pumps.co.uk](http://www.albany-pumps.co.uk)



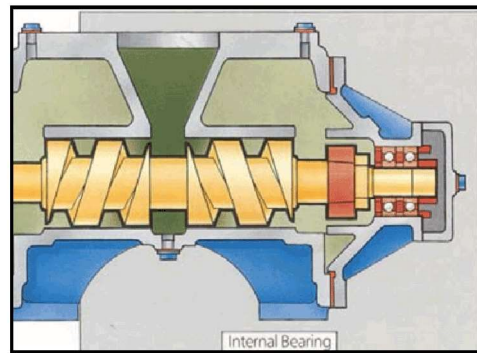
## S: Twin screw type pumps:

Type SA: Internal seal/external bearing



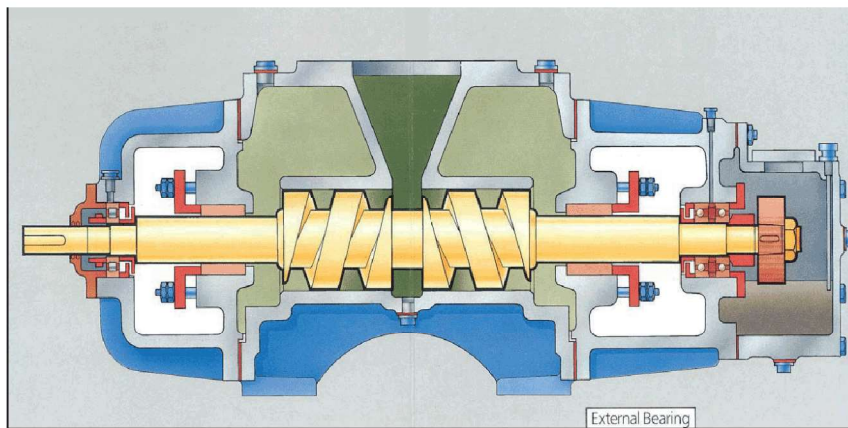
Use: for pumping non lubricating or light viscosity products

Type SC: Internal bearing twin screw pump



Use: for pumping liquids with lubricating properties

Type SB: External bearing twin screw pump



Use: for pumping non-lubricating and high viscosity liquids at pressure and elevated temperature

### CONSTRUCTION

Albany Twin Screw pumps are fitted with hardened timing gears and locating bearings. This ensures there is no contact between the screws. The ratio between outside and root diameters is designed to provide maximum shaft stiffness which eliminates body bore wear.

### PUMPING ACTION

As the shafts rotate, the fluid is drawn to the suction ends of the casing and propelled to the central delivery area through the right and left hand scrolls. The specially designed profile of these screws provides maximum volumetric efficiency. The mechanical seals (or packed glands) are under inlet pressure. The central discharge ensures that the shafts are hydraulically balanced to eliminate any end thrust.

### MATERIALS

Albany Twin Screw pumps are manufactured in materials best suited to the pumped liquid and to the application. Materials currently offered cast iron, cast steel, stainless steel, aluminium bronze or gunmetal, duplex alloys. Nace specification is available.

### DRIVE ARRANGEMENTS

The pumps run at 4 pole synchronous motor speeds for normal applications. This eliminates the need for speed reducers. Smaller pumps can run at 2 pole speeds on certain duties. On applications such as oily water or very high viscosity (over 20,000 c/s) 6 or 8 pole, or even slower speeds, can be used.

### CAPACITY PERFORMANCE

Capacity range - up to 1800 M<sup>3</sup>/hr  
Pressures - from low pressure up to 30 bars (g)  
Viscosities - up to 60,000 centistokes

### SUCTION PERFORMANCE

Albany Twin Screw pumps give excellent suction lift. Due to the design and gentle action of the screws the pumps require a low NPSH. NPSH required is dependent on viscosity and speed, and can be as low as 0.5M.



# Albany Pumps

## S: Twin screw type pumps:

### Horizontal Models

#### Design Options:

SA internal seal/external bearings for  
Clean fuels of low viscosity.  
SB external bearings for non-lubricating and  
High viscosity fluids.  
SC internal bearings for lubricating fluids.

#### Features:

- Heating options available by  
oil, steam or electricity
- Cooled bearings and/or gearcases
- API676 compliant
- Pressures up to 30 barg
- Temperatures up to 300 deg c



### Vertical Models

#### Design Options:

VA internal seal/external bearings for clean fluids  
Of low viscosity  
SE internal bearings for lubricating fluids

#### Features:

- Vertical models save space
- With or without relief valve
- API 676 compliant
- Pressures up to 20 barg
- Temperatures up to 200 deg c



## Albany Pumps

### S: Twin screw type pumps:

Example showing A and B pitch options to indicate different flow rates

(Multi-pitch, scroll and screw clearance options are available on all styles of screw pump)

#### Examples showing all screw diameter sizes

Pump frame size	95% of theoretical output litres per rev	5 centistokes		15 centistokes		125 centistokes	2000 centistokes	25000 centistokes
		2800 rpm	1450 rpm	2800 rpm	1450 rpm	1450 rpm	850 rpm	100 rpm
AS080	0.186	28.31	12.43	28.90	13.03	14.62	8.78	0.21
AS095	0.320	50.17	22.85	51.01	23.68	25.92	15.49	0.66
AS111	0.475	75.10	34.65	76.23	35.78	38.81	23.15	1.15
AS121	0.760	123.40	58.73	124.78	60.11	63.80	37.89	2.54
AS125	0.747	120.54	57.05	121.98	58.49	62.32	37.04	2.37
AS135	0.941	153.29	73.04	154.99	74.73	79.26	47.06	3.18
AS145	1.136	-----	88.62	-----	90.58	95.81	56.86	3.97
AS150	1.231	-----	96.41	M <sup>3</sup> /hr	98.50	104.09	61.75	4.37
AS160	1.546	-----	122.80		125.19	131.58	77.98	5.86
AS170	1.904	-----	153.40		156.09	163.29	96.67	7.64
AS180	2.202	-----	177.81		180.83	188.92	111.81	8.96
AS196	2.751	-----	225.86	-----	229.41	238.91	140.29	11.58
AS206	3.30	-----	271.14	-----	275.08	285.91	168.81	14.40
AS210	4.43	-----	372.28	-----	376.48	387.69	228.74	21.09
AS235	4.83	-----	403.77	-----	408.66	421.73	248.95	22.51
AS265	7.04	-----	596.67	-----	602.72	618.89	364.93	34.54
AS292	9.43	-----	809.86	-----	816.58	834.54	491.58	48.51
AS350	16.34	-----	1425.91	-----	1434.70	1458.21	857.91	88.73

Stohtert & Pitt design pumps use **SS** prefix instead of **AS** on pump frame size.