

# Tri-lobe Blowers Trinado/Scirocco

**410, 408** Blower Range:  
3178-14205 (M<sup>3</sup>/HR)

## Based on Success

HR Blowers are one of the world's leading air blower manufacturers and have a reputation for quality, innovation and service.

### Design Features

The Scirocco Blower has been specially designed to reduce noise and power loss by utilising an exclusive wrap-around plenum and proprietary double Whispair® jet to control pressure equalisation - (feeding backflow in the direction of impeller movement, thereby aiding rotation).

The computer calculated impeller profiles ensures maximum volumetric efficiency with minimum absorbed power without sacrificing torsional rigidity.

The conservative load carrying capacity of the larger diameter rolling element bearings ensures an extended operating life. Timing gear life is also extended by a controlled lubrication system.

The gear and shaft strengths are substantially increased by the use of taper mounted gears which do not need keyways for location. Setting of the gear wheels to obtain correct timing of the impellers is simplified, a feature that facilitates field maintenance.

### Specification

**CASING:** The cylinder and headplates are manufactured from cast iron.

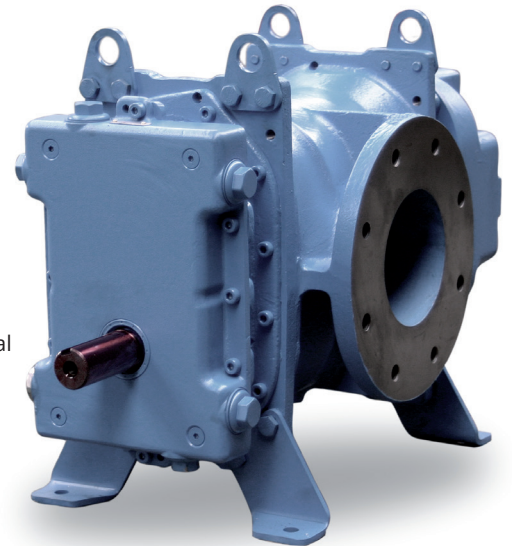
**IMPELLERS AND SHAFTS:** The dynamically balanced impellers have integral shafts and are made from ductile shafts.

The high rigidity of the impeller/shafts permits a higher pressure rise to be obtained than with other machines of comparable size. The generous shaft diameter keeps drive stresses low.

**GEARS:** Precision Ground Gears are used to ensure smooth, silent running and accurate timing of the rotary impellers. A controlled lubrication system is provided to ensure efficient operation without waste of energy in the gearcase. Timing gears are hardened and precision ground, spur gears are manufactured from high grade alloy steel.

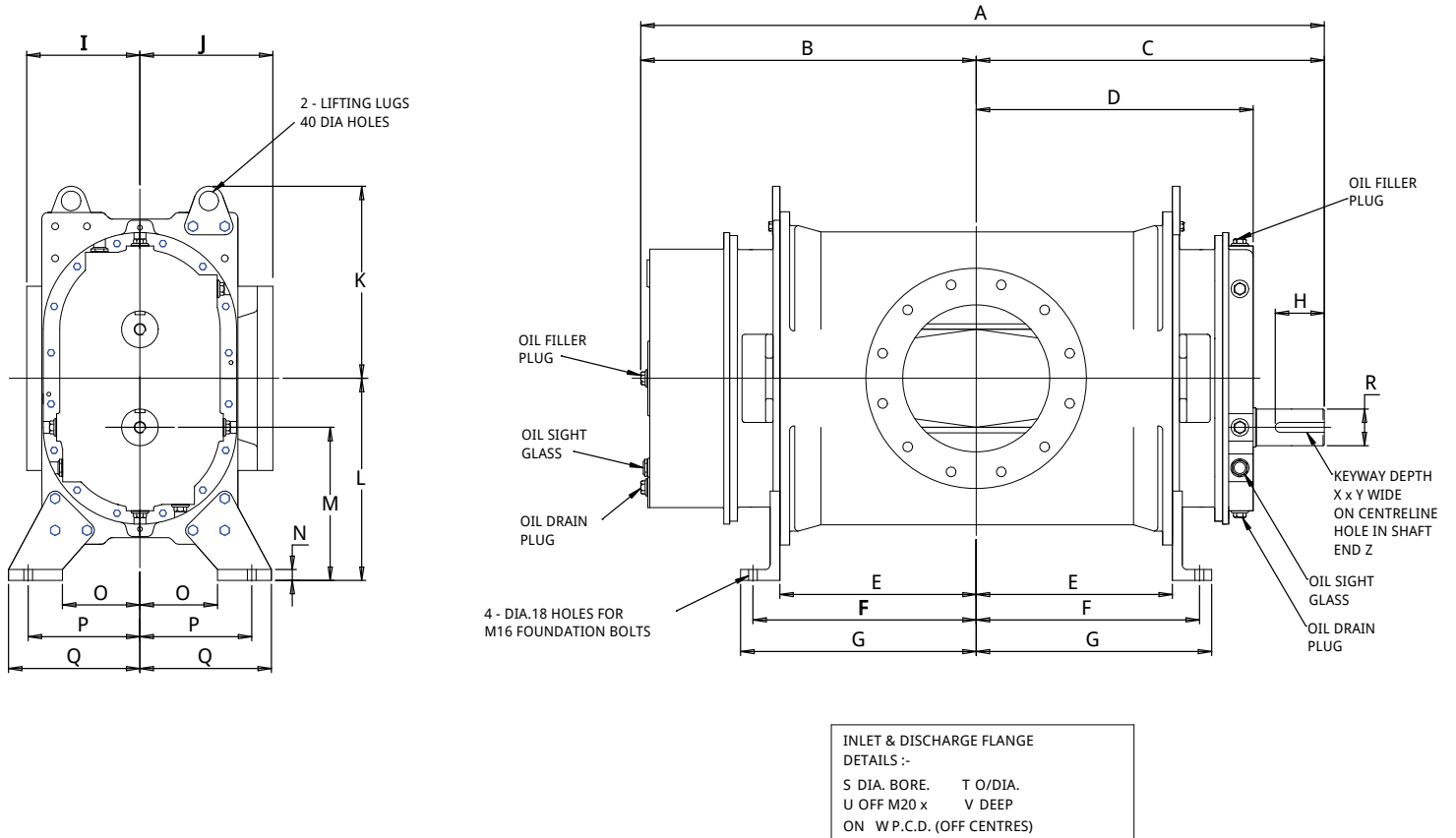
**BEARINGS:** The bearings at the drive end of the blower are spherical roller type of generous proportions to give long operational life. Parallel roller bearings are fitted at the gear end and are splash lubricated by oil from the gears.

**LUBRICATION:** Specially designed labyrinth seals and oil throwers are used at both ends. This feature eliminates maintenance associated with the use of lip seals. The Scirocco Whispair® blowers are constructed with air gaps which isolate the bearing and gear lubricants from the compression chamber.



### User Benefits

- The delivered air is guaranteed to be oil free because internal lubrication is unnecessary, and because the Scirocco Range of Positive Displacement Air Blowers are constructed with air gaps which completely isolate bearing and gear lubricants from the compression chamber.
- Noise Levels are kept to a minimum. Air noise is reduced by carefully designed air ports (utilising the special Whispair feature and by the elimination of resonant unbraced surfaces. Mechanical noise levels have been reduced by running accuracy of the taper mounted gears.
- The blower can be installed for either vertical or horizontal air flow simply by repositioning the mounted feet. Installation costs can be reduced by the versatility of mounting arrangements.
- The generous diameter of the drive shaft permits the use of V-belt drives without the need for a double outer bearing.
- Centre timing permits clockwise or anti-clockwise drive shaft rotation.



Dimensions

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
410	1564	760	804	607	390	480	520	150	302	355	498	553	423	x	232	317	377	100.003/100.011	350	490	12 off M20	40	445	10	28	M24
408	1826	891	935	737	521	611	651	150	302	355	498	553	423	x	232	317	377	100.003/100.011	400	540	16 off M20	40	495	10	28	M24

Blower Performance

	SPEED	300mbar		500mbar		700mbar		1000mbar	
		M <sup>3</sup> /HR	kW	M <sup>3</sup> /HR	kW	M <sup>3</sup> /HR	kW	M <sup>3</sup> /HR	kW
410	800	3685	45	3406	75	3178	110	—	—
	1000	4847	5	4567	90	4340	132	4053	185
	1500	7751	90	7471	150	7244	200	6957	260
	2000	10655	132	10375	185	10148	260	9861	375
408	800	4913	75	4540	90	4102	132	—	—
	1000	6462	90	6089	132	5651	185	—	—
	1500	10334	132	9961	185	9523	260	—	—
	2000	14205	185	13835	260	13394	335	—	—

For accurate performance characteristics please contact HR Blowers