

# Tri-lobe Blowers Trinado/Scirocco

**110, 108** Blower Range:  
729 - 3324 (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.

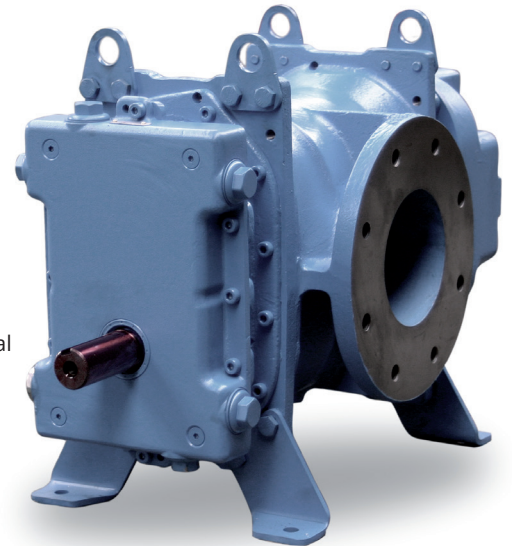
**IMPELLERS AND SHAFTS:** The dynamically balanced impellers have integral shafts and are made from ductile shafts.

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.

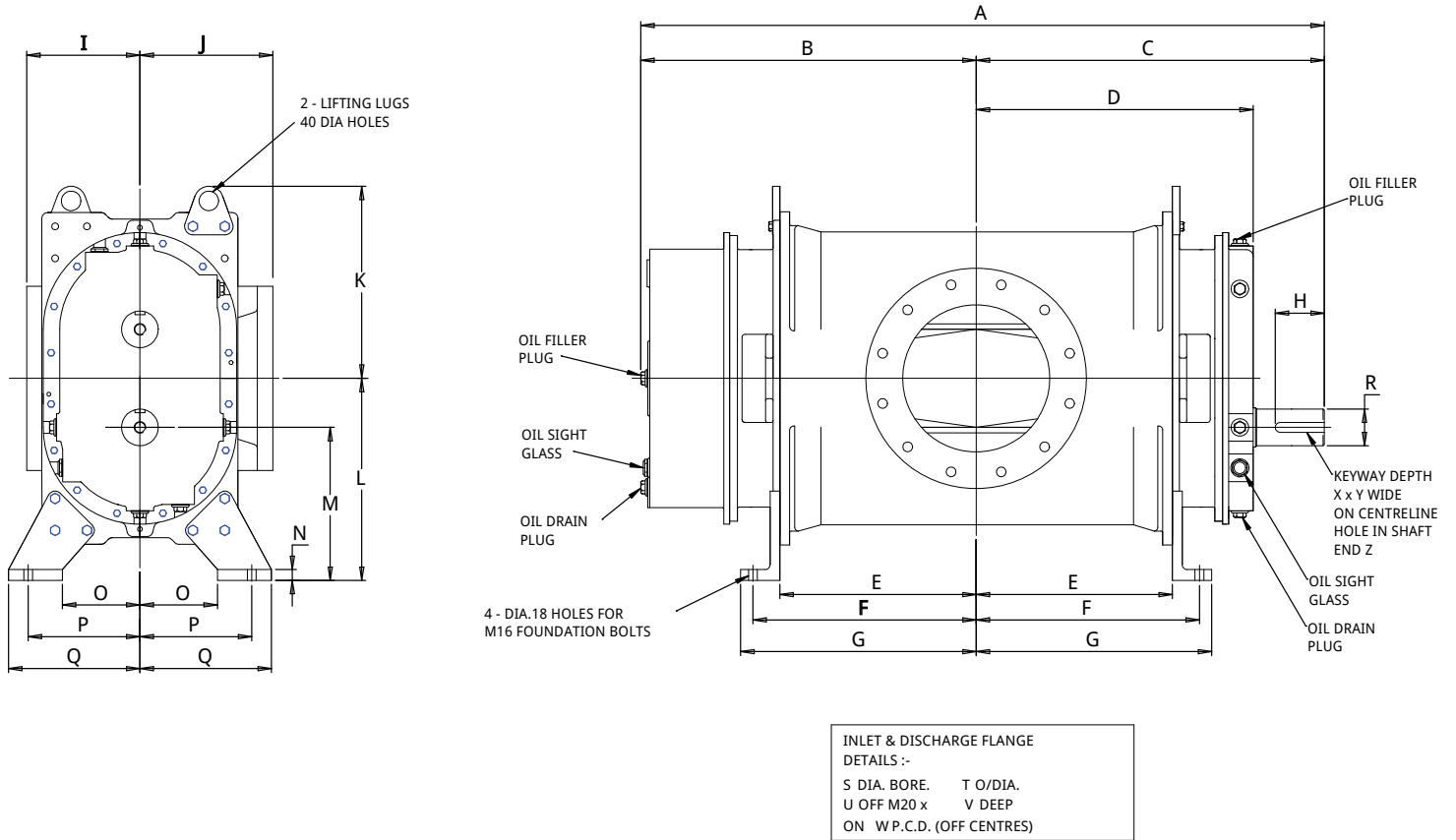
**BEARINGS:** The bearings at the drive end of the blower are spherical roller type of generous proportions to give long operational life. Parallel roller bearings are fitted at the gear end and are splash lubricated by oil from the gears.

**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
108	942	497	445	355	250	285.5	302.5	75	145	170	247	260	197	14	91	139.5	170	45.011/45.030	200	340	8 off M20	24	295	5.5	14	M20
110	817	435	382	292	188	223	240	75	145	170	247	260	197	14	91	139.5	170	45.011/45.030	150	285	8 off M20	24	240	5.5	14	M20

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
110	1650	845	11	781	18.5	729	22	—	—
	2000	1071	15	1007	22	955	30	889	45
	2500	1394	18.5	1330	30	1278	37	1212	55
	3000	1717	22	1653	37	1600	45	1535	75
	3500	2040	30	1975	45	1923	55	1858	75
	4200	2492	30	2427	45	2375	75	2310	90
108	1650	1127	15	1042	22	972	37	—	—
	2000	1429	18.5	1343	30	1274	45	—	—
	2500	1860	22	1774	37	1705	55	—	—
	3000	2290	30	2205	45	2135	75	—	—
	3500	2721	37	2636	55	2566	75	—	—
	4200	3324	45	3239	75	3169	9	—	—

For accurate performance characteristics please contact HR Blowers