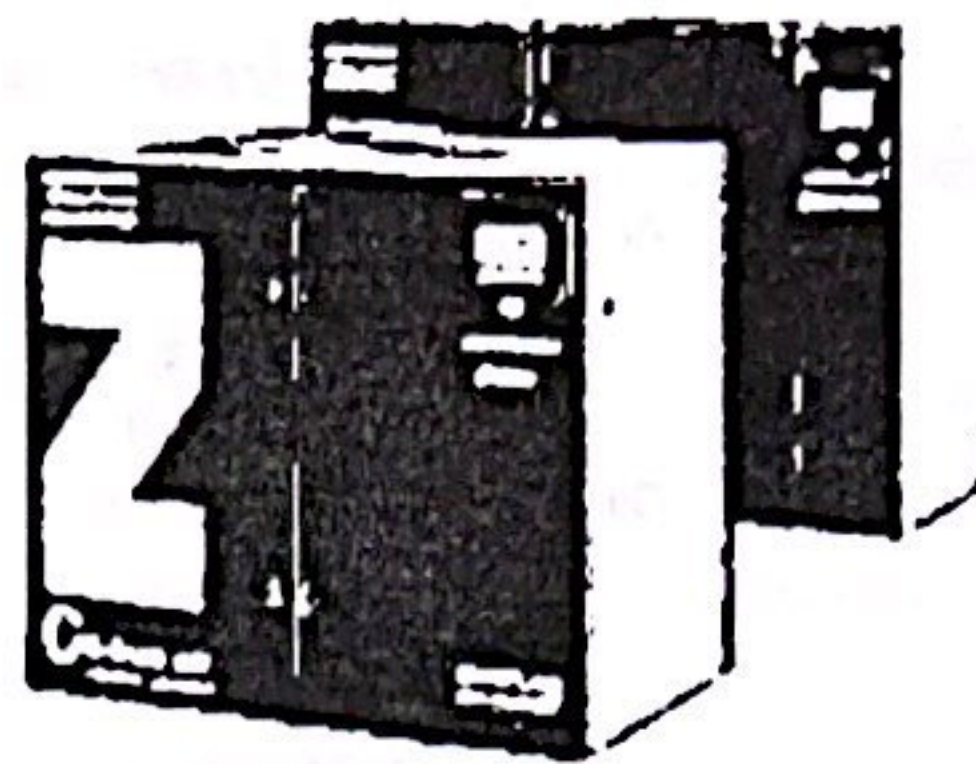
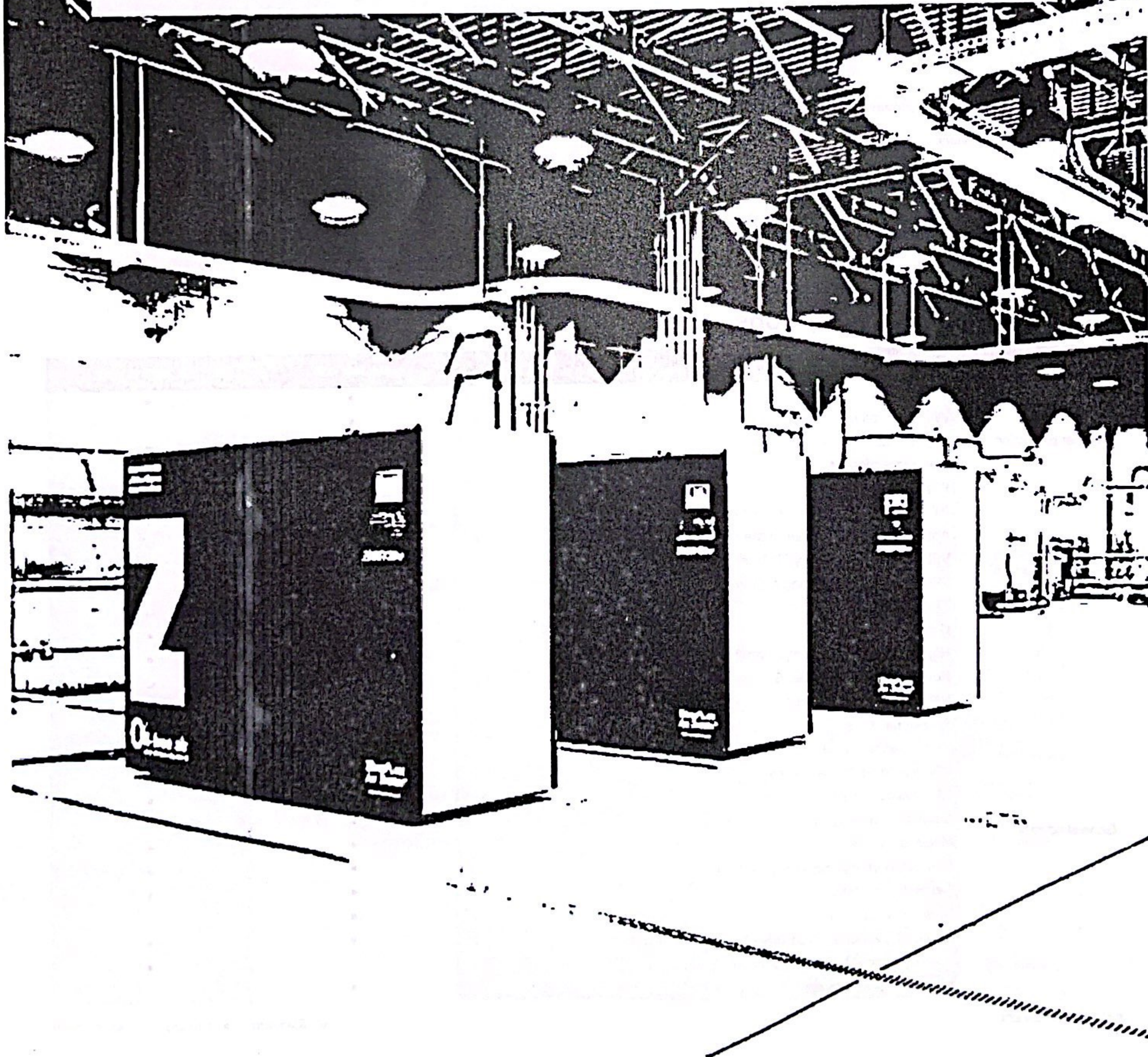


OIL-FREE ROTARY TOOTH COMPRESSORS



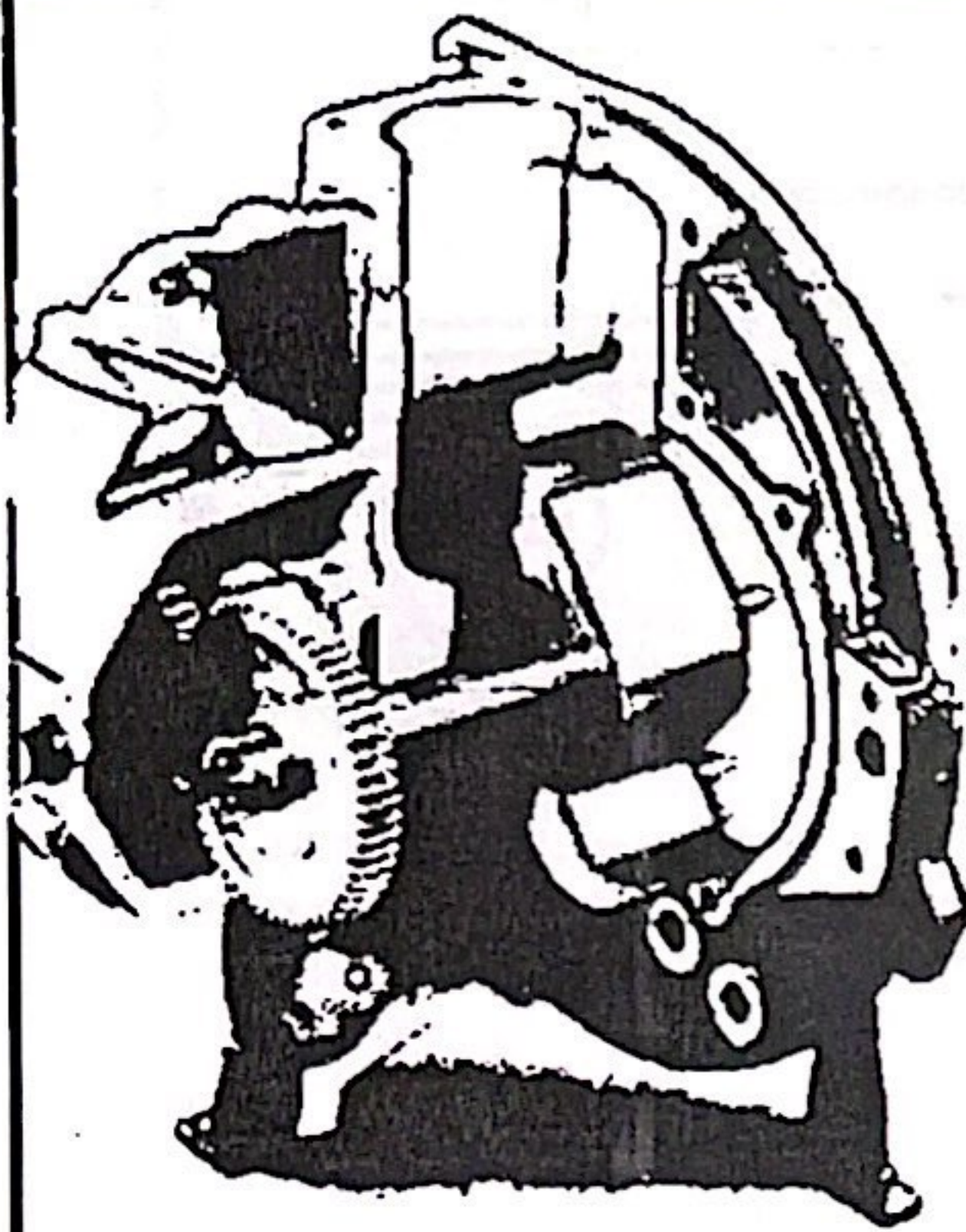
Atlas Copco

ZT 15-22, ZR/ZT 30-45, ZT 22 VSD, ZR/ZT 37-55 VSD



PROVEN TECHNOLOGY, MAXIMIZED EFFICIENCY

To provide you with top-quality, 100% oil-free air, our ZR/ZT series incorporate a range of advanced technologies. The unique rotary tooth element increases efficiency thanks to two-stage compression. As no venting of the pressure element is required, the energy consumption is considerably lower compared to single stage compression systems. With its symmetrical and dynamically balanced design, the double tooth element ensures an increased free air delivery and delivers consistent performance over time.



Rotors

Stainless steel symmetrical rotors ensure perfect dynamic balancing and minimum bearing load to guarantee a long life span.

Axial in- and outlet port

The straight rotor design and the opposing axial in- and outlet port avoid axial load on element components, increasing element lifetime.

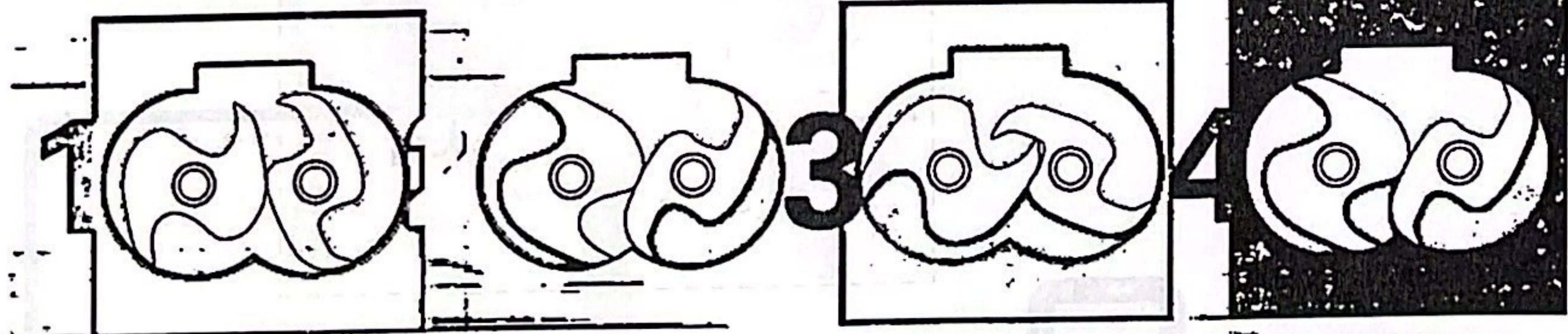
Air-cooled design

Cast teeth allow for efficient heat dissipation, eliminating the need for a complex cooling water system and ensuring greater reliability.

Seals

Two independent floating oil and air seals, separated by a neutral buffer area, safeguard the compression chamber from oil penetration.

The rotary tooth working principle



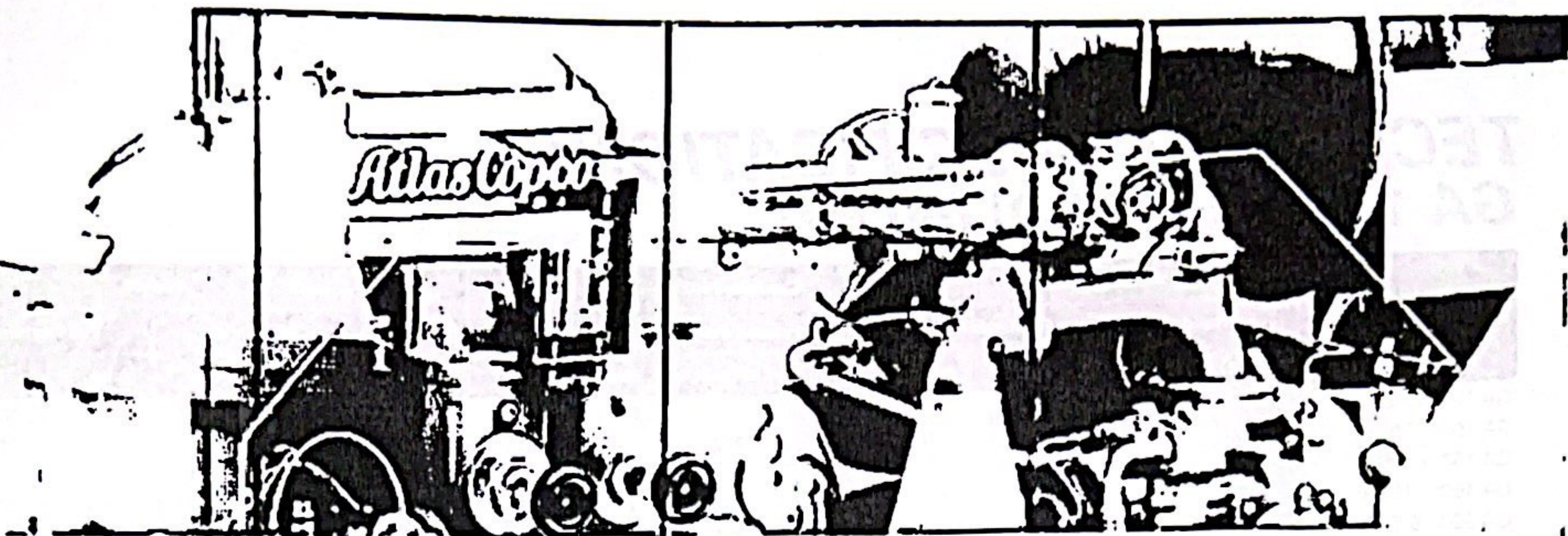
Atmospheric air is drawn through the inlet port into the compressor chamber as a result of the rotational action of the tooth rotors.

Air is trapped between the teeth of the male and female rotors.

Compression takes place. The male and female rotor turn towards each other, decreasing the free space, resulting in an increase in pressure.

The female rotor exposes the outlet port and the compressed air is delivered to the system.

○ Intake ○ Transport ○ Compression ○ Delivery



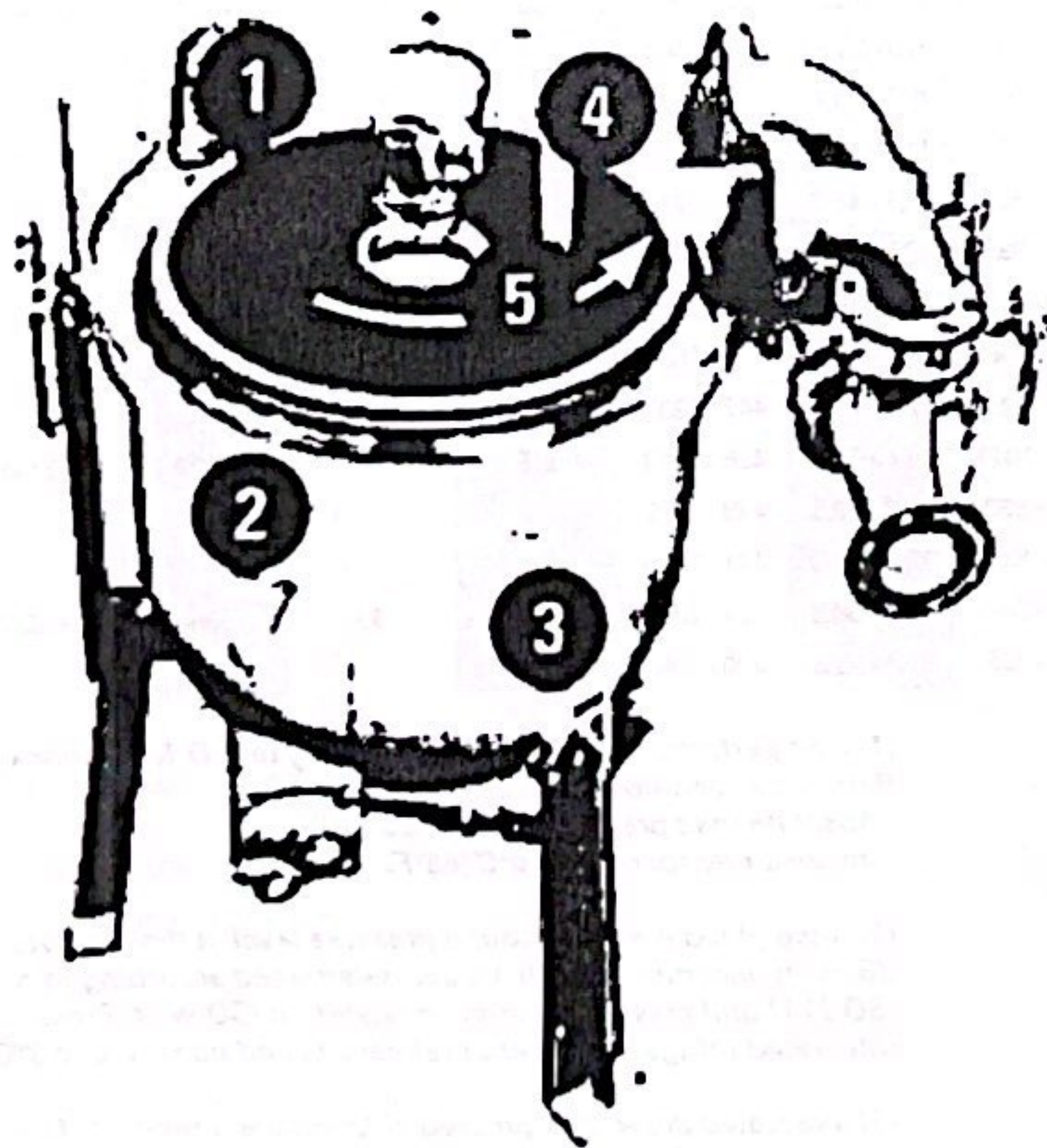
A COMPLETE FULL FEATURE PACKAGE

Our Full Feature concept stands for a compact, all-in-one quality air solution. Integrating the IMD or ID dryer and its Variable Speed Drive on VSD models, this integrated package offers the highest quality air at the lowest possible cost.



Protect your compressed air system

A dry compressed air system is essential to maintain the reliability of production processes and the quality of the end products. Untreated air can cause corrosion in the pipe work, premature failure of pneumatic equipment and product spoilage.



The IMD drying principle

- ① Hot unsaturated air
- ② Hot saturated air
- ③ Cold saturated air
- ④ Dry air
- ⑤ Drying section

IMD adsorption dryer

The IMD adsorption dryer eliminates the moisture before it enters the air net, ensuring a reliable process and an impeccable end product. As no external energy is needed to dry the air, large savings are obtained. The pressure drop through the dryer is minimal, which again cuts down the operating cost.

TECHNICAL SPECIFICATIONS

ZT 15-22, ZR/ZT 30-45, ZT 22 VSD, ZR/ZT 37-55 VSD

Type	Free air delivery ⁽¹⁾			Installed motor		Noise level d0(n) ⁽²⁾	Weight without dryer ⁽³⁾		Integrated dryer available
	l/s	m ³ /min	cfm	kW	hp		kg	lbs	
Air-cooled									
ZT 15-7.5	38.1	2.3	80.7						
ZT 15-8.6	35.5	2.1	75.2	15	20	72	975	2149	ID/IMD
ZT 15-10	30.4	1.8	64.4						
ZT 18-7.5	48.6	2.9	103.0						
ZT 18-8.6	46.4	2.8	98.3	18	24	72	995	2194	ID/IMD
ZT 18-10	36.7	2.2	77.8						
ZT 22-7.5	59.6	3.6	126.3						
ZT 22-8.6	54.0	3.2	114.4	22	30	72	1001	2207	ID/IMD
ZT 22-10	45.6	2.7	96.8						
ZT 30-7.5	78.8	4.7	167.0						
ZT 30-8.6	73.9	4.4	156.6	30	40	72	1201	2648	ID/IMD
ZT 37-7.5	96.6	5.8	204.7						
ZT 37-8.6	92.3	5.5	195.6	37	50	72	1251	2758	ID/IMD
ZT 45-7.5	114.3	6.9	242.2						
ZT 45-8.6	108.9	6.5	230.7	45	60	72	1289	2842	ID/IMD
Water-cooled									
ZR 30-7.5	78.8	4.7	167.0						
ZR 30-8.6	73.9	4.4	156.6	30	40	70	1150	2535	ID/IMD
ZR 37-7.5	96.6	5.8	204.7						
ZR 37-8.6	92.3	5.5	195.6	37	50	70	1200	2648	ID/IMD
ZR 45-7.5	114.3	6.9	242.2						
ZR 45-8.6	108.9	6.5	230.7	45	60	70	1222	2694	ID/IMD

Type	Working pressure	Free air delivery ⁽¹⁾			Installed motor		Noise level dB(A) ⁽²⁾	Weight without dryer ⁽³⁾		Integrated dryer available
		bar(e)	l/s	m ³ /min	cfm	kW		hp	kg	
Air-cooled										
ZT 22VSD - 10 bar (e)	Minimum	4	21.5 - 57.3	1.3 - 3.4	45.6 - 121.4					
	Effective	7	20.6 - 56.4	1.2 - 3.4	43.7 - 119.5	22	30	72	1120	2469
	Maximum	10	19.7 - 47.4	1.2 - 2.8	41.8 - 100.3					
ZT 37VSD - 8.6 bar (e)	Minimum	4	42.4 - 102.3	2.5 - 6.1	89.9 - 216.9					
	Effective	7	41.3 - 101.2	2.5 - 6.1	87.4 - 214.4	37	50	72	1431	3155
	Maximum	8.6	41.2 - 95.1	2.5 - 5.7	87.2 - 201.6					
ZT 55VSD - 8.6 bar (e)	Minimum	4	42.4 - 143.7	2.5 - 8.6	89.9 - 304.5					
	Effective	7	41.3 - 142.5	2.5 - 8.6	87.4 - 302.0	55	75	72	1485	3274
	Maximum	8.6	41.1 - 138.8	2.5 - 8.3	87.2 - 294.0					
Water-cooled										
ZR 37VSD - 8.6 bar (e)	Minimum	4	42.0 - 102.3	2.5 - 6.1	89.0 - 216.9					
	Effective	7	40.8 - 101.2	2.4 - 6.1	86.5 - 214.4	37	50	70	1322	2914
	Maximum	8.6	40.7 - 94.9	2.4 - 5.7	86.3 - 201.1					
ZR 55VSD - 8.6 bar (e)	Minimum	4	42.4 - 140.6	2.5 - 8.4	89.9 - 297.8					
	Effective	7	41.3 - 139.4	2.5 - 8.4	87.4 - 295.4	55	75	70	1360	2998
	Maximum	8.6	41.1 - 135.0	2.5 - 8.1	87.2 - 286.0					

(1) Unit performance measured according to ISO 1217, Annex C, Edition 4 (2009)
 Reference conditions:
 - Relative humidity 0%
 - Absolute inlet pressure: 1 bar (14.5 psf)
 - Intake air temperature: 20°C, 68°F
 FAD is measured at the following working pressures:
 - 7.5 bar versions at 7 bar.
 - 8.6 bar versions at 8 bar.
 - 10 bar versions at 9.5 bar.
 For VSD at 7 bar

(2) A-weighted emission sound pressure level at the work station (LpWSAd).
 Measured according to ISO 2151: 2004 using ISO 9614/2 (sound intensity scanning method).
 The added correction factor is the total uncertainty value (KpAd) conform with the test code.

(3) Integrated dryers will increase the weight.

DIMENSIONS

Type	A		B		C	
	Length		Width		Height	
	mm	Inch	mm	Inch	mm	Inch
ZT 15-22	1700	69.3	1026	40.4	1621	63.8
ZR/ZT 30-45	2005	78.9	1026	40.4	1680	74.0
ZT 22VSD	2195	86.4	1026	40.4	1621	63.8
ZR/ZT 37-55VSD	2440	96.1	1026	40.4	1880	74.0

