

Press Release from the Industrial Air Division

For further information please contact:

Pieter van Wyk, Business Line Manager – Oil Free Air
+27 (0)11 821 9000 / 9144 (direct) / FAX: +27 11 388 5065
Email: Pieter.vanwyk@za.atlascopco.com

Prepared by: Sonia Laverick Laverick Media Communications
Tel: 011 027 8880 / Fax: 086 671 6836 lavmedia@iafrica.com / www.laverickmedia.co.za

For Immediate Release

29 Oct 2014

Atlas Copco ZS air blowers integrate the proven benefits of screw technology to reduce energy costs by 30%

Atlas Copco Compressor Technique's low-pressure ZS and ZS+ VSD air blower range with twin screw design is based on the company's pioneered oil-free screw technology and sets a technological standard for energy efficiency in the low-pressure compressed air market.

Atlas Copco's ZS positive displacement blowers provide a continuous and reliable supply of 100% oil-free air, TÜV-certified according to ISO 8573-1 CLASS 0 (2010), offering customers the benefits of high efficiency, reliability, quiet operation (less than 80dB(A), high controllability, easy installation, low maintenance and long equipment life.

Low pressure compressed air is widely used for applications such as waste water aeration at treatment plants, dilute phase pneumatic conveying of dry powders, flue-gas desulphurisation of emission stacks, etc. "The blower market for small volume flows has been largely dominated by blower technology such as twin-lobe and Roots-type (typically used for early turbochargers in vehicles) which has not seen any major technical improvements over the past 50 years," according to Pieter van Wyk, Atlas Copco Business Line Manager, Oil-Free Air, Atlas Copco Compressor Technique.

2/...Atlas Copco ZS Blowers

Atlas Copco Industrial Air Division

Postal address:

P O Box 14110
Witfield
1467
Gauteng
South Africa

Visitors address:

Innes Road
Jet Park
1459 Gauteng
South Africa

Reg No.: 1911/003838/07

Phone: + 27 (0)11 821-9000
Fax: + 27 (0)11 821-9202
+ 27 (0)11 821-9246

2/...Atlas Copco ZS Blowers

Recognising a market need, Atlas Copco developed an air blower solution based on its oil-free screw technology which uses internal compression instead of external compression, a technology which Van Wyk says is far superior to any other traditional blower technology. “This development enables us to offer the market an alternative low-pressure blower which runs at a similar duty to traditional lobe-technology units, but includes all of the features and benefits associated with modern screw compressors.”

The ZS range integrates the proven benefits of screw technology and will cut energy costs by an average of 30% when compared twin-lobe and Root-type blowers. Although the ZS blower does not represent the lowest capital cost solution on the market, these significant energy cost savings associated with the efficiency of a screw compressor lowers the lifecycle costs substantially. Van Wyk points out that the energy savings alone make up for the initial purchase cost and will realise quick return on investment. “Over a five year period, 80% of the total costs of a 160kW blower, will be down to energy, while the remaining 20% will be equally split between the initial capital cost and the ongoing maintenance costs.”

“Screw compressors are not generally associated with the most efficient technology, but when it comes to the 1 000-8 000 cc/h flow range, our screw technology without any doubt offers the best efficiency,” continues Van Wyk. “The ZS+ oil-free Variable Speed Drive (VSD) (22-355 kW, 30-475 hp) air blower range takes the two key prerequisites of reliability and energy efficiency to another level.”

The ZS+ VSD is supplied as a state-of-the-art, ready-to-run package with completely integrated VSD convertor and proven Elektronikon® controller. “Our premium solution also comes with its own on-board PLC to precisely control the unit’s volumetric flow and discharge pressure. It is also fully compatible, via Modbus or Profibus, to a company’s SCADA system in a plant room, enabling a customer to very quickly get a complete picture of what his compressors are doing.” 3/...Atlas Copco ZS Blowers

3/...Atlas Copco ZS Blowers

Continuous monitoring is directly associated with efficiency as better control and visibility helps to build efficiency across the whole process in a plant. “Add to this a proactive maintenance regime, component reliability is further improved and equipment life span is extended with a direct and positive impact on uptime.”

The 100% oil-free air delivery of the ZS blower is absolutely essential in many applications where end-product contamination must be avoided at all cost. In an oil injected compressor, the oil removes some of the heat when it is separated from the compressed air. But because the blowers run oil free, they run hot so they are fitted with an additional water-cooled jacket around the housing to extract heat from the air.

ZS blowers are manufactured to very high quality standards and are made to last. Screw technology has a much longer trouble-free running life. All ZS blowers are guaranteed for five years, but Van Wyk notes that the average lifespan is between seven and nine years. “As only bearings and seals will wear, only preventative maintenance is needed over an approximate five year period,” reveals Van Wyk.

Excellent component accessibility further enhances maintenance and extends service intervals in the ZS blower range. “And in the event that a seal does go, the design prevents any oil from mixing with the air. The oil is trapped in a redundant chamber and vented to the atmosphere to prevent contamination via the screws. A Roots-type blower won’t last much more than a quarter of that time; the lobes on the Roots blowers are usually treated as consumables. They can be refurbished but they are usually replaced like bearings or filters.”

Atlas Copco, continuous to invest significantly in R&D as part of its commitment to constantly develop technology such as the ZS blower range that delivers quality, reliable, cost effective air solutions so that customers can reap all the benefits associated with sustainable productivity. /Ends

4/...Atlas Copco ZS Blowers

4/...Atlas Copco ZS Blowers

Atlas Copco is a world-leading provider of sustainable productivity solutions. The Group serves customers with innovative compressors, vacuum solutions and air treatment systems, construction and mining equipment, power tools and assembly systems. Atlas Copco develops products and service focused on productivity, energy efficiency, safety and ergonomics. The company was founded in 1873, is based in Stockholm, Sweden, and has a global reach spanning more than 180 countries. In 2013, Atlas Copco had revenues of BSEK 84 (BEUR 9.7) and more than 40 000 employees. Learn more at www.atlascopco.com.

***Industrial Air is a division** within Atlas Copco's Compressor Technique business area. It develops, manufactures and markets oil-injected and oil-free air compressors, vacuum pumps, gas generators, air treatment solutions and compressor controls and monitoring under several brands. In addition to serving a wide variety of industries, dedicated solutions are also available for marine, railway and oil and gas customers. The division's focus and main drive is to further improve its customers' productivity. The divisional headquarters and main production center are located in Antwerp, Belgium.*

Atlas Copco South Africa

Atlas Copco Industrial Air Division
P O Box 14110 Wiltfield
Boksburg, South Africa 1467

Visitors address:
Innes Road
Jet Park
1459
Gauteng
South Africa

Telephone: +27 11 821 9000
Telefax: +27 11 821 9106
www.atlascopco.com www.atlascopco.co.za