

HOWDEN AFRICA

FOCUSED YET DIVERSE





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Howden Africa is a market driven, customer orientated company: its main business activities are the design, manufacture and marketing of air and gas handling solutions to a wide range of industries

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Compressor plant for a Howden thermal ice storage system

Howden Africa was established in Johannesburg in 1952, to supply fans for the mining and power generation industries, just under a century after the Scottish engineer and inventor James Howden set up the parent company in Glasgow. Howden was an innovator par excellence, but his most successful invention was a forced draught system that dramatically improved the performance of steam boilers.

Today Howden and its many subsidiaries have a long history of innovation in the air and gas handling field. It has grown to become a worldwide organisation with over 4,200 employees and companies in 17 countries. Its equipment can be found in virtually every industry, but particularly in those such as power generation, petrochemicals, mining, steelmaking and cement manufacture, where the most arduous air and gas handling duties are to be found.

So Howden has been a major engineering force in Africa for over 60 years – well over in fact, since as early as 1925, Howden companies were supplying main surface fans to South African, Zimbabwean and Zambian mines. In early 2012, the Howden Global holding company Charter International was acquired by the global manufacturing group Colfax Corporation of the United States. Though the customers probably did not detect any immediate change in the service they receive, the synergies with Colfax’s existing fluid handling capabilities will help both

companies to focus on supplying a range of market-leading products to applications where performance and reliability are paramount.

The Howden business units located in Africa are Howden Power, Howden Fan Equipment, Howden Projects and Donkin Fans. What sets Howden Africa apart from its competitors is that many of the technologies used in these industries, including mine ventilation and cooling, were first conceptualised by Howden itself. The business units are supported by two world-class manufacturing centres designed to service their particular needs, both located in South Africa. The Johannesburg operation handles a range of large scale engineered plant and products, including the design and fabrication of turnkey projects. It manufactures equipment including fans, heat exchangers, furnaces and cooling systems, gas cleaning solutions and dust scrubbers.

The Port Elizabeth centre is responsible for the design and manufacture of the comprehensive range of Donkin pre-engineered fans and accessories. Howden customers thus have the benefits of a personal service and a presence in Africa with all the additional advantages of access to an international network of world-class technological and engineering skill. Its involvement in the past development of Africa’s industrial infrastructure is in this way matched by its commitment to the future.

Howden Power has supplied virtually all the boiler Forced Draught (FD), Induced Draught (ID) and Primary Air (PA) fans for

1952

 The year Howden Africa was established



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 - All Silencers for FD- Fans 8000 x 8500 x 5050 mm and for the PA – Fans 2000 x 2900 x 1500 mm
- **Mines (via Howden Fan Equipment)**
 - Ø 5673 x Ø 7172 x 2800 H conical Silencer, Zondagfontein Mine, South Africa
 - Conical Silencer Ø 4163 x Ø 5000 x 4000 lg. Paardekraal Mine, South Africa

- **Mines (via Actom - ex Alstom/ABB-Flakt)**
 - Ø 6300 x Ø 6829 x 1500 high conical Silencers, Thubelisha Mine, South Africa
 - Ø 6600 x Ø 7258 x 2500 high Conical Silencers for Shondoni Mine, South Africa
 - Ø 6600 x Ø 7258 x 2500 high Conical Silencers for Impumelelo Mine, South Africa

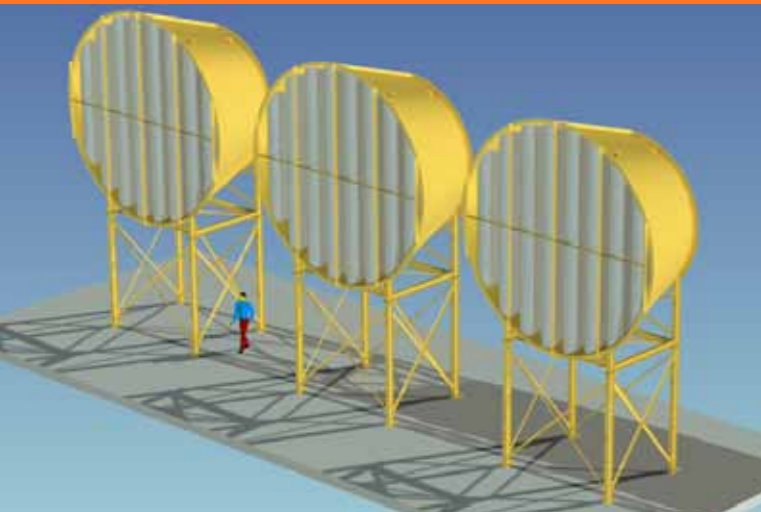
Mines (directly)

- Anglo – Gold
- Ø 4310 x Ø 6625 x 3000 long Inlet Silencers for Bulk Air Cooling Towers at Anglogold-Ashanti Moab Khotsong Mine, South Africa.

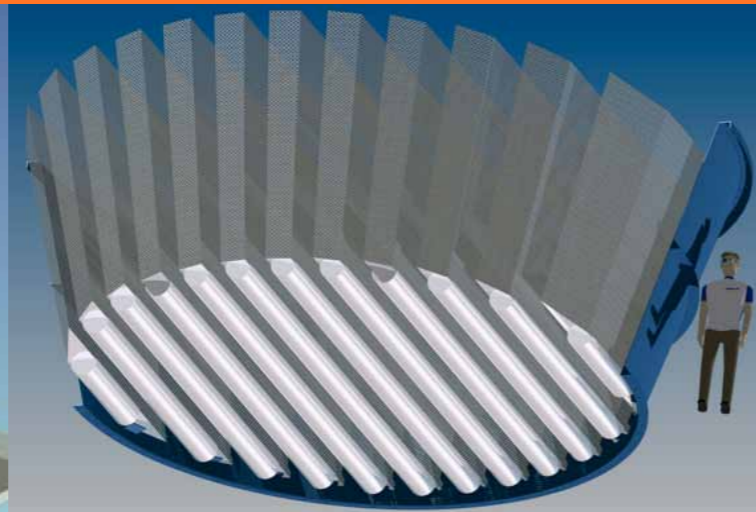
De Beers

- Large Blow-off Silencers for Main Compressor House at Cullinan Diamond Mine, South Africa.

INTERNATIONAL SOUND CONTROL HAS THE GRIPS ON NOISE CONTROL TECHNOLOGY



ANGLOGOLD ASHANTI - MOAB KHOTSONG GOLDMINE - 3 off Ø 4310 x Ø 6225 x 3000 LG. CONICAL EVASE TYPE SILENCERS FOR BULK AIR COOLING TOWERS



CONICAL EVASE TYPE SILENCER, Ø 7172 / Ø 5674 x 2800 H FOR HOWDEN FAN EQUIPMENT / ZONDAGFONTEIN MINE

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all of Eskom’s fossil-fired fleet of 13 power stations dating back to the 1960s. However as Africa’s leading supplier of boiler fan and air pre-heater technology it also supplies, petrochemical, sugar, paper and many other industries. It maintains a comprehensive inventory of parts and detailed records of every major installation. Additionally, it frequently finds a way to make considerable medium and long-term savings by refitting older plants with up-to-date fan and pre-heater equipment that offers far greater efficiency. It is happy to provide costed proposals for



any installation, whether or not it currently uses Howden equipment, to investigate the potential advantages of a partial or total refit.”

Africa’s deep mines represent some of the most challenging and demanding situations in the world. Howden built its reputation by providing solutions for engineered systems in harsh environments and has taken

the demands of deep mine ventilation in gold mining, where excavations often extend to depths of thousands of metres, in its stride. The quality and performance of equipment such as underground booster

INTERNOISE (PTY) LTD



Company owner and MD, Heinz J. Beinroth (Dipl.-Ing & Dipl. Wirtsch.-Ing), has more than 25 years experience in the Noise Control Industry. Heinz worked for 15 years with G+H Montage, largest insulation & noise control company in Germany with some 5500 employees (Head of Export Division). A further 7.5 years was spent at Willich, the second largest insulation and noise control company in Germany where he

held the position as Area Manager for South and Southern Africa. In 1995, Willich set up their South African Division and in 1999 the Willich Division was taken over by H.J. Beinroth and the name changed to Internoise (Pty) Ltd. t/a International Sound Control & Insulation. Over the last 25 years they have been involved in many major noise control projects in the USA, India, UK, Indonesia, Malaysia, U.A.Emirates and Germany. Their South African projects include Kendal, Letabo, Matimba, Majuba (Power Stations), Saldanha Steel, Sasol 2 and many others.

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and surface ventilation units has helped to introduce Howden products into other facets of mining such as dust scrubbing and temperature control, designing and manufacturing a range of process compressors to cool deep-level gold mines.

The technologies offered by Howden to the mining sector are changing. South African mines are getting deeper, and conventional air cooling methods using surface chillers and blowers

are becoming inadequate and energy-inefficient, making it necessary to use hard ice plants to cool underground air. At 1,500 metres underground, rock surfaces reach 57 degrees, and hard ice plants provide an economical method of cooling.

The acquisition of Donkin Manufacturing in 1988 strengthened Howden's position in medium and smaller fans that can shift up to 13,000 cubic metres per hour. The company had built up a considerable reputation since its foundation in 1956. Donkin has a modern, comprehensively-equipped manufacturing facility with full performance and noise level testing capabilities in Port Elizabeth, and sales offices in Johannesburg, Cape

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Geoffrey Chingwaru

“HOWDEN HAS BEEN A MAJOR ENGINEERING FORCE IN AFRICA FOR OVER 60 YEARS”

Town and Durban. Donkin Fans supplied several different fan types for installation in the new soccer stadiums constructed for the 2010 World Cup, for example the Nelson Mandela Bay Stadium in Port Elizabeth. And it doesn't just supply the local market, having built up a considerable export business, including the recent supply of 500 HVAC ventilation fans, comprising both roof units and axial flow fans, to the prestigious Old Town Commercial Island project in Dubai.

The diverse capabilities of the business come together in Howden Projects, which provides cost effective turnkey solutions to a variety of industries including mining, manufacturing and power generation. Wherever air cleaning is an issue, a system can be designed to keep particulate levels within statutory levels. Howden can design and supply single units, to integrate with and improve a customer's existing plant, or become totally involved with the development of new projects from feasibility studies and consultancy right through to a full design, manufacturing, installation, testing and commissioning package with the highest standards of engineering and quality control throughout. A good example is its work at Eskom's Majuba power station



Howden main surface fan

in Mpumalanga, which boasts the world's largest fabric filter plant - designed, built and installed by Howden Gas Cleaning.

Howden Africa has always been a great place to work and to acquire engineering skills. Being part of a global group allows

the expertise and experience gained in one location to be applied in another and is an essential part of the approach that has kept Howden at the forefront of technology, and it has long recognised the importance of allowing individual engineers to develop their skills and knowledge to the full.

In 2008, the company took the groundbreaking step of adding a formal dimension to its training capabilities by instituting Howden Academy, a residential training course in which engineers from all Howden business units are brought together for an introduction to the technologies and business

practices it employs and the industries in which it operates. This has the additional benefit of reinforcing the spirit of friendship, co-operation and shared knowledge that has always distinguished the company and is exemplified in South Africa by its support for broad-based black economic empowerment (BBBEE) as the best route to empowerment for all the country's communities. **BE**

“SOUTH AFRICAN MINES ARE GETTING DEEPER, AND CONVENTIONAL AIR COOLING METHODS ARE BECOMING INADEQUATE”

For more information about Howden Africa visit: www.howden.com



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