

# trident<sup>®</sup>

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## INDUSTRIAL AIR AND GAS SOLUTIONS

 **CompAir** **Reavell** <sup>®</sup>hydrovane **Quantima**<sup>®</sup> **GD** GARDNER DENVER **BellissMorcom**



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## Introduction

Established in 1986, Trident Agency Ltd. is the only specialized company in Bangladesh marketing, servicing and supplying AIR compressors, high pressure GAS compressors, NITROGEN generation plants, FILTRATION systems, VACUUMS and all necessary ANCILLARIES. We ensure high quality performance and low operating costs for a broad range of applications.



Highly Specialized Firm

250 Member Workforce

Skilled Technical Experts

Trained Service Engineers

Clockwork Maintenance

Emergency Response

Years of Experience and Expertise

Solid Goodwill and Market Reputation

## Strengths

Tier 1 Distributors

Representing Industry Leaders

High Quality, Durable Machinery

Backup support and Warranty

Numerous awards and merits

Guaranteed Peace of Mind



## Product Range



Oil Free Screw Compressors

Oil-less Screw Compressors

Lubricated Screw Compressors

High Volume Oil Free Turbo Compressors

PET Bottling Plant Compressors

Rotary Vane Compressors

Engine Starting Compressors

Reciprocating Oil Free Compressors

Breathing Air and Marine Compressors

High Pressure CNG Compressors

On-site NITROGEN Generation Plants

Liquid Ring Vacuum Pumps

Portable Air Compressors





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## Our Services

Plant Design, Installation and Commissioning

Requirement Survey and Consultation

Operation and Maintenance Services

Round the Clock Parts and Technical Support

Compressed Air System Auditing

Energy Savings and Cost Reduction



### Value Added Services

- Professional Air Audit
- Performance Reporting
- Leak Detection

### Leading Customer Support

- Custom Engineered Solutions
- Local Service Centers
- Genuine Parts and Lubricants



## Manpower Strength

Trident employs nearly 250 service engineers to look after the equipment we supply. Our Highly skilled team consists of factory trained experts from the UK and Germany. Our maintenance team works round the clock to ensure your peace of mind. Combining the latest technology and tools with our passion to commitment, we have unparalleled after sales service and support in our field.



# Air purity that meets the most stringent hygienic standards

Get the ultimate air quality:  
oil-free & silicone free!

You may have no choice over the quality of the compressed air used in your process – it just has to be absolutely contaminant free.

For this reason, CompAir's D-range offers the highest standard of air purity and has been

ISO CLASS:0  
**zero**  
PLUS SILICONE FREE

ISO 8573-1 (2010)

certified ISO 8573-1 Class Zero (2010) and silicone free.

No matter what industrial sector, there is a growing demand for higher quality, oil-free compressed air that meets the stringent quality standards.

Whether it is needed for food and beverage or chemicals production, supply of pharmaceuticals, electronics or sensitive components, manufacturers will no longer accept the risk of product or equipment contamination.



- ✓ Premium efficiency two stage airend design
- ✓ High quality IE 3 electric motor
- ✓ Efficient motor cooling
- ✓ High ambient temperatures of up to 45°C
- ✓ Delcos XL touch screen controller with enhanced monitoring
- ✓ Closed cooling water circuit for airend cooling



# Regulated speed technology offers maximum efficiency, cuts energy **AND** saves money

## Perfect response to your individual air demand

Regulated speed compressors from CompAir can efficiently and reliably handle the varying air demand. The right regulated speed compressor in the right application delivers significant energy savings and a stable air supply at constant pressure.

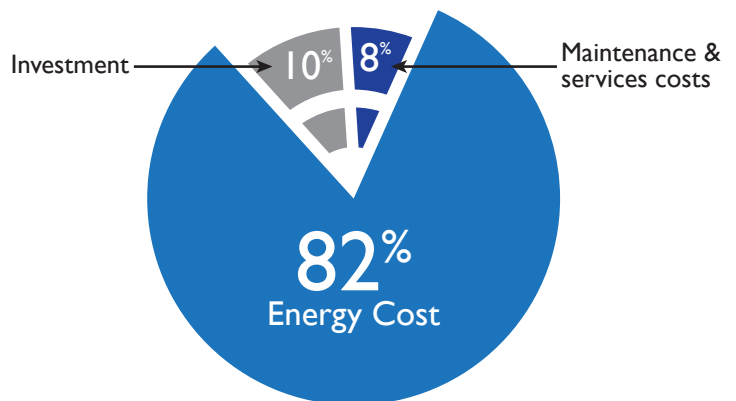
Maximum efficiency at any level of demand cuts energy costs and **saves money**.

- Excellent efficiency
- High reliability
- Low cost of ownership



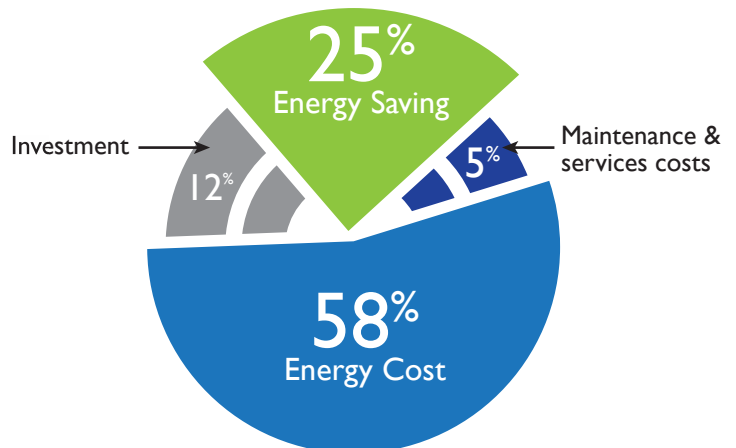
## Reduce the cost of ownership and minimize your energy consumption

The largest costs component of a compressor during its lifetime is the power required to run it.



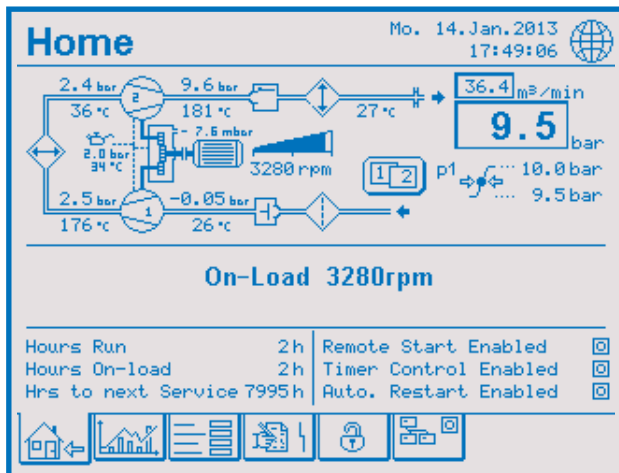
A typical fixed speed compressor operating at 70% load.

Using a regulated speed compressor can easily save 25% energy required to do the job and no more.



A variable speed compressor at 70% load.

# Perfect control – Perfect performance

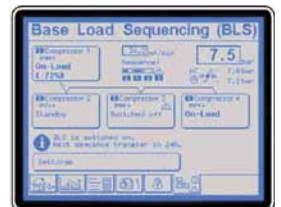


## Delcos XL touch-screen controller

The multilingual Delcos XL control system ensures reliable operation and protects your investment by continuously monitoring the operational parameters, which is essential for reducing cost of ownership.

- Precise monitoring for exceptional operational reliability
  - Ambient pressure and temperature
  - Inlet and outlet pressure and temperature at both stages
  - Network pressure and temperature
  - Oil / water pressure and temperature
  - Oil / water level
  - ... and many more
- High resolution, easy-to-use touch-screen panel
- User-friendly clear menu structure
- Integrated SD card for in-depth analysis of monitored machine parameters

- Trend diagrams for
  - Network pressure
  - Motor speed (regulated speed models)
  - On load hours / total running hours and average volume flow
  - Weekly average volume flow
- Optional base load sequencing





# Belliss & Morcom

Oil Free Compressors for PET Bottle Blowing

## What makes Belliss & Morcom unique?

Low Power Consumption	Use of energy efficient equipment ensuring lower operating costs
Small Compact Footprint	Reduction in space requirements leads to cost savings for floor space
Direct Drive Shaftless Motor	Reduces power absorbed and eliminates any belt drive losses
Simple Installation	Compact skid packages thus reducing installation costs
Balanced Operation	Dynamically balanced removing the need for any special foundations
Single Compressor Block	One single 3 stage block resulting in the most efficient air solution
Half Load Capability	Reduced power at partial load conditions for the WH range
Low Maintenance	Only one major annual service required
Robust Construction	Ensures continuous 24/7 operation maintaining production output
High Operating Efficiency	Results in maximum compressor and plant performance
High Quality Oil Free Air	Guaranteed clean dry air to ISO 8573.1 Class 1.2.4
Single Turnkey Partners	A single source for both PET blowing and utility air requirements
Global Supply & Local Support	Dedicated sales and service centres protect your investments

## Our Enhanced Products are Designed to Reduce Energy Consumption and Improve Compressor Performance.

### AirPET

#### AirPET Control Systems

The AirPET compressor control system is designed to give a better and more accurate overall control of the air pressure on a multi-compressor system than the conventional methods.

#### Air Recovery

The Air Recovery System is designed to accommodate a returned pressure from the Blow Moulding machines that can be 'recycled' back through the compressor.

- Reduction in compressor energy consumption
- Easily installed to existing installation
- Can be used to supplement LP air requirements

#### Variable Speed Drives

- Reduced energy costs
- Variable capacity control – 30% to 100%
- Reduced motor starting current (within the FLC of the motor)
- Improved efficiency and power factor
- Extended component life
- Accurate and repeatable pressure control

#### Water Cooled Motor

It is widely accepted within industry today that the running of motors and drives account for a large percentage of energy usage. Using the right energy efficient motors will help lower your carbon footprint as well as your energy bills. With this in mind Belliss & Morcom developed a unique water cooled shaftless motor, which makes our compressor systems the most energy efficient on the market.

#### Energy Audits

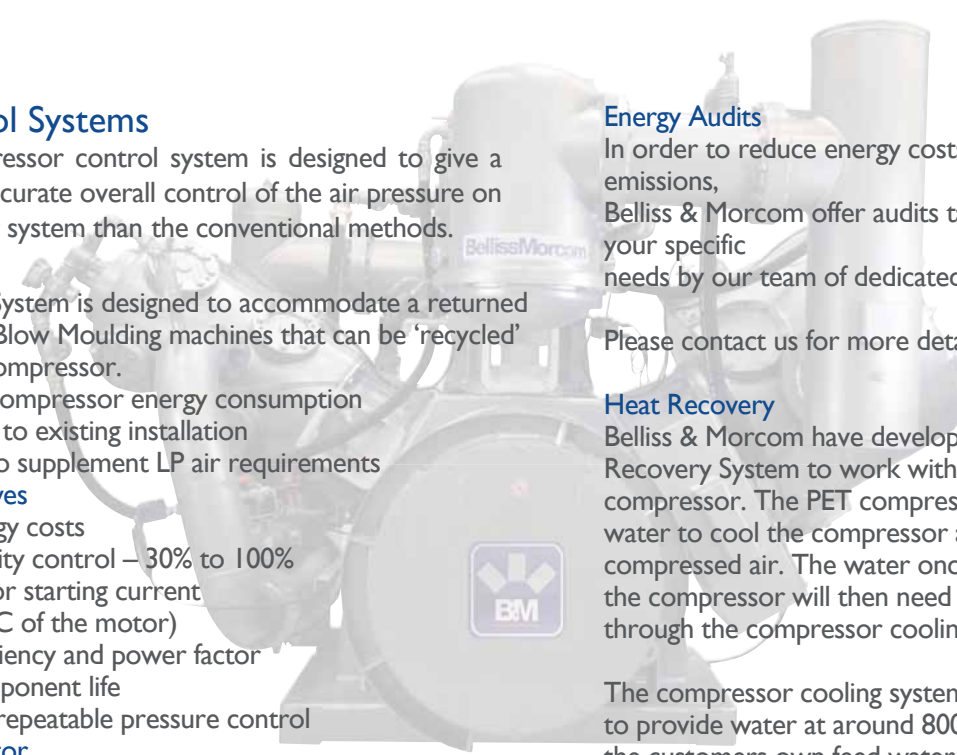
In order to reduce energy costs and CO2 emissions, Belliss & Morcom offer audits tailored to suit your specific needs by our team of dedicated experts.

Please contact us for more details.

#### Heat Recovery

Belliss & Morcom have developed a Heat Recovery System to work with the PET compressor. The PET compressors use cooling water to cool the compressor and the compressed air. The water once heated through the compressor will then need to be cooled through the compressor cooling tower.

The compressor cooling system can be modified to provide water at around 80°C to pre-heat the customer's own feed water to their heating systems (water or steam) and thus reduce their energy load through the water / steam heater. Savings are typically 22-30% of the compressor motor rating kW. Therefore a WH40 compressor with a 400kW would provide energy reduction equivalent to 90kW.



# Compressors and Ancillaries



Compressor series	Pressure range (bar)	FAD (m <sup>3</sup> /min)	Motor output (kW)
L series Oil lubricated screw compressors	5 - 13	0.2 - 41.0	2.2 - 250
D series <b>OilFREE</b> Oil-free screw compressors	4 - 10	7.0 - 42.6	75 - 300
DH series <b>OilFREE</b> Oil-free water-injected screw compressors	5 - 10	2.3 - 18.6	15 - 110
Quantima <b>OilFREE</b> Oil-free centrifugal compressors	3 - 8	26.7 - 70.9	150 - 300

## Compressed Air Treatment and Accessories

- Heat recovery
- Water separators
- Compressed air filters
- Refrigerant dryers
- Adsorption dryers
- Nitrogen generators
- Condensate drains
- Sequencers



# CompAir Downstream Equipments

## Compressed air purification

A modern production system and process demands increasing levels of air quality. A CompAir compressed air system utilising the latest technology provides an energy efficient solution at lowest life cycle costs.

## Nitrogen Generator

Designed to achieve maximum efficiency and gas quality.



## Water Cyclone Separator X Series

Designed for efficient removal of bulk liquid contamination from compressed air.



## Heatless Desiccant Dryers

Series A\_XS and A\_TX.

## Heat Regenerative Desiccant Dryers

Series A\_TV and A\_RS.



## Compressed Air Filter CF Series

Efficient design for water, dust and particle removal.

## Condensate Drain Bekomat System

To drain compressed air condensate without loss of compressed air.



## SmartAir Lite & SmartAir Master Multi Compressor Controllers

Sequencers for up to 12 units.



## Compressed Air Refrigerant Dryer

CompAir offer a full range of energy efficient and environmentally friendly stand alone refrigerant dryers.



## Our Clients

### Pharmaceuticals



### Tobacco



BRITISH AMERICAN TOBACCO



ABUL KHAIR GROUP



BATB

## Engineering



ASHUGANJ POWER STATION



**UTTARA MOTORS LIMITED**  
(An Enterprise of Uttara Group of Companies)



**SHUN SHING GROUP**  
順承集團



## Food & Beverages



PEPSI

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## Fashion & Textiles



THERMAX GROUP LTD.



ENVOY TEXTILES



BIMAN HANGER

## Others



BCIC



BJMC



Unilever

## Recent Trident Achievements

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Sold the first CompAir branded Nitrogen Generators in ASIA, with 3 in place so far.



Sold 4 QUANTIMA Centrifugal Compressors, the first in Bangladesh.



Sold the first 2 Belliss & Morcom PET bottling compressors in Bangladesh, PEPSICO's first time.



Sold 2 Units of Vacuum pumps for GD NASH.



Over 100 Reavell CNG machines in place.



Over 25 years in Continuous operation



Awarded Asia's No. 1 distributor in 2011.

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