

ELECTRONIC DRIVES, CONTROLS & COMPRESSORS



QUALITY & SERVICE ARE
NOT EXPENSIVE...

...THEY ARE PRICELESS



ELECTRONIC DRIVES & CONTROLS

Authorized
value
provider





ELECTRONIC DRIVES & CONTROLS

**SCOTLAND & NORTH EAST ENGLAND'S
ABB AUTHORISED VALUE PROVIDER FOR
VARIABLE SPEED DRIVES, MOTORS AND
CONTROL GEAR**

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COMPANY OVERVIEW

Founded in 1996, EDC remains a family-owned and managed business which provides electrical engineering products and support to a range of industries. We undertake:

- VSD SUPPLY / COMMISSIONING
- VSD REPAIRS / INSTALLATION
- CUSTOMISED CABINETS
- TECHNICAL SUPPORT
- VARIABLE SPEED DRIVE TRAINING
- HIRE DRIVES
- DRIVECARE+
- PROJECT MANAGEMENT
- APPLICATION ENGINEERING
- VSD RETROFITS
- MOTORS: ATEX, IEC, WIMES
- CONTROL GEAR
- ENERGY & HARMONIC SURVEYS
- OFFSHORE WORK

**EDC SERVICE ENGINEERS: TRAINED
& CERTIFIED BY ABB**

EDC (SCOTLAND) LTD
45 KILPATRICK DR, ERSKINE,
RENFREWSHIRE, PA8 7AF
TEL: 0141 812 3222

EDC (NORTH EAST) LTD
UNIT 1 EASTERN AVENUE,
TVTE GATESHEAD, NE11 0ZJ
TEL: 0191 917 0200



ABB DRIVES SALES, SERVICE & SUPPORT IN NORTH EAST ENGLAND

EDC (North East) Ltd is an ABB Authorised value provider for drives in north east England. A sister company to EDC (Scotland) Ltd, it brings you all the benefits, drive expertise, stock availability and levels of service you would expect from an already successful ABB drives partner. Carrying ABB authorised service suitcases - something only ABB AVPs have access to - our customers can be assured that we have spares and ABB-trained engineers on hand to repair your drive. Below are EDC (NE) Ltd service suitcases & demonstration cases (for training).



Right: Peter Myatt, ABB's Channel Manager for drives & EDC MD, Nick Brown, attending the opening of our new service centre in Gateshead.



AUTHORISED DISTRIBUTORS FOR ABB INVERTERS IN SCOTLAND & THE NORTH EAST

SERVICE CONTRACTS

With over 100 years' experience in the industry, few problems are 'new' to our engineers...

If your plant is down, you're losing money.

Trust EDC to get you back up and running with minimal downtime. With Drivecare's preventative maintenance and scheduled service intervals your drive will be serviced and consumables replaced allowing optimal performance and maximum energy savings.

During services our engineers ensure connections are tight, drives ventilated and free from dust and moisture ingress. Parameters are checked and the drive is given an all-round functionality check. We believe DriveCare is the best method of ensuring you achieve the best reliability throughout the full lifespan of your equipment. It's the best decision you'll ever make for your plant.

DRIVECARE+ BENEFITS

WHEN A BREAKDOWN IS AN EMERGENCY DRIVECARE+ DELIVERS:

- Guaranteed response times
- Engineers on call
- Telephone support whenever/wherever
- Emergency response
- Critical spares & service suitcases held in stock
- 'Pre-programmed' VSDs held on or off site for same day delivery

DRIVECARE+ THE ULTIMATE DRIVE SERVICE & MAINTENANCE PACKAGE. THE BENEFITS:

- Reduce risk
- Avoid downtime on critical plant
- Take control of your OPEX budget



The EDC engineering team, highly valued for their problem-solving approach

There's a reason EDC is an ABB (Scottish & North East) Authorised value provider for inverters. It starts with our experience and ends with our customer service, but in between, there's a lot more.

BREAKDOWN

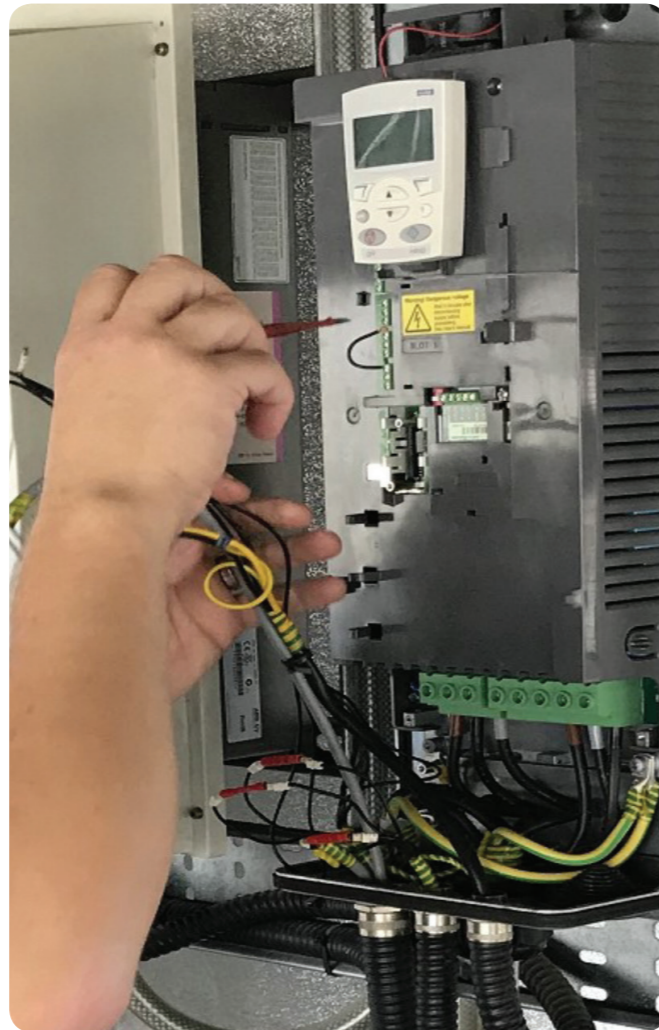
Who do you turn to? Tried, trusted and trained by ABB, all our work is fully EMC compliant and undertaken by industry qualified engineers. Put EDC on your speed dial for drive emergencies. We hold spares, service suitcases & a huge range of drives in stock.

REPAIRS

In-house and on-site. We have dedicated repair workshops & test bays in Erskine & Gateshead. Service suitcases are also held in our branches in Scotland & north east England.

INSTALLATION & COMMISSIONING

Drives can be installed and cabled on site. Our engineers can then set them to run as per your control philosophy, setting & storing the parameters.



MOTORS

- DRIVE & MOTOR PACKAGES
- IE4 & SynRM MOTORS
- PROCESS PERFORMANCE
- GENERAL PERFORMANCE
- HAZARDOUS AREA
- SMART SENSOR CONTROL

70% reduction in downtime, 30% extended lifetime and 10% lower energy usage - taking you to new levels of efficiency

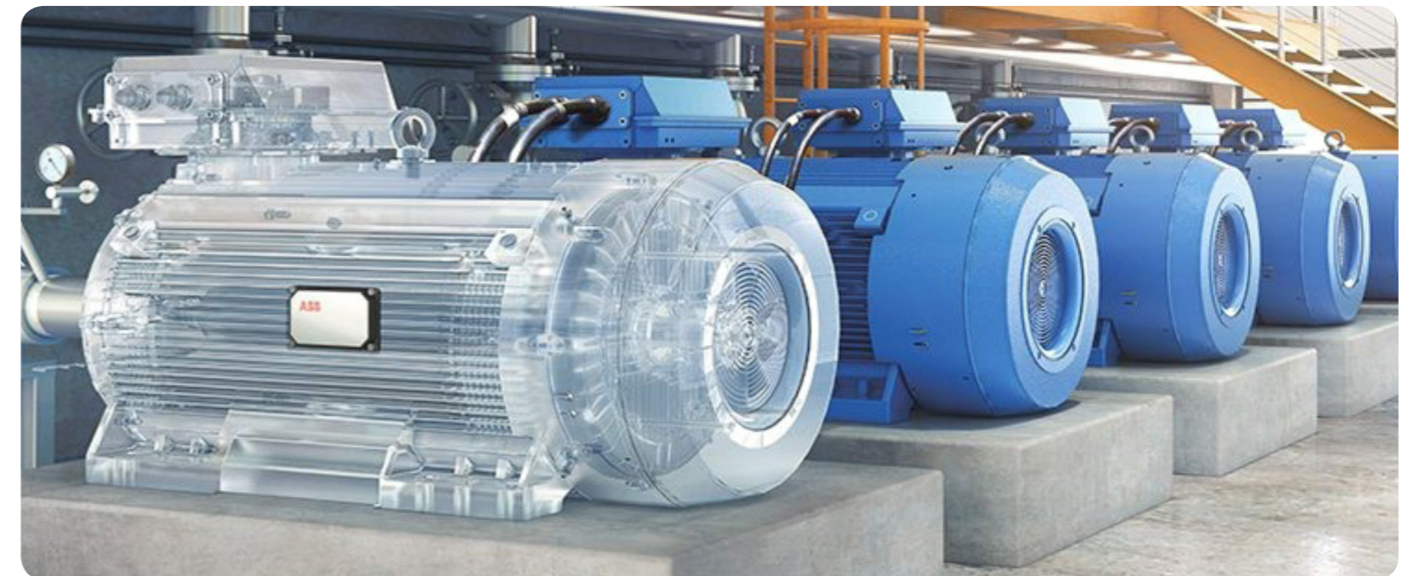
As an ABB Authorised value provider of motors, EDC can provide the sales, support and engineering expertise you would expect from a world-renowned supplier.

We can advise on the cost of ownership, the motor best suited to your application, energy efficiency savings and lifecycle costs, as well as state-of-the-art SynRM motors - built with no rotor windings (so power loss may be a thing of the past).



We can also introduce you to the latest in remote condition monitoring - via the ABB Ability™ Smart Sensor, a device which actively monitors variables in your motor's operation.

Mounted wirelessly and communicating via a secure server to your phone, it has proven results including: 70% reduction in downtime, 30% extended lifetime and 10% lower energy usage - taking you to new levels of energy efficiency.



Let EDC help drive your success

INVERTERS

As a Scottish and north east England ABB Authorised value provider (AVP) of drives, we carry an extensive range of ABB variable speed drives, up to 500kW.

Renowned for quality & longevity, ABB VSDs are the industry standard for motor control. At EDC we complement the intuitive programming of ABB drives with our technical expertise, customer service and problem-solving approach. Whether it's a 0.37kW single phase unit you require or something a few hundred kW larger; we know one size doesn't fit all - and stock accordingly.

And with a vast experience in VSDs our engineers are happy to discuss your requirements with you.



MICRO, GENERAL PURPOSE, INDUSTRIAL, INDUSTRY SPECIFIC & LEGACY DRIVES



ACS55 & ACS150 series (0.18kW—2.2kW) & (0.37kW—4kW) Micro Drives

ACS480 series (0.37kW—22kW) General Purpose Drives

ACS580 series (0.55kW—500kW) General Purpose Drives

ACH580 series (0.55kW—250kW) HVAC Industry Drives

ACQ580 series (0.75 kW—500kW) Water & Wastewater Drives

ACS880 series (0.55kW—4.2MW) Industrial Drives



WE CAN ASSIST YOU IN DRIVE SELECTION. PLEASE CALL FOR DETAILS

DRIVES
Sales, Support & Service
HVAC
Sales, Support & Service
MOTORS
Sales & Support



HIRE DRIVES

Don't allow an on-site drive failure to stop production

Both branches of EDC can ship and commission variable speed hire drives on a same-day basis, keeping your business and your production line running.

Drives up to 500kW are available (supplied with or without cable sets). Delivery and collection can be arranged, and, if required, drives can be fully installed/commissioned by our team of ABB-trained engineers.

BENEFITS OF HIRE DRIVES

- Provide an emergency replacement to keep your production line running
- Don't commit capital when a temporary hire drive may be more cost-effective
- Prove your energy savings before you purchase
- Allows you to try before you buy



BESPOKE DRIVE TRAINING COURSES FOR YOUR ENGINEERS ON-SITE OR AT OUR PREMISES

TRAINING

Your staff may need to sort minor problems or adjust a drive programme. Basic training in VSD operation & functionality allows them to do this. Full & half-day 'hands-on' courses are available.

BENEFITS OF TRAINING

- Less downtime/Fewer call-outs
- Better drive utilisation
- An engaged workforce





CONTROL GEAR

EDC IS AN AUTHORISED DISTRIBUTOR OF ABB CONTROL GEAR & BUSSMANN FUSES

Our range includes:

- CONTACTORS
- SOFTSTARTS
- OVERLOADS
- RELAYS
- SWITCH DISCONNECTORS
- POWER SUPPLIES
- SWITCH FUSES
- ISOLATORS
- OVERLOADS
- PUSHBUTTONS
- MCBS
- MCCBS
- ENCLOSURES
- FUSES
- ENCLOSED SWITCHES
- DIN RAIL PRODUCTS
- ACBS
- DOL STARTERS

Need an item urgently to replace an obsolete part? Unsure of your exact requirements? Our experts are happy to help and can advise on all aspects of control gear. With over 25 years' experience in ABB control gear they can recommend substitute parts which are readily available. Call us for a fast, friendly, competitive quote.



FUSES

As an official industrial distribution partner for Cooper Bussmann EDC not only holds a vast stock of fuses, we also offer the very best pricing on their circuit protection range including:

- HIGH SPEED FUSES
- FUSE DISCONNECTORS
- SQUARE BODY & CYLINDRICAL FUSES
- FUSE LINKS
- FUSE BLOCKS & HOLDERS

Best prices on ex-stock genuine, branded Cooper Bussmann fuses



TEXA FANS & FILTERS

TEXA is an industry leader in the manufacture of cooling products & thermal management for the electrical control panel and electronics industry.

With a reputation for reliability and quality its products are built to exacting, environmentally friendly standards. This means that their fans and filters are both durable & cost-effective. EDC stocks a full range of Texa fans and filters which can be shipped for next-day delivery. Easy to install and interchangeable with other fan & filter manufacturers' products the Texa range can ensure your enclosure is rated up to IP54 protection. With an industry-wide reputation, Texa is the perfect solution to the cooling requirements of your enclosures, regulating the internal 'climate' and prolonging the running hours of your installation.



HARMONIC SURVEYS

LOW HARMONIC DRIVES

Harmonic distortion is caused by non-linear loads such as variable speed drives and other rectifier technologies. These high harmonic currents can cause a wide range of problems, often disrupting business operations. Eliminating them means no more:

- INSULATION FAILURE
- OVERHEATING OF CONDUCTORS
- NUISANCE BREAKER TRIPPING
- RUPTURING OF FUSES
- VOLTAGE DISTORTION
- CIRCULATING CURRENTS FROM HARMONIC RESONANCE
- PREMATURE MALFUNCTIONING OF EQUIPMENT
- NON-COMPLIANCE WITH UTILITY REGULATIONS
- HIGH CARBON FOOTPRINT
- PRODUCTION LOSSES

Our surveys not only ensure you can comply with current regulations, they will advise you on your present level of distortion & what can be done to mitigate it. Our engineers will visit your site to fit the recording equipment. They will establish the point of common coupling and investigate any supply transformers. Normally, it takes a minimum of 7 days' recording to capture the data required.

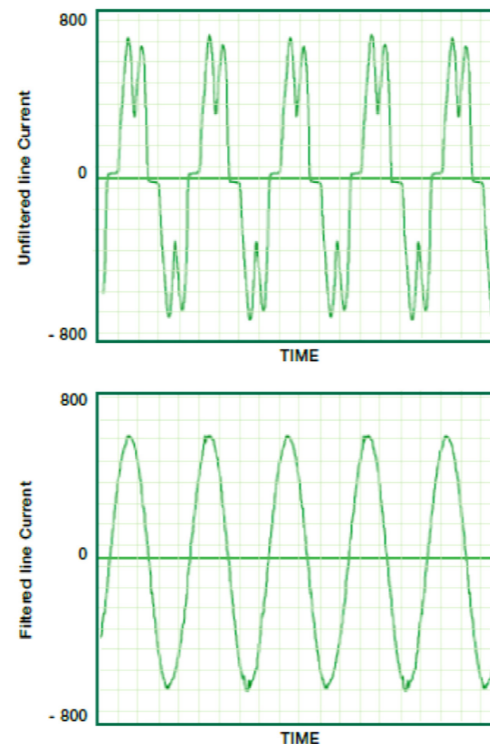
The engineer will then return to site to recover the equipment & data (total site time is often less than 4 hours). Your data will be analysed and a report issued - which will provide a solution to reduce your distortion. Contact us to arrange a survey or for information on ultra-low harmonic drives from ABB.

POWER QUALITY

POWER QUALITY OR POWER FACTOR: WE CAN IMPROVE IT

A decade of research has gone into the creation of ABB's active filters, making them a leading manufacturer of power quality solutions.

Poor power quality can be caused by: harmonic pollution, load imbalance or reactive power. It causes: production loss, equipment failure, reduced safety, non-compliance with regulations, reduced equipment lifetime and increased CO2 emissions. ABB's user-friendly active filters measure line current for each harmonic & reactive power component, comparing this to the target set by the customer. Any deviation is automatically eliminated.



ENERGY SURVEYS

HARNESS THE POWER OF YOUR PLANT

We will undertake a review of your system providing an in-depth report on how to reduce running costs. Find out if you have inappropriate setups, ineffective control, system obsolescence or artificial demands. An energy survey is one of the most cost-effective measures you can take; reducing emissions, energy costs and ecological impact. Contact us for a no-obligation survey. A typical executive summary is shown below.

Application	Running Costs	Annual Savings	Investment	Energy Saved	Payback Time	CO ₂ Saved
SV/C3	£12,827	£5,217	£7,096	115,931kWh	1y 4m	61 tonnes
SV/D1	£43,145	£17,548	£10,942	194,977kWh	7m	102 tonnes
SV/D2	£43,145	£17,548	£10,942	194,977kWh	7m	102 tonnes
SV/D3	£8,746	£3,558	£7,008	39,523kWh	1y 11m	21 tonnes
SV/D4	£12,827	£5,217	£7,096	57,966kWh	1y 4m	30 tonnes
SV/D5	£52,473	£21,341	£12,290	237,135kWh	7m	124 tonnes
SV/D6	£43,145	£17,548	£10,942	194,977kWh	7m	102 tonnes
SV/C4	£21,572	£8,774	£8,364	97,489kWh	11m	51 tonnes
TOTAL:	£237,880	£96,752	£74,680	1,132,974kWh	1y	595 tonnes
TOTAL PAYBACK (including ECA*):					7m	
TOTAL PAYBACK (including ECA* & CO₂ value):					6m 17d	

THERMAL IMAGING

THE PROBLEM:

- OVERLOADED CIRCUITS
- LOOSE CONNECTIONS
- MOTOR WINDING FAULTS
- PHASE IMBALANCES

THE SOLUTION: A non-invasive thermal imaging survey—allowing you to see 'hot spots' in your electrical system. Damaged parts, which are about to fail, often generate excessive heat. A thermal survey identifies weak links in your system before they cause power loss and failure.



See things in a different light with a thermal imaging survey from EDC

Patersons Quarries saved £17,000 per annum after our energy survey on their landfill site and won the prestigious ABB & Drives & Control's 'Energy Savings Award'.

DESCRIPTION:

The gas management compound involved four 45kW motors with star/delta starters to boost gas pressure to burn in the generators. Two 45kW motors ran as a set, boosting pressure to feed 5 generators. Without these motors there wouldn't be enough gas pressure to run the generators, so no profitable electricity production.

EDC conducted an energy appraisal on the booster fans & proposed drives to provide constant gas pressure to the engines & reduce parasitic energy consumption, enabling increased generation.

THE SOLUTION: Patersons decided to go ahead with the VSD option due to the following:

- Less mechanical stress on the motors and fans
- Process improvement through utilizing pressure transducers in closed loop control to maintain constant gas pressure to the engines
- Energy/Cost Saving of 99,684 kWh per year & higher gas plant availability.



Stevie McGown, gas plant engineering manager accepted the award from EDC's Duncan Cairney.



Dollar Pumping Station, Forth

Imagine supplying 1.34 billion litres of clean water to 2.46 million households and 150,000 businesses. Imagine the energy which goes into producing this precious resource and then delivering it to point of use. Then imagine the wastage caused by leaks. That's why Scottish Water, in conjunction with ABB drives, has used a predictive system for identifying—and rectifying—leaks. Since 2006 this system has seen leakages reduce by a half. Using data loggers, Scottish Water began tracking leaks through their extensive system to specific sites, monitoring the leakage expected to the actual burst rate. It was realised that sites with higher than expected burst rates were using direct-on-line (DOL) starting. Unlike inverters DOL starting causes shock loads when water is moved and suddenly stopped (water hammer). Surging back, the water hits a dead end, causing a shock to the network and stress to the pipes. This cycling between positive & negative pressure (pressure transients) can finally cause the pipes to rupture. The solution was for EDC to survey these sites, and change over the DOL starters or softstarts (which were being used in some instances) to inverters: the

aim being to optimise pump pressure & maintain a calm network. Dollar pumping station in Forth has been a spectacular example of the success of this system. Moving from DOL to ABB ACQ580 drives the site has seen a reduction in leaks from 9 in 2016... to none, post-drive installation. In addition, the maximum pressure was reduced from 140 meters head to 83. So efficient have ABB drives been that Scottish Water has saved 20 million litres a day (from 2015 figures) —proving that not making waves is sometimes the best course of action.





ELECTRONIC DRIVES & CONTROLS



AIR COMPRESSORS

SCOTLAND & NORTH EAST ENGLAND'S
AUTHORISED SCR COMP DISTRIBUTOR



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COMPRESSORS/BLOWERS

INTEGRATION SPECIALISTS

Your SCR Comp distributor for Scotland & north east England, EDC Air Compressors has brought state-of-the-art compressor engineering to the UK market at affordable prices ('Quality without Cost' is the motto of SCR), backed up with 50 years' of experience.



COMPRESSOR / BLOWER INSTALLATION & COMMISSIONING

From delivering your new air compressor we can install and commission it, retrofitting with VSDs if required.

SERVICE CONTRACTS / OVERHAULS

Our experienced, industry-trained engineers are able to service and repair all makes of air compressors, air dryers and ancillary equipment quickly and with the minimum of disruption.

ENERGY SURVEYS

Savings made in your compressed air system will have a significant impact on both your company's running costs and the environment. Do you know how much your compressed air is costing?

LEAK DETECTION

Ultrasonic detection can stop you losing money as well as air.

COMPRESSOR / BLOWER HIRE

A new compressed air system servicing the needs of your business: FairAir - is the ideal solution. Pay for air as you use it.

MANAGEMENT SYSTEMS

Seamlessly integrates with your compressed air system. It monitors, controls, optimises and manages your system requirements.

VSD RETROFITS

EDC specialise in retrofitting drives to existing compressed air systems.



SERVICE CONTRACTS

Our Aim: your uninterrupted supply and efficient operation

With 50 years' experience in compressors, we not only offer the best prices in the industry, we also have unrivalled field service experience in fault diagnostics and maintaining all air compressor systems; a knowledge base gained through practical, hands-on fault-finding and servicing of air compressors in a multitude of applications. Off-the-shelf parts mean that in an emergency you can be back up and running with minimal downtime.



Above: A Hydrovane overhaul

EXTEND THE LIFE CYCLE OF YOUR BLOWER OR COMPRESSED AIR SYSTEM AND OPTIMISE PRODUCTIVITY



Typically, air compressors should be serviced every 2000 hours: air intakes should be checked, leakage detection and flow testing carried out, and the operating parameters of the unit logged.

Regular servicing not only optimises your compressor system - keeping it running smoothly - it can also reduce your energy consumption, thereby lowering the overall costs of your compressed air. Servicing means small, but important issues can be picked up before they begin to cause very real and very costly problems to your whole compressed air system.

Contact us for details of Aircare. Our experienced, industry-trained engineers can service & repair all makes of air compressors, air dryers & ancillary equipment.

FAIRAIR

CARING FOR YOUR COMPRESSOR; KEEPING COSTS DOWN

Imagine buying compressed air as a utility? No upfront costs. Just pay-as-you-go, giving you total flexibility to vary your usage. Benefits to your business include:

- Paying only for the actual air you use frees up capital, allowing your business to expand
- No hidden costs - ever! Installation, commissioning, call-outs, repairs, maintenance? It's all taken care of
- Having an expert on hand to advise when needed
- Remote monitoring of your compressor if required
- Significantly reduced start up costs
- A new compressor, which will be less costly to run

FAIRAIR:
PAY FOR THE
AIR
YOU USE



OIL FREE & VSD

WHAT DO COCA-COLA, KAWASAKI & BMW HAVE IN COMMON? THEY ALL USE SCR AIR COMPRESSORS

- PERMANENT MAGNET AIR COMPRESSORS
- FIXED SPEED OIL INJECTED COMPRESSORS
- 5 YEAR PARTS & LABOUR WARRANTIES
- OIL FREE INDUSTRIAL AIR COMPRESSORS
- OIL INJECTED/INTEGRATED DRYER COMPRESSORS
- VARIABLE SPEED OIL INJECTED COMPRESSORS

SCR air compressors are designed and specified to a build quality which is unrivalled in its class. With worldwide distributorships, SCR air compressors are the most competitively priced air compressors on the market today. EDC can supply, install and commission compressors from stock.

THE BENEFITS: Vector control technology, touchscreen PLC interface, dual layer oil-cooled PM motors, high efficiency airends and branded control gear (to mention a few).



We supply, install, service, retrofit, conduct surveys and lease compressors



SCOTLAND & THE NORTH EAST'S AUTHORISED DISTRIBUTOR FOR SCR COMPRESSORS

LOBE & SCREW BLOWERS



WHEN IT HAS TO BE RIGHT... IT HAS TO BE ROBUSCHI

LONG-LIFE BEARINGS

a lifespan of 100,000 hours.

STAINLESS STEEL CONSTRUCTION

for use in heavy duty applications up to 14,000 m3/h.

A COOLED BLOWER VERSION

two cooling coils keep the oil temp below 100 degrees celsius, irrespective of operating conditions, making it an ideal selection when the gas discharge temperature exceeds 140 degrees celsius.

ANTI-CORROSIVE COATING

either synthetic resin-based (which prevents contamination from the gas being conveyed) or nickel & phosphorous alloy (the best choice to prevent corrosion of the blower from gas).

STRONG & SILENT

Robuschi blowers are innovative in their design and can easily be retrofitted into other manufacturers' units. The highly engineered Robuschi range of blowers has been designed to meet the needs of specific applications in the chemical and pharmaceutical, environmental, plastics, pulp and paper, mining, medical and wastewater treatment industries. The RBS series of low-pressure, positive displacement, 3 lobe rotary blowers, combined with the patented 'Low Pulse' system can reduce the residual pressure pulsation of the conveyed gas to below 2% of the operating pressure.



Above: Veolia Newbridge installation



LEAK DETECTION

The leak can be tiny, but the cost of it will amaze you. A single leak of 4.1(CFM) wastes 5768 kWh annually - at a cost of £576.78.

Worse still, if your system has been poorly maintained, 30% of your air capacity could be lost to leaks. As the cost of energy is normally the most expensive item in your total system costs, this means that the leak is an ongoing expense. Using unobtrusive state-of-the-art ultrasonics EDC can 'eavesdrop' on your leaks, effectively plugging the hole in your finances caused by escaping air.



STOP HAEMORRHAGING MONEY AND AIR WITH EDC AIR COMPRESSOR LEAK AND ENERGY SURVEYS

ENERGY SURVEYS

EDC can undertake an energy survey on your compressed air system, providing a detailed report with the potential to save you up to 30 - 35% on your compressed air running costs. We'll provide a comprehensive profile of your current compressed air usage - and give a clear & concise report on how to reduce your running costs; how maintenance can be improved, how suitable your existing system is for your actual requirement and whether you're wasting electricity (& money) due to pressure drops in your system caused by incorrectly sized distribution pipework. A detailed data logger report could prove to be an eye-opening exercise regarding your energy wastage.

AIR COMPRESSORS COST OF OWNERSHIP

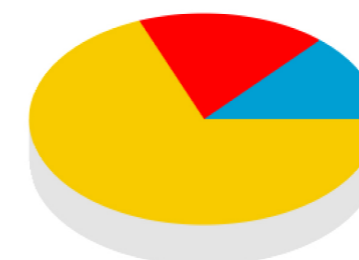
13.5 % PURCHASE

17.5 % REPAIRS

69 % ENERGY

0 % SAVING

PRE-ENERGY AUDIT



13.5 % PURCHASE

17.5 % REPAIRS

34 % ENERGY

35 % SAVING

POST-ENERGY AUDIT





COMPRESSOR MANAGEMENT

AIRMATICS COMPRESSOR MANAGEMENT TECHNOLOGY

HELPING YOU
SAVE UP TO 30% IN
COMPRESSED AIR
ENERGY COSTS
PER ANNUM



Airmatics is all compatible and can be integrated into any air compressor system. Once installed, it gets to work, creating efficiencies straight away. It reports on the status of your system, providing 360 degree real-time performance tracking, freeing your workforce from routine tasks. The benefits include:

- Reduces your carbon emissions
- Maximises performance & efficiencies
- Helps you make decisions about your air compressor system by giving you accurate, real-time information
- Extends machinery lifetime by ensuring your performance never exceeds the system requirement
- A single compressor to a whole eco-system of air compressors can be monitored & controlled
- Is industry 4.0 ready
- Cost-effective and easy to operate
- Fully secure
- No overhauling or replacing your current compressor network

Patersons Fife Silica Sands

DESCRIPTION:

EDC was invited to conduct a plant-wide energy appraisal of Patersons Fife Silica Sands electric motor and compressor loads.

The plant in Scotland produces quality assured, high silica content sand for use in glassmaking and other industries, including: sports and horticultural sand, paving & drainage sand and sand for use in equestrian centres.

The quarry was keen to find out how they could improve efficiency, save money, and at the same time further enhance their commitment to the environment.

THE PROCESS:

The air compressor was critical to the plant: no air, no process. As the work-horse of the operation, it bore the brunt of the workload, controlling the wet plant magnets.

The energy appraisal revealed potential energy savings of 390,000 kWh—with a payback period of as little as 18 months.

SOLUTION:

EDC proposed a new 22kW SCR30DV variable speed air compressor, which would allow precise control depending upon the load. The old compressor (which had nearly 60,000 hrs on the clock) would be retained as an emergency standby.

The installation of the VSD compressor reduced the running costs from nearly £10,000 to £6,000 per annum.

ADDITIONAL BENEFITS FOR THE SITE INCLUDED:

- Plant integrity with online standby
- Reduced maintenance on the new compressor
- Quantifiable CO2 savings - the equivalent of driving an average family car to the moon and back



Wastewater Processor

DESCRIPTION:

A wastewater processor needed a new blower for an aeration system. As aeration is crucial to the aerobic treatment of fecal matter the blower had to be of the highest quality. Replacing an Aerzen, we installed a Robuschi low pressure 3 lobe rotary blower.

THE PROCESS:

Aeration diffusers are critical in providing a continuous supply of regulated air to oxygenate the micro-organisms essential to the aerobic digestion of fecal matter. Aeration basins, as well as grit chambers, require regular oxygen top-ups to meet the biochemical demand of the protozoa which consume the matter.

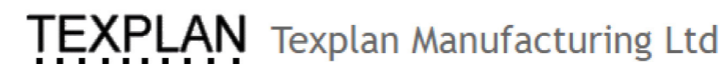
These organisms are also kept mobile by the 'oxygen currents' in the water as they process the waste material transforming it into nitrogen gas, water and carbon dioxide. Essential to the running of any wastewater treatment facility, blowers are also one of the most energy-hungry items of plant on site

and can account for up to 70% of the plant's power consumption. But with such a critical process it's vital that the blower selected is as energy-efficient and as reliable as possible.

Compact in its design and with long-life bearings (designed for a lifespan of 100,000 hours), the new Robuschi blower was hoisted into position. Connected to an ABB 132kW motor and controlled by an ABB variable speed drive (to maximise control of the motor, and in turn, the blower) a new pulley and belt were fitted and the blower set to 580 mbar.

BENEFITS:

The customer has a new blower at a cost-effective price & retrofitting within a day ensured that CAPEX costs and downtime were kept to a minimum.



Authorized
value
provider



CONTROL MORE EFFICIENTLY,
USING LESS ENERGY



ELECTRONIC DRIVES & CONTROLS

SCOTLAND

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Drives
Sales, Support & Service
HVAC
Sales, Support & Service
Motors
Sales & Support

