

3 in 1 Dryer System

SKF has developed an innovative 3-in-1 dryer system that removes oil, contaminants and water from compressed air systems used in automotive workshops. The compact SFD (Separator Filter Dryer) system can treat a compressed air stream directly from the tank, eliminating the need for after coolers, additional external filters and other equipment, or alternatively be mounted on small air compressors or at the point of use. The SFD provides a reliable and versatile drying solution, able to accommodate a range of air system requirements and flow rates.

The Atlas of Efficiency

Atlas Copco is delivering an energy efficiency workshop and exhibiting at the Carbon Trust's Technology Convention at the NEC on 20 Jan 2010. Peter Lattaway, product support manager said, "Atlas Copco is pleased to be working with the Carbon Trust in order to keep companies up to date with the latest technological developments. It's important to understand the energy saving potential of the Carbon Zero technology in compressed air so that they can help end users exploit heat recovery within their operations."

Ron Bassiano, Atlas Copco's automotive engineering specialist, confirms that bodyshops are trending towards the use of variable speed drive compressors – used in industry for some time – as they offer greater efficiencies. He also confirmed that for large users of air, ie a 15kW compressor or larger, there is the possibility of recycling heat energy for further efficiencies.

Advice on compressed air systems (energy saving posters, air tools guide, etc) available from Brit. Compressed Air Society: www.bcas.org.uk

Revolutionary EARS

There's a new solution for compressed air delivery and it's totally different to any other seen on the UK refinish market. The system, known as EARS - exhausted air recycling system - was developed by an Australian automotive engineer and is now being introduced to European and US markets.

In the UK the EARS system is being marketed by Tom Parker Ltd, a company that specialises in the distribution of air and fluid couplings. Established over 30 years ago, the company is still run by the founder's family, in Preston, and has an established quality product range, sold either direct or via a carefully selected network of factors.

The EARS system recycles air exhausted from air tools back into the closed circuit compressed air system. This means that air pressure is more stable within the system and energy is saved because the compressor is not continually taking in atmospheric air to be compressed. Although it can't be used in the spraybooth for paint spraying there are benefits in the booth because overall the air pressure is more stable and does not drop if there is increased demand for air.



The EARS demonstration van is fully equipped with all that's needed to properly demonstrate the new concept

Because you are recycling the air, there is also less demand on the compressor so you can use a smaller compressor and therefore energy costs are lower. Using recycled clean air also gives extended compressor and tool life as fewer contaminants are being pulled into the system to damage the internal workings.

Noise from air tools drops remarkably because air is no longer being exhausted from individual tools adding to the system's benefits. The reduction in noise from tools was a clinching factor in Manchester College's decision to install the system in their new body repair and refinishing facility; they have measured the impact of the new system and report a 70-75% reduction in noise. This is significant in the teaching situation.

The EARS system can be fitted to most piston and screw type compressors. It requires the use of tools that are adapted to take 2 airlines – in and out - and Tom Parker has sourced high quality tools already converted or they can retrofit your existing air tools. Installation requires a double-circuit of air pipes - air supply in and exhausted air return. Again, an existing air supply can be extended to include the return pipework.

Tom Parker has been working on this project for around 2 years, ensuring that they get the right tools and connections – reflecting the company ethos of quality products for a quality job. Bob Rowell is the EARS product specialist and he will work closely with the growing network of EARS distributors to ensure that installations are correctly specified and installed to meet body repairers' specific needs.

The company has invested in a mobile demonstration unit, in which Bob can comfortably demonstrate the significant noise reduction, energy savings and efficiency improvements offered by an EARS compressed air system. The £50,000 Mercedes Sprinter (long wheelbase) is equipped with a 7.5kW screw compressor capable of producing 15kW output with EARS, 3 phase electricity supply and a comprehensive range of air tools and attachments.

To conclusively show the system's benefits the company has invested in comprehensive data logging equipment for use during a demo or for loan to potential customers who can use it to compare real-life results from their current supply with that of a new EARS system.

Richard Parker, sales director, concludes with the benefits their testing has shown so far: "an 80% improvement in compressor efficiency, noise reductions of up to 70% and energy consumption reductions of around 40%. With rising energy costs, the modest investment associated with the EARS system will provide a rapid payback. A Carbon Trust interest-free loan may also be available".

