

HEAT RECOVERY: HOW YOUR AIR COMPRESSOR CAN HELP HEAT THE WORKSPACE FOR LESS

We've just installed a new BOGE Duotherm heat recovery system for Doncaster-based [Aggregates R Us](#). So why should you follow their example?





We'll let you into a not especially secret secret: air compressors may be an essential part of the workplace, but they've never been especially efficient in their use of energy. The act of compressing air produces heat. Of the 100% of electrical energy consumed by an air compressor, around 94% is converted to heat.

In a standard compressed air system, virtually all of that heat is lost. But what if it wasn't? **BOGE's Duotherm heat recovery system** harnesses the heat and feeds it back into your company's heating or hot water system. All of a sudden, your air compressor effectively becomes an energy saver.





Heat recovery for Aggregates R Us

Like the rest of us, Aggregates R Us was looking for ways to minimise the effect of rapidly increasing energy costs. By installing this Duotherm 30 btw unit, Aggregates R Us is able to use energy that would otherwise be lost to heat its factory floor.

To cope with summer, when the additional blast of heat will be much less welcome, we installed twin blast gates to divert the heat outside.

In the images on this page, you can see the complete heat recovery ducting journey.

Is heat recovery available with your compressor?

Usually, yes. If you operate a water-cooled air compressor it's particularly easy to integrate a heat recovery system to heat your water because the water circuit already exists. Duotherm is ideal for those businesses whose compressor isn't water cooled.

Five models offer motor powers from 11kW (Duotherm 15) to 110kW (Duotherm 110) and you can integrate any of them with your oil cooled screw compressor – and it doesn't have to be a BOGE compressor. The unit's heat exchanger then takes all the energy used by the oil cooler and applies it to heating your mains water or your workspace.





How quickly will a heat recovery system pay for itself?

Payback time depends on the structural conditions at the site. As Power Transmission World notes, “investments in a heat recovery system pay for themselves within six months to twelve years; frequently, this occurs within less than twelve months.”

To calculate your savings, compare the usable heat generated by your air compressor in kW with the cost of buying the same amount of energy from your external supplier. Remember, your air compressor would have been in use anyway, whether you were recovering the heat or not, so once the heat recovery system has paid for itself any heat generated is virtually free. BOGE itself is saving around 100,000 kWh of heating power each year having installed a heat recovery system at its own premises.

Protect your business from energy price volatility. Discover what a heat recovery system could do for you. [Contact us](#) or call [0114 243 2347](#).

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- > [Discover more about our maintenance services & plans](#)