

Our Client

DOT Ferritslev in Funen, Denmark is a part of DOT, Scandinavia's leading full-service partner in surface treatment and corrosion protection of iron and steel. The unique experience and know-how of DOT provide an outstanding combination of corrosion protection, a complete logistics solution, competent advice, prompt deliveries and flexible solutions.



The Challenge

Among its extensive range of surface treatments, DOT Ferritslev offers hot-dip galvanising, a process which applies molten zinc to metal surfaces for long-term durability and reduced maintenance. The molten zinc used in this process was responsible for generating vast amounts of excess heat. Additionally, DOT operates 13 pre-treatment baths which, previously, were heated using a gas furnace.

In a world where energy costs are increasing rapidly and stricter regulations are being placed on CO₂ and other greenhouse gas emissions, DOT's senior team recognised a need for improving processes, increasing overall efficiency and reducing their company's environmental footprint.



“Heat recovery on the flue gasses has resulted in substantial savings. Previously, we used more than 1 million kilowatt hours in gas to heat our pre-treatment baths.

That energy now comes from the heat recovery system which means a pay-back period of 2.6 years. At the same time, we have reduced our CO₂ and NOx emissions significantly!”

Dennis Nielsen
Factory Manager, DOT Ferritslev



Our Solutions

exodraft offers a unique, patented air-to-water heat recovery system designed to increase plant efficiency and reduce energy consumption by up to 16%. As every client situation differs, the final solution is always a bespoke system fully optimised to recover the waste heat in the most sensible manner given the circumstances.

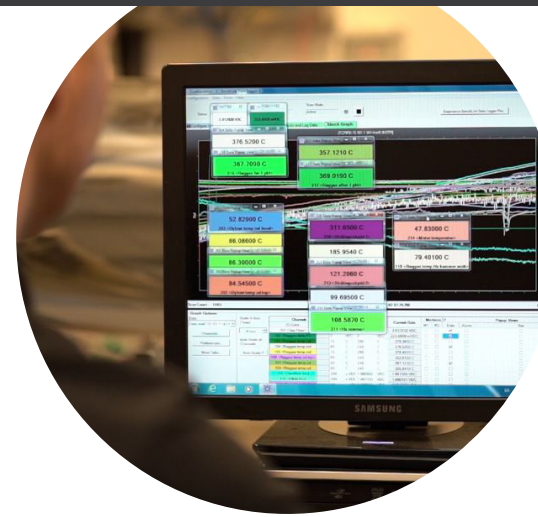
We begin each project by paying the client a visit to directly assess the heat recovery potential as well as the unique on-site challenges. We then carry out a detailed analysis of the current heat production, developing an extensive data log. The collected data is then fed into **exodraft's** proprietary OptiCalCHR™ software to calculate the expected energy savings as well as the project's pay-back time.

In the case of DOT, **exodraft** designed a heat recovery system specially optimised for recovering the excess heat from the hot-dip galvanising process and converting into hot water to be used in other processes within the factory, most notably supplying all the energy necessary to heat the 13 pre-treatment baths which, previously, were heated by a cost-ineffective gas furnace.



“**exodraft** has been very professional and their implementation outstanding. They have managed the entire project, including sub-contractors, meaning we have had just one contact person. I can highly recommend **exodraft**. If your company has excess heat, don't hesitate to contact them today.”

Dennis Nielsen
Factory Manager, DOT Ferritslev



The Results

Installing a heat recovery system makes perfect sense for any company generating large quantities of excess heat, and DOT has been very pleased with the way in which **exodraft** heat recovery has enabled them to make operational, environmental and economic improvements.

The return-on-investment calculated by **exodraft** has worked out well and the investment is on track to have paid itself off within just 2.6 years. At the same time, the high costs of heating the pre-treatment baths and the negative environmental impact associated with the gas furnace have been mitigated.

As always, **exodraft** managed every phase of the project from the initial design work all the way through to the final turn-key implementation. DOT expressed appreciation for the coordinated approach by **exodraft** project management as it helped them stay abreast of project proceedings as well as affording them a clear line of communication through a single dedicated **exodraft** contact person.

Max. performance:	480 kW
Max. Energy per day:	4.3 MWh (4,300 kWh)
Max. Energy per week:	20.5 MWh (20,500 kWh)
Max. Energy per month:	90.8 MWh (90,800 kWh)
Expected annual energy:	995MWh (995,000 kWh)



About Us

With more than 60 years of experience, **exodraft** is the world's leading supplier of mechanical chimney draft solutions for both private home-owners and businesses and a rising player on the markets for flue gas particle reduction technology and industrial heat recovery solutions, specifically waste heat recovery from flue gas and process air.

Headquartered in Denmark, **exodraft** has subsidiaries in Germany, United Kingdom, Norway, Sweden and France and has, to date, sold its extensive range of products in more than 40 countries across the globe. Learn more at www.exodraft.com

How it works: Heat recovery

exodraft can help you recover excess heat in flue gasses, process air and steam, converting it into hot water which can then be used for a variety of useful applications.

By using an **exodraft** heat recovery system, up to 95% of the heat that would have been otherwise lost can be recovered. The amount of energy lost as flue gas or process air is typically 10-15%.

exodraft's highly efficient heat recovery technology coupled with its competitive pricing means that the investment in an **exodraft** heat recovery system can have paid itself off within just a few years.

Heat recovery is common sense. Not only do you obtain substantial energy savings, you also reduce your CO₂ emissions, thus benefitting the environment and your company's green accounting.