

DTL

Damper Technology Ltd

Providing
Expert Damper
Solutions
Worldwide



ORBINOX
ORBINOX VALVES INTERNATIONAL GROUP

COMPANY PROFILE



Damper Technology Ltd (DTL) was established in 2001 and has a history in the Damper Industry reaching back to 1965.

Since conception DTL have continued to build on a growing worldwide reputation for quality, innovation, product reliability and cost effectiveness, becoming one of the world leaders in the Damper Market Place.

In addition to this they hold over 30 years of technical archives for Becorit & Herweg, Long Airdox Becorit, and Effox UK dampers, enabling spares and service backup for these products.

During 2009 DTL became part of the **Orbinox Valves International Group**, a global brand name within the valve industry. With an international infrastructure and presence in more than 70 countries, ORBINOX service many industries in which DTL are actively engaged.

With a team of highly experienced engineers, DTL design all their products in-house, using the latest CAD & 3D modelling technology including **Finite Element Analysis** as and when appropriate. All manufacturing and project execution is managed from the UK office and dedicated manufacturing facility which conforms to the requirements of ISO 9001:2008 accredited by the BSI under certificate number FM61617, whilst also utilising a global network of partners, agents and fabrication facilities worldwide.



DTL's ability to satisfy diverse and often demanding requirements is illustrated by this catalogue of Damper products used in all sectors of industry throughout the world's five continents.

Damper Technology India PVT Ltd, DTL's Indian subsidiary, work out of offices in Southern India and serve industries associated with the developing Indian economy.



UK Head Office, Eastwood, Nottingham



UK Manufacturing Plant, Thurmaston, Leicester



Offices of Damper Technology India Pvt Ltd, Coimbatore



Orbinox Head Office, Spain



Y Duct Manufacture

PRODUCT DIRECTORY

The range of dampers illustrated in this brochure are designed and manufactured to suit many different applications, operational conditions and industries both on and offshore.



Pair of Gas Turbine/WHRU Control & Isolation Dampers

Industries and Applications Served:

- CHP, WHRU and HRSG Systems
- Offshore/Oil & Gas
- Gas Turbine Exhaust
- Power Generation
- Gas Cleaning (FGD/SCR/DENOX/DESOX)
- Stack Isolation
- Cement & Metallurgical
- Tunnel Ventilation
- Gas & Diesel Engine Exhaust
- Fan Inlet Control
- General Industrial

Existing designs are constantly reviewed, and can be modified to suit specific requirements.

BUTTERFLY DAMPERS

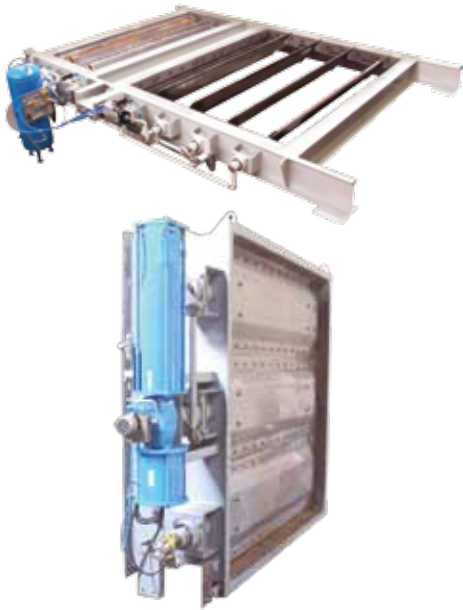


Butterfly dampers provide a simple and cost effective method of control and isolation.

Stainless steel dampers for high temperature applications are available in a variety of sizes. Various sealing arrangements can be used to provide the correct efficiency for your specific application. Sealing efficiency can be increased to 100% with the addition of twin seals and a seal air fan.

Butterfly dampers can be actuated pneumatically, electrically or manually by a simple hand lever.

MULTILOUVRE DAMPERS



Multilouvre dampers are used in a variety of industries and applications including Fossil Fuelled Power Generation, Tunnel Ventilation, Gas Turbine / WHRU, HRSG, FGD and SCR.

Temperatures can be from -50°C to in excess of 1100°C and pressures in excess of 6600mmWG .

Multilouvre dampers will form an effective method of controlling and isolating most duct media.

Dampers for FGD and SCR systems are manufactured in a range of materials including carbon steel, stainless steels and high performance alloys.

Various sealing arrangements can be incorporated, from simple metal/metal ledge seals to full twin flexible seals and 100% seal air systems.



GUILLOTINE DAMPERS

Guillotine dampers and blanking plates can be used in any application where a positive isolation is required for routine maintenance and/or personnel safe entry to a duct behind a media source.

DTL's guillotine designs have a record of proven reliability on major UK and overseas power stations as well as offshore installations.

Actuation can be manual, pneumatic, hydraulic or electric, with various designs to suit all budgets and specifications.



DIVERTERS & T-DUCTS

Flap diverters allow the user to control the flow of TEG to the HRSG (WHRU) and to positively isolate the HRSG (WHRU) so that routine maintenance can be carried out during normal operating periods.

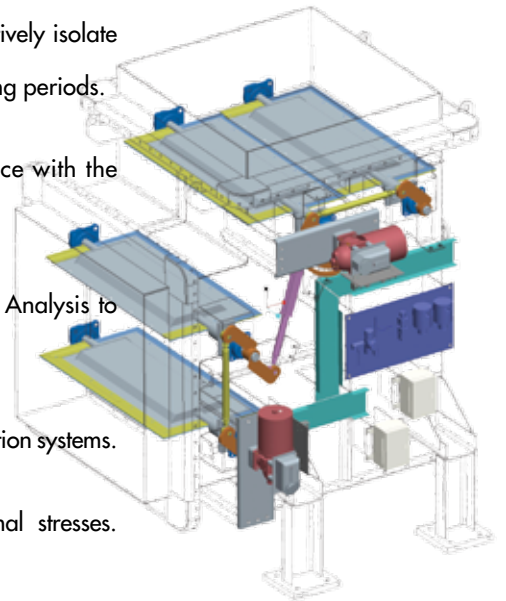
Each unit is custom designed to suit the exact operational requirements in accordance with the relevant specification.

Flap diverters have been developed over a number of years using Finite Element Model Analysis to ensure that the thermal and mechanical stresses are evenly distributed throughout the unit.

The same degree of quality engineering has been applied to the tube design, shafts and actuation systems.

The internal insulation minimises external thermal growth, frame distortion and thermal stresses.

The retainer plates are allowed to expand independently of each other in all directions.



As an alternative to a flap diverter, multilouvre dampers can be built into a T-Duct section and linked to provide an effective inlet / bypass solution. These can be incorporated with a guillotine to provide a fully integrated inlet/bypass/isolation solution. Seal air systems can be added to any of our diverters to provide 100% sealing efficiency.

STACK DAMPERS

To minimise heat loss from the boiler and to prevent the ingress of rain water, DTL have a range of stack isolating dampers which are designed for use with any size of stack.

The stack isolating damper can be of the butterfly, twin louvre, multilouvre or twin flap design and can incorporate an automatic pressure relieving system to prevent over pressurisation and damage to the turbine or boiler.



HIGH PRESSURE (PED/PER) DAMPERS



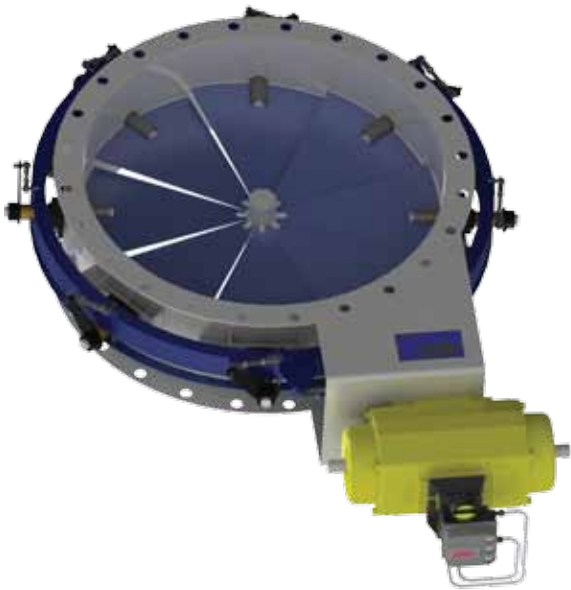
Dampers are increasingly being offered as a viable alternative to a valve. DTL are able to design and supply custom higher pressure dampers manufactured in accordance with applicable regulations such as PER / PED.

GAS CLEANING DAMPERS (SCR / FGD / DENOX / DESOX)



In both wet and dry gas cleaning plants, which probably represent the most demanding of all applications, a reliable damper solution is essential. DTL offer a wide and adaptable range of dampers using specific materials and highly corrosion resistant alloys where applicable. Specially reinforced blade designs facilitate incredibly wide one piece construction (no central supports required) whilst internal lining systems ensure cost effectiveness.

RADIAL VANE (IVC) DAMPERS



Predominantly used on fan inlet applications, offering an enhanced level of flow and pressure control, with multiple blades arranged around a central hub. This enhances the performance of the fan by introducing swirl into the fan inlet providing an efficient method of control.

DTL's range of Inlet Vane Control (IVC) dampers can be fitted with any form of actuation allowing either local or remote modulating control. They are engineered to ensure ease of maintenance and service without removing the damper from the fan and are designed to withstand the high air velocities that can be experienced in use.

SPECIALIST OFFSHORE EQUIPMENT



The offshore oil & gas sector requires a level of industry knowledge, product engineering and documentary support that DTL have been providing for many years. DTL's reference list demonstrates an impressive range of dampers & controls supplied to the most comprehensive specifications for many of the world's foremost oil & gas companies.

OFFSHORE SERVICE

DTL's team includes fully qualified & certified offshore engineers to provide service inspections, routine maintenance and extensive retrofit / overhaul of damper installations to the oil & gas sector.

MAINTENANCE

DTL dampers are supported by a dedicated team of skilled service engineers, and are able to provide the following services for all existing installations worldwide, including offshore:

- Service Inspection
- Routine Maintenance
- Commissioning
- Troubleshooting
- Repairs/Retrofit
- Spare Parts

DTL's service engineers are fully qualified and hold all the necessary training qualifications and certification to carry out these activities.

SPARES

DTL are able to supply and fit a range of readily available first line spares. Together with all DTL projects, archives are held for Becorit & Herweg, Long-Airtox Becorit and Effox UK allowing us to offer the same level of spares and maintenance service for these dampers also.



DTL

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FM61617 – ISO 9001:2008



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