

# Energy & Offshore





WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK





## An introduction

#### Who we are

Cavotec is a multi-national group of companies serving the following industries: mining and tunnelling, ports and maritime, steel and aluminium, energy and offshore, airports, general industry and automation. In the early 1960's our main focus was the design and production of motorised cable reels primarily for manufacturers of tower cranes, harbour cranes and mining equipment. Today, Cavotec is connecting mobile equipment around the world in many diverse applications.

#### Where we are

The Cavotec Group consists of 7 manufacturing "Centres of Excellence" located in Canada, France, Germany, Italy, Norway and Sweden and by 5 local manufacturing units located in Australia, China, Germany and the USA. For the distribution of products and providing support to customers Cavotec has 27 sales companies which, together with a network of distributors, serve more than 30 countries in five continents.

The ultimate objective is to be perceived as "local everywhere".

#### How we work

Our aim is to work closely with our customers in order to build long-term partnerships. To achieve this aim we have created a working environment that attracts the best people, encourages them to stay and brings out their best qualities. By producing totally reliable systems and backing them with efficient service, we strive to create true customer satisfaction.



### Our experience in the energy and offshore industry

The Cavotec Group has been in active in the energy and offshore industry for more than a decade. It started by supplying special stainless steel drag chains and cable reels designed to withstand the harsh operating conditions found on offshore applications in the United Kingdom and Norway.

Today, the Cavotec Group supplies a full range of explosion proof equipment such as slipring assemblies, radio remote controls and special fire-retardant flexible cables to applications throughout the whole world. Through our continuous commitment to provide the best equipment and service the Cavotec Group has become a the leading name in supplying safe and reliable equipment to the energy and offshore industry.

Our major customers in this market segment are:

- Adnoc
- Amclyde
- BP
- ELF
- Fisia
- Italimpianti
- Halliburton

- Hitec
- Huisman
- Hydralift
- National Oil Well
- Maritime Hydraulics
- Saipem
- Statoil



## Local throughout the world

As shown here the Cavotec Group is organized to support its customers around the world through its manufacturing units and sales companies. Each Cavotec manufacturing company, no matter where it is located, aims at being a market leader in its field by providing innovative and reliable products to Group customers. Each Cavotec sales company, in the 27 countries where they operate, aims at better serving its local market following the Group philosophy "to be local everywhere".

#### **MANUFACTURING NETWORK**

#### **Centres of Excellence**

#### France

Cavotec RMS
Spring Driven Reels

#### Germany

**Cavotec Alfo** Spring Driven Reels Slipring Columns

Cavotec Fladung GmbH Aircraft Support Systems Security Systems

#### Italy

**Cavotec Specimas** Motorized Cable Reels Panzerbelt Cable Protection Slipring Columns

#### Norway

Cavotec Micro-control Radio Remote Controls

#### Sweden

**Cavotec Connectors** *Electrical Plugs & Sockets* 

#### **Local Manufacturing**

#### Australia

Cavotec Australia Motorized Cable Reels

#### China

Cavotec China Product Assembly

#### **Germany**

**Cavotec MoorMaster** Automated Mooring Systems

#### **Sweden**

Cavotec Sweden
Product Assembly

#### **USA**

Cavotec USA
Product Assembly

#### **Group Partners**

#### **Belgium**

**Gantry** *Crane Rail Systems* 

#### Italy

Brevetti Stendalto
Cable Chains
Prysmian (Pirelli)
Flexible Cables
Tratos Cavi
Flexible Cables

#### **New Zealand**

Mooring Systems Ltd Automated Mooring Systems

#### **SALES NETWORK**

#### **Cavotec Sales Companies**

Cavotec Australia
Cavotec Belgium\*
Cavotec BeNeLux
Cavotec Brazil\*
cavotec Canada
Cavotec Chile
Cavotec China
Cavotec Denmark
Cavotec Finland

Cavotec France
Cavotec Germany
Cavotec Hong Kong
Cavotec India
Cavotec Italy
Cavotec Korea
Cavotec Latin America
Cavotec Mexico
Cavotec Middle East

Cavotec Norway
Cavotec Russia\*
Cavotec Singapore
Cavotec South Africa
Cavotec Sweden
Cavotec Turkey\*
Cavotec UK & Ireland
Cavotec USA

\* Branch Office

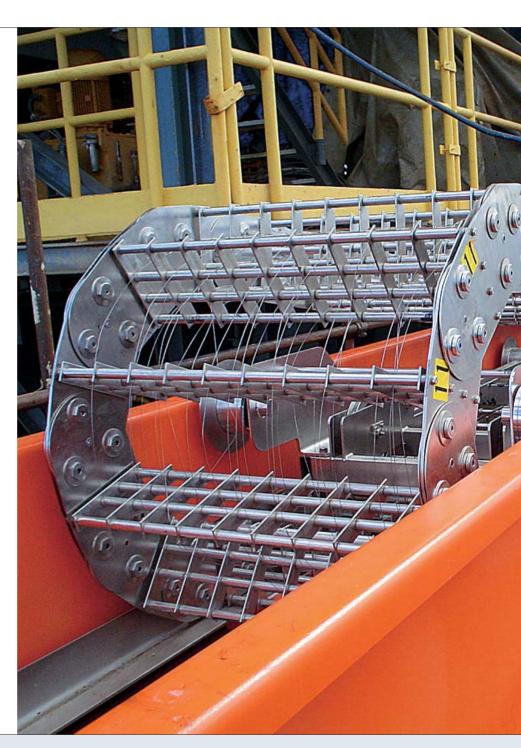






## **Steel Cable Chains**

Founded in 1976, Brevetti Stendalto was the first to develop and manufacture the revolutionary cable chains in nylon. Today Brevetti is considered one of the most important manufacturers not only of nylon but also of steel cable chains in Europe. Their range of chains, which can be used in many different types of application, are marketed by the Cavotec Group all around the world.





The wide range of cable chains provided by Brevetti Stendalto covers any possible type of application while allowing for custom-made solutions where necessary.



One of the most common applications for Brevetti Stendalto equipment is supplying power to offshore drilling rigs.



Brevetti steel cable chains are the proven alternative for supplying power in a secure and fast way. With this system, power and control cables are carried safely and fully protected by a heavyduty steel chain over long travelling distances at high speeds. Thanks to the high quality and innovative design the Brevetti cable chains are able to maintain their full operational function even in the harsh working environment of the energy and offshore sector. Endurance tests carried out by leading operators and the many applications at work have proven the reliability of the system and its clear economic advantages.

> Brevetti Stendalto cable chains are renowned for their endurance and high quality finish.





### **Power Connectors**

The Cavotec Power Connectors have been present in the field of industrial power supply for more than 20 years, starting in the harsh environment of the Scandinavian mines and hydro-electric tunnels.

Today the high quality, strength and integral safety of the Cavotec Connectors have set the standard concerning low and high voltage power supply to many different types of equipment. Not only in mining and tunnelling but also in hundreds of energy and offshore applications around the world.



Cavotec Connectors for low and high voltage applications are well designed, with a standard IP 66 protection and a standard maximum temperature of 80°C. The range of low voltage power connectors, available in a variety of sizes, are made in two different operating systems:

 The "Push & Pull" system is preferred when the connectors have to be disconnected manually or automatically several times a day. 2. The "Screw Ring" system has special connectors fitted with screw rings for applications with manual disconnections on a day-to-day or weekly basis.

The high quality, robustness and integral safety of the Cavotec Connectors have set the standard concerning high and low voltage power supply to many different types of equipment used in applications around the world.



Cavotec Connectors are able to withstand very severe working conditions, making them the preferred choice for customers around the world.



### **Cables**

In order to supply a comprehensive selection of high quality cables specially adapted to harsh working environments, the Cavotec Group decided to select specialised manufacturing partners enabling Cavotec to guarantee the very highest level of productivity and safety.

Among the specialised cable manufacturing partners represented by the Group, we can mention such companies as Amercable, Baude, Gore, Palazzo, Prysmian, Nexans and Tratos.



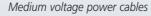
All the cables offered by the Cavotec Group are divided in low and medium voltage. Low voltage cables are further divided into power or control cables as each single cable is designed to deal with specific applications. Medium voltage cables on the other hand are all power cables but the majority can be supplied with integrated fibre-optics as an option. The range of cables is such that Cavotec can supply any type of cable to suit any specific application.

Cavotec offers many different types of cables to meet specific operating requirements. For more detailed information please consult our flexible cables catalogue.



Heavy duty low voltage power cables

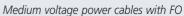






Light-weight low voltage control cables







## Cable Reels

Cavotec Specimas cable reels have been supplied to the energy and offshore sector since many years. Each unit is used in a variety of operations supplying power, air and water to mobile equipment. The Cavotec Specimas reputation in this market segment has been established by supplying innovative, strong and compact systems, supported by a team of specialised engineers.

For intermittent duty applications Cavotec normally recommends the Hydrodynamic System, while for continuous duty applications Cavotec has designed a variable torque regulating system.



The Hydrodynamic System is an unique patented system which provides a simple and rational solution for many cable and hose reel applications. The system is based on a torque unit in which reduction gear, clutch and brake are built into one closed unit. Furthermore, thanks to the clutch acting directly on the main drum shaft, an even torque output is guaranteed.

Cavotec Specimas also provides another type of system called the Cavotec Torque Control system. This provides a constant pull on the cable following a torque reference signal. This signal is based on cable weight and length, speed, and acceleration. The main benefit of this system is a significantly improved cable life. The system can be used for single-phase and three-phase AC and also for DC feed. The standard protection class is IP55 and the system is suitable for environment temperatures up to +40 C°. Special ventilation and motor insulation are supplied for higher temperature ranges.



To guarantee maximum support to its customers Cavotec Specimas has a team of specialised engineers for 24/7 service demands anywhere in the world.



## **Ex Radio Remote Controls**

Cavotec Micro-control has been involved since 1984 in the development and production of advanced radio remote control systems, including the latest units for use in areas where explosions could occur.

All systems have a high level of flexibility and are made from standard modules allowing for full customisation to meet specific requirements. Cavotec Micro-control radio remote control systems meet the most stringent safety and quality controls and are fully ATEX and IEC approved.



The MC-3000 Ex and MC-3-6 Ex radio remote controls provide a secure and flexible control of many different types of machinery. To a wide extent they feature the same functionality as the "ordinary" RRC's. One addition however is the possibility to use a cable control. This provides an extra failsafe against shutdown if a fault occurs in one if the other types of communication.

Both systems can be delivered with simplex or duplex communication. The duplex communication option allows the operator to receive messages (alarm messages, status indications etc.) through led's, control display, indicator instruments, etc.

Additionally, the base units can be delivered with a serial interface for the most common bus standards on market today. On request, they can be delivered without explosion proof and increased safety encapsulation if this is deemed not necessary. The battery used in the terminal is intrinsically safe. As a consequence the exchanging of the battery can be done in an explosive area.

Typical applications for these radio remote controls are offshore oil and gas equipment, mining applications and maritime cranes and winches.



The MC 3000Ex is the first ever explosion proof RRC to obtain a full ATEX approval.





## **Crane Controllers**

Gessmann is a company specialised in the production of high quality industrial controllers and switches to be used in crane operation systems, remote controls and several other applications. Gessmann production includes a large range of different controllers which can solve nearly all man-machine interface problems. As a result of the close cooperation established with its customers, several Gessmann solutions are specially designed for tailor-made applications.

Gessmann Industrial Controllers are distributed by the Cavotec sales companies in Australia, China, Middle East, Norway, UK and the USA.



#### **Industrial Controllers**

Gessmann standard range of industrial controllers are used in many different types of crane applications, mobile electro-hydraulic applications, ship controllers and radio remote controllers. The modular design enables the switching device to be used universally. All controllers are resistant to oil, maritime climate, ozone and UV radiation.

#### **Crane Control Units**

Operators' chairs with equipment boxes are manufactured for many different applications and are in operation all around the world. The modular design allows combinations of specific features, seats and other adjustments in accordance with the customer's requirements.



All Gessmann controllers meet the following standards: IEC 9475-1, EN 60947 and DIN-VDE 0660-200

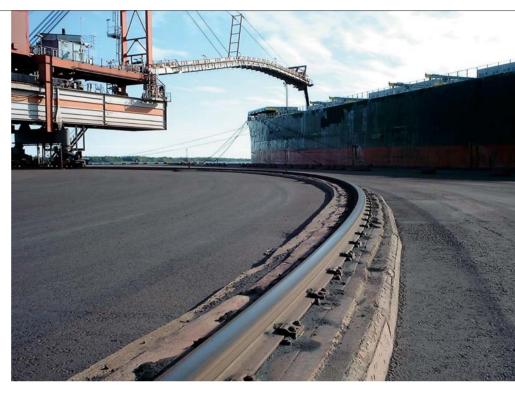


## Rail Fastening Systems

Cavotec Gantrex is specialised in the design, development and manufacture of a complete range of products related to rail fastening systems for both overhead and ground supported cranes. Additionally, the company offers a wide range of rail profiles and thermite and flash-butt welding services.

Cavotec Gantrex has 30 years of experience in supplying products to the energy and offshore sector and is supported by an experienced engineering and installation group.

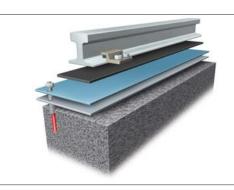
The Cavotec Gantrex products are distributed by the Cavotec Group in the following countries: Australasia, North and South America, South Africa, Finland, Norway and Sweden.



The Cavotec Gantrex soft-mounting crane rail fastening system is the proven solution for any crane runway problem. A complete range of weldable and boltable clips is available for all rail sizes. In addition, Cavotec Gantrex provides both steel-reinforced continuous rail pad and molded crowned pad for intermittent-supported applications. The soft-mounting system ensures the longevity of the crane, wheels and rail support.

In addition to the main core of products, Cavotec Gantrex also provides continuous and intermittent steel soleplates configurable for any rail application. To provide unit responsability, Cavotec Gantrex also supplies adhesive anchors and a quality non-shrink epoxy grout specially preblended, packaged and produced for rail-on-concrete conditions.

Cavotec Gantrex offers a complete solution to any rail fastening application. Their range comprises of rails, rail clips, pads, soleplates, anchor bolts and special epoxy grout.



Head Office

Cavotec MSL Holdings Ltd.

Cavotec MSL is listed on the NZX ≥

Corporate Office

Cavotec (Swiss) SA

Via Serafino Balestra 27 CH-6900 Lugano, Switzerland

We are present in

Argentina

Australia

Belgium

Brazil

Canada Chile

China

Denmark

Γαν νο:

Egypt

Finland

France Germany

Hong Kong

India

Indonesia

Ireland

Italy

Japan Korea

Luxemburg

Malaysia

The Netherlands

New Zealand

Norway

Qatar

Russia

Saudi Arabia

Singapore

South Africa

Sweden

Switzerland

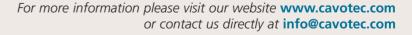
Taiwan Turkey

U.A.E.

U.K.

U.S.A.







WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK