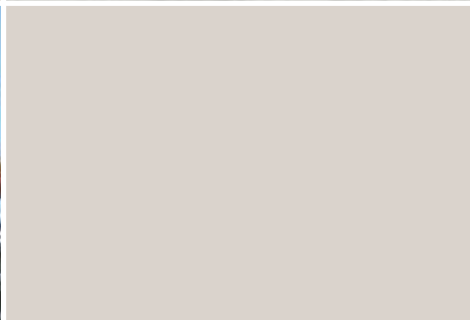




Corporate Product Range



Cavotec – a brief overview

CAVOTEC IS A GLOBAL ENGINEERING GROUP THAT DELIVERS POWER TRANSMISSION, DISTRIBUTION AND CONTROL TECHNOLOGIES THAT FORM THE LINK BETWEEN FIXED AND MOBILE EQUIPMENT.

WORKING CLOSELY WITH OUR CUSTOMERS AND INDUSTRY BODIES, WE LOOK TO DEVELOP LONG-TERM RELATIONSHIPS THAT DRIVE PROJECTS FORWARD AND HELP IMPROVE SAFETY, EFFICIENCY AND SUSTAINABILITY AT A VAST DIVERSITY OF APPLICATIONS WORLDWIDE.



Cavotec Alfo

Location: Overath, Germany
Established: 1991
Size: 7,000 sqm



Cavotec Alfo specialises in the design and manufacturing of spring reels and slipping columns, used in many different industry sectors. Cavotec's spring-driven cable reels meet all applicable IEC international standards and comply with the latest EU requirements (CE-marking).

General Industry | Ports & Maritime

Cavotec Connectors

Location: Staffanstorp, Sweden
Established: 1991
Size: 2,000 sqm



Cavotec Connectors electrical power, power supply and power connectors are used in many different industrial applications. They are found in ports and terminals, mining and tunnelling, railways, steel and aluminium plants, mobile generator sets, offshore and other industrial machinery.

Ports & Maritime | Mining & Tunnelling | General Industry | Airports

Cavotec Dabico

Location: Costa Mesa, CA, USA
Established: 1966
Size: 4,500 sqm



Cavotec Dabico has led the market for in-ground fuel systems for aircraft for more than four decades. Our experienced engineers design advanced, customised and fully integrated systems for the global airports sector.

Airports | Ports & Maritime

Cavotec Fladung

Location: Dietzenbach, Germany
Established: 1968
Size: 8,100 sqm



Cavotec Fladung has been a pioneer of airport ground support equipment (GSE) for more than forty years. The company was an early developer of 400Hz technology, specialised cable reels and aircraft connectors, which are now industry standard at airports worldwide. Cavotec Fladung also manufactures and supplies mobile electrical caddies, Pre-Compressed Air systems (PCAir) and a wide range of accessories such as aircraft cables, connectors and tow bars – all with a focus on safety, reliability and innovation.

Airports | General Industry

Cavotec INET

Location: Fullerton, CA, USA
Established: 1967
Size: 6,500 sqm



Cavotec INET supplies Ground Support Equipment (GSE) and services aircraft as an engineering and manufacturing company of 50/60Hz to 400Hz power conversion systems, static transfer switches, Uninterruptible Power Systems (UPS), specialised Ground Power Units (GPU) and Pre-Compressed Air systems (PCAir). Cavotec INET is also the beneficiary of several certifications as the preferred contractor for both federal and local governments in the US.

Airports

Cavotec Meyerinck

Location: Fernwald, Germany
Established: 1968
Size: 3,000 sqm



Cavotec Meyerinck supplies a wide range of fuelling systems, fluid and surge control, and loading terminal products for the aviation, petrochemical, railways and food beverage industries. Cavotec Meyerinck products - such as loading arms, shock absorbers, armatures and complete systems - are produced according to our customers' requirements and meet all appropriate national, international and military standards.

Airports | General Industry | Ports & Maritime

Cavotec Micro-control

Location: Hell, Norway
Established: 1985
Size: 3,000 sqm



Cavotec Micro-control has been at the forefront of manufacturing high quality and technologically advanced radio remote control systems since 1985. The company supplies a comprehensive range of customised radio remote control systems (RRCs) designed for a vast range of applications in the offshore, mining and maritime sectors, as well as general and process industries around the world.

Ports & Maritime | General Industry | Mining & Tunnelling | Airports

Cavotec MoorMaster

Location: Christchurch, New Zealand
Established: 1999
Size: 500 sqm



Cavotec MoorMaster is a world leader in the design and manufacture of advanced vacuum mooring technology. Based in Christchurch, New Zealand, the Cavotec MoorMaster technical team consists of experienced naval architects, mechanical and electrical engineers who design and develop MoorMaster™ systems. This award winning technology is in operation at applications in Australia, Canada, Denmark, Oman and New Zealand.

Ports & Maritime | Mining & Tunnelling

Cavotec Specimas

Location: Nova Milanese, Italy
Established: 1963
Size: 9,500 sqm



Cavotec Specimas is a well-established developer of motorised cable reel technology for the ports and maritime, mining and tunnelling and general industry sectors. Cavotec's engineers design and manufacture the Group's AMP systems, MoorMaster™, motorised cable reels, patented Panzerbelt cable protection system and electric marine propulsion sliprings.

Ports & Maritime | Mining & Tunnelling | General Industry

Ports & Maritime



POWERING SAFE AND EFFICIENT OPERATIONS AT THE WORLD'S PORTS

Our Ports & Maritime Market Unit develops innovative systems that support our customers' efforts to improve safety, drive productivity and reduce environmental impact at ports.

Cavotec is the home of award winning automated mooring technology MoorMaster™. We also supply Alternative Maritime Power (AMP) systems and a comprehensive range of staple port equipment, including motorised cable reels, marine propulsion slipring columns, electrical power connectors, power chains and crane controllers.

The ports and maritime sector has been at the heart of our business for more than forty years. Our focus on safety, reliability and the environment has helped make us a respected partner for operators worldwide.

Some of our major customers in this market segment:

ABB • Aker • APMT • Cargotec • China Harbour Engineering • Dalian Huarai • DP World • Eurogate • Konecranes • MSC
National Oilwell Varco • Odim • Port of Los Angeles • Port of Long Beach • Port of Salalah • PSA • SLSMC • Statoil • ZPMC

Motor-Driven Cable and Hose Reels

Centre of Excellence:
Cavotec Specimas

Cavotec Specimas has been involved in the development and manufacture of motorised cable reels since the early 1960s. Our cable reels are designed for horizontal and vertical applications, both for continuous and intermittent duty applications.

Always at the forefront of innovation, Cavotec Specimas has introduced many new developments over the years such as the noted "Pull & Store" system, which has subsequently been adopted in thousands of applications.

Our solutions enable ports to safely and efficiently electrify their quays and mobile cranes, which enable the reduction of emissions and operational costs. We also supply ERTG and ASC RMG solutions for powering and controlling these modern quay cranes.



Spring-Driven Reels

Centres of Excellence:
Cavotec Alfo, Cavotec RMS

Cavotec Alfo and Cavotec RMS spring-driven cable reels are based on a flexible and innovative design for both standard and highly specialised applications.

Our spring-driven reels serve customers in a broad variety of applications, from heavy industry applications to major sporting and cultural venues.

All Cavotec spring-driven cable reels meet applicable International Electrotechnical Commission (IEC) and EU standards.



Alternative Maritime Power (AMP)

Centre of Excellence:
Cavotec Specimas

Concern over air quality in harbours has led to growing pressure on the ports industry to reduce carbon and nitrogen dioxide emissions. Cavotec's Alternative Maritime Power (AMP) systems enable vessels to turn off their engines when in port and connect to shore-side electricity, thus helping to improve air quality in ports and surrounding communities.

Cavotec Specimas designs, manufactures and installs integrated AMP solutions, including ship- and quay-based cable management systems, innovative vault covers, connectors and mobile units.



MoorMaster™ Automated Mooring System

Centre of Excellence:
Cavotec MoorMaster

MoorMaster™ is a vacuum-based automated mooring technology that eliminates the need for conventional mooring lines. Remote controlled vacuum pads recessed in, or mounted on the quayside, moor and release vessels in seconds. In addition to improved safety and productivity, the technology also has the potential to deliver infrastructure savings in many applications.

Since its introduction in 1998, several different versions of the technology have performed thousands of successful mooring operations at applications in Australia, Canada, Denmark, Oman and New Zealand.

MoorMaster™ is used in port sectors such as container terminals, Ro-Ro, bulk handling and lock applications and the technology is also designed to function in Ex-zone environments.



Panzerbelt

Centre of Excellence:
Cavotec Specimas

Panzerbelt is Cavotec's patented cable protection system that protects the cables powering ship-to-shore cranes. Panzerbelt is currently in operation at over 800 applications worldwide. It incorporates a continuous semi-flexible belt, made from rubber with a steel inlay, that lies over channels cast in the quay. The belt is riveted to the quay surface along one edge, while the other remains free to be raised by a cable guide and belt-lifting device fitted to the crane.

Panzerbelt guarantees that cables inside the channel are protected from vehicles crossing the track and from objects and fluids falling into the cable duct.



Access Covers for the Ports & Maritime sector

Centre of Excellence:
Cavotec Dabico

Cavotec's Easy Lift Cover Assembly is a robust, cost-effective and marine-grade solution produced to meet site-specific size and load-bearing requirements.

The unique design of Cavotec's Easy Lift Covers is the result of more than 40 years of experience with high-load rated, one-hand lift covers. Easy Lift Covers can be safely opened with a lift weight of approximately 15 kilograms. The covers require a positive force to close and cannot accidentally slam on an operator.

Cavotec also manufactures fibre glass pit forms for use in conjunction with the Easy Lift Cover. They are designed to encourage on-site labour savings by eliminating the time-consuming formation of concrete vaults. Internal components, such as stainless steel junction boxes, can be factory installed prior to shipment.



Power Units

Centre of Excellence:
Cavotec Connectors

Cavotec power units are designed to perform under the pressure of harsh working environments such as in container or bulk terminals and in the off shore market.

Our power units are customised to clients' exact specifications with LV, MV or HV connectors and electrical or mechanical interlocking. Cavotec Push & Pull connectors offer the highest safety standards and enable the fast connection and disconnection of mobile cranes such as ERTG, ASC or STS. The unique features of Cavotec connectors have also been widely recognised in the off-shore industry, an essential product for connecting mobile equipments on off-shore platforms.

Cavotec power units form part of a complete system offering for the ports and maritime industry such as the electrifications of mobile cranes with motorised cable reels, turnover anchor and cable guides.



Industrial Radio Remote Controls

Centre of Excellence:
Cavotec Micro-control

Cavotec's industrial radio remote control (RRC) systems guarantee safe and secure communications in all kinds of operating environments in the ports sector.

Our RCC are used to control ASC, RMG and ERTG in a semi-automatic mode and mooring operations with MoorMaster™.

All units have ATEX and IEC certifications.





Slipring columns

*Centre of Excellence:
Cavotec Specimas*

Cavotec's comprehensive range of collector columns (sliprings) supply electrical power and signaling through sliprings used in a wide range of applications. Cavotec's slipring columns, with a unique multi-contact patented brush-gear, serve customers throughout the ports and maritime sector.

Cavotec tailors slipring columns to specific customer requirements, including high voltage and high amperage applications.



Cables

*Manufacturer:
exclusive Cavotec supplier*

Cavotec supplies a wide range of flexible cables from standard to highly advanced power and signal cables.

Cavotec's experience supports customers worldwide in selecting the most suitable cable according to the demands of specific applications.

On request, cables are supplied terminated with lugs or connectors (both MV and LV) for easier application.

Spreader and festooning cables are also available.



Airports



IMPROVING EFFICIENCY, REDUCING CONGESTION

Cavotec's Airports Market Unit enables the global airports industry to operate more safely and efficiently every moment of every day. Our integrated systems help airlines and airports to service aircraft quicker, ensuring passengers can board and disembark aircraft easily and punctually.

Through our domestic and international sales and field support offices, we supply ground support equipment (GSE) - including fuel, water and power supply units, tunnel systems, pre-conditioned air units (PCAir), aircraft cables and mobile caddies, connectors, generators, converters, cable coilers and tow bars.

Some of our major customers in this market segment:

Anchorage Airport • Bahrain Airport • Boeing Corporation • Cargolux • ClaVal • Dubai Airport • Emte Sistemas
Frankfurt Airport • Gamuda • Gatwick International Airport • Heathrow International Airport • Lufthansa • Munich Airport
New Delhi Airport • Oslo Airport • Shanghai Airport • Siemens • Saudi Oger

Power conversion

Centre of Excellence:
Cavotec INET

Cavotec INET engineers and manufactures a wide range of modern 400Hz solutions for commercial and military aircraft. Our 400Hz solutions address all types of design requirements, including fixed or mobile units, point of use, and central systems, all engineered upon the optimum solution for our clients.

Complementing our existing 400Hz solutions (cable coilers and in-ground utility pits) with power conversion technology has brought Cavotec to a unique market positioning with the potential for full system design and a guaranteed functionality.



Pre-conditioned Air (PCA)

Centre of Excellence:
Cavotec INET

Cavotec INET's conventional Pre-conditioned Air (PCA) systems are capable of cooling aircraft in any climatic condition and are in operation at commercial and military airports worldwide.

Cavotec's complete range of PCA systems include fixed, mobile point-of-use and central PCA Handling units, which can all be mounted under passenger boarding bridges, on aprons, in technical rooms and even hangars.

Part of Cavotec's unique PCA in-ground utility pit systems, Cavotec's PCA range contributes to the aviation industry's drive to reduce air and noise pollution at airports and reduce APU fuel costs.



Pre-Compressed Air (PCAir)

Centre of Excellence:
Cavotec Fladung

Cavotec's mobile or fixed Pre-Compressed Air (PCAir) systems provide pre-compressed air to cool the cabins of passenger aircraft during ground handling.

Cavotec PCAir provides outstanding cooling performance and contributes towards improving passenger flight experience through its ability to deliver dry pre-compressed air at -20°C during two full hours of continuous operation.

PCAir is a superior option for the ground cooling of large wide body aircraft, like the A380, in hot and humid climates such as the Middle East.



In- and Above-Ground Utility Systems

Centre of Excellence:
Cavotec Fladung

Cavotec Fladung produces a wide range of pit solutions, including both Pop-Up Pit Systems and Hatch Pit Systems. Both Pop-Up Pits and Hatch Pits can be used in combination with our Tunnel System, on apron parking areas with 400Hz power supply, PCA, Waste Water, Blue Water, Potable Water, or in individual concrete pits.





Aircraft refuelling systems

Centre of Excellence:
Cavotec Meyerinck

Cavotec Meyerinck designs and manufactures advanced refuelling and loading systems that efficiently transport aircraft fuel, chemical and petrochemical liquids.

Cavotec Meyerinck supplies specialised refuelling loading arms for commercial and military aircraft, fighter jets, helicopters and tank trucks.

Major oil companies and dispenser trucks manufacturers have adopted Cavotec Meyerinck rigid arms for their dispenser trucks due to their highest safety standards and ergonomics for operators.



Tank farm solutions

Centre of Excellence:
Cavotec Meyerinck

Cavotec Meyerinck offers a comprehensive range of solutions for airport tank farms, which includes the loading and off-loading of fuel from rail cars and aircraft tank trucks, through to fuel storage tanks with floating suction arms.

Cavotec Meyerinck's state-of-the-art solutions are designed support the industry around the clock. The quality and reliability of Cavotec Meyerinck solutions have been recognised for many years and adopted around the world by both military and commercial customers.





Fuel Hydrant Systems

Centre of Excellence:
Cavotec Dabico

Cavotec Dabico designs, manufactures and supplies advanced fuel hydrant systems. Our engineers provide installation supervision and long-term support to commercial and military applications worldwide.



Vault Access Pit Covers

Centre of Excellence:
Cavotec Dabico

Cavotec Dabico vault access pit covers ensure easy and safe access to fibreglass vaults and concrete chambers.

With a maximum lift weight of 12kg, our vault access pit covers prevent fluids, dirt and debris from entering the pit.

All Cavotec Dabico covers are aircraft load rated to 4:1.



Mining & Tunnelling



CLEANER, MORE EFFICIENT OPERATIONS

Cavotec's expertise in the mining and tunnelling sectors makes tough underground work safer, more efficient and more sustainable at applications worldwide.

The core mission of this Market Unit is to design, manufacture and supply integrated automation and power supply systems that enable operators at both underground and surface mining sites to limit environmental impact and improve productivity.

Cavotec's major customers in these sectors include Atlas Copco, Bals, BHP Billiton, Blumenbecker Automation, Herrenknecht, LKAB, Pilbara Iron, Rambooms, Robbins, Sandvik, ThyssenKrupp and WHBO.

Some of our major customers in this market segment:

Atlas Copco • Bals • BHP Billiton • Blumenbecker Automation • Herrenknecht • LKAB • Pilbara Iron • Rambooms
Robbins • Sandvik • ThyssenKrupp • WHBO

Reels for the Mining & Tunnelling sector

Centre of Excellence:
Cavotec Specimas

Mining and tunnelling are two traditional fields for Cavotec Specimas cable reels. Since the early seventies they have been present in the mining industry in Scandinavia and are currently at work all over the world installed on drilling machines, tunnel scaling equipment, loaders, reclaimers and stackers.

Our robust motorised cable or hose reels participate to the continuous operations in the underground or open pit mining and up to the loading and unloading of the bulk materials. This environment in which the engineering quality is also essential for guaranteeing the operations safety has supported the definition of Cavotec high technical standards.



Power Units

Centre of Excellence:
Cavotec Connectors

Cavotec power units are designed to perform under the pressure of harsh working environments such as mines, steel works and maritime applications.

Our power units are customised to clients' exact specifications with LV, MV or HV connectors and electrical or mechanical interlocking. Cavotec Push & Pull connectors offer the highest safety standards and enable the fast connection and disconnection of mobile mining equipment.

Cavotec power units form part of a complete system offering for the mining industry, which includes innovative solutions such as motorised cable reels and RRC units.



Electrical connectors

Centre of Excellence:
Cavotec Connectors

Cavotec's Electrical Connectors are designed for heavy-duty use in harsh working environments such as mines, steel works and petrochemical applications.

Safe and durable, Cavotec's Electrical Connectors guarantee quick and easy connection and disconnection to promote operational efficiency.

Cavotec's wide range of connectors includes LV, MV and HV connectors, which can be supplied with either electrical or mechanical interlocking. Our connectors can also be integrated with our own distribution boards fitted with short-circuit breakers.



Industrial Radio Remote Controls

Centre of Excellence:
Cavotec Micro-control

Cavotec Micro-control manufactures high quality and technologically advanced RRC systems.

Through continuous innovation and research, Cavotec Micro-control has become a leader in its field by providing a wide range of equipment capable of meeting the most stringent industry specifications.

We help our clients to safely and efficiently operate mobile equipment under the harshest working environments.



General Industry



ENGINEERING EXCELLENCE FOR INDUSTRY

Cavotec's largest and most diverse Market Unit, General Industry, delivers a diverse range of systems that help a huge variety of industrial sectors operate more efficiently and more sustainably.

The unit's equipment areas include slinging columns for wind turbines, power connectors for high-speed trains, spring driven reels, radio remote controls and cable management systems.

Some of our major customers in this market segment:

ABB • Arcelor – Mittal • Al Habtoor • Costain • Fisia Italmimpianti • GE International • Konecranes • Liebherr • Linde
Manitowoc • Palfinger • Rocktec • Siemens • Terex • Vahle

Motor-Driven Cable and Hose Reels

Centre of Excellence:
Cavotec Specimas

Cavotec's innovative motor-driven cable and hose reels are used in a variety of different configurations in general industry applications such as steel mills, aluminium plants and logistical centres all around the world.



Spring-Driven Reels

Centres of Excellence:
Cavotec Alfo, Cavotec RMS

Cavotec Alfo in Germany and Cavotec RMS in France are specialised in the manufacture of a wide range of high quality spring-driven reels for horizontal and vertical applications.

The innovative design and modular components allow for a great many combinations able to cover most industry requirements.



Slipping Columns

Centre of Excellence:
Cavotec Alfo

Cavotec Alfo is a well-known manufacturer of high quality slipping columns. Our slipping collectors are mounted either vertically or horizontally.

For extra protection, Cavotec Alfo collectors can be fitted with covers to ensure optimal performance in the most demanding of operational environments.



Stage Technology Reels

Centres of Excellence:
Cavotec Alfo, Cavotec Specimas

Cavotec has through years of supplying Power Supply Equipment gained a wide range of experience. Stage Technology is one industry where we have worked closely with consultants, contractors and users to find the right equipment for various applications.

Equipment like Motorised- and Spring Operated Cable Reels, Cable Chains, Electrical Connectors, Cable and Radio Remote Controls have successfully been installed in theatres worldwide.

Typical installations are concert halls, cinemas, churches, hotels, sporting arenas, circuses, movable concert arenas and town halls.



EX-Industrial Radio Remote Control Systems

*Centre of Excellence:
Cavotec Micro-control*

Cavotec Micro-control has developed RRC systems in close co-operation with customers since 1984. Designing systems that exceed expectations by consistently meeting even the strictest safety specifications is central to our work.

Our Ex-proof radios have become the preferred radio remote systems for offshore, mining and hazardous-area industries. ATEX and IECEx tested and approved, Ex-RRC systems provide secure and flexible control for a vast range of machinery.

Ex-RRC systems can be delivered with simplex or the duplex communication option that allows operators to receive messages, alarms and status indications via LED, display and other indicators.



Loading Arms

*Centre of Excellence:
Cavotec Meyerinck*

Cavotec Meyerinck loading arms are used wherever liquid products, such as chemicals, petrochemicals or food, need to be transferred by ship, tank truck, railcar or any kind of container. Our loading arms meet the most stringent safety requirements and provide easy operation for loading or unloading.



Industrial Controllers

*Manufacturer:
exclusive Cavotec supplier*

Cavotec supplier Gessmann manufactures a wide range of single and multi-axis joystick controllers, foot pedals, seats and cab units for users and manufacturers of cranes and mobile machinery.

Designed for use in harsh environments, these products are used in ports, mining and tunnelling, special vehicles and maritime applications. Cavotec represents Gessmann in Australia, China, Hong Kong and across Latin America.



Flexible Cables

*Manufacturer:
exclusive Cavotec supplier*

Cavotec supplies a wide range of flexible cables from standard to highly advanced power and signal cables, including special configurations.

Cavotec's experience supports customers worldwide in selecting the most suitable cable according to the demands of specific applications.

On request, cables are supplied terminated with lugs or connectors (both MV and LV types) for easier application.

Spreader and festooning cables are also available.





Rotating Electrical Connectors

*Manufacturers:
exclusive Cavotec suppliers*

Mercotac rotating connectors combine mercury with compatible metals to form highly reliable rotating electrical connections for up to eight channels. They are well suited for highly sensitive circuitry used in robotics, video and digital signals.

Mercotac electrical connectors are marketed by Cavotec in the following countries: Argentina, Chile, China, Germany, Hong Kong, Norway, Singapore, South Africa, Sweden and the United Kingdom.

Aurotac connectors, manufactured by Eletca, are ideal for transmitting signal and control circuits in applications which need high revolutions, low noise emissions and low resistance. These products are distributed through local agents in several markets.



Cable Chains

*Manufacturer:
exclusive Cavotec supplier*

Power chains, manufactured by Brevetti, are an innovative and cost effective alternative to festooning systems and conductor bars. These systems safely carry power and control cables over long distances and at high speeds.





Cable Ladders and Trays

*Manufacturer:
exclusive Cavotec supplier*

Established in 1935, WIBE AB is a leading manufacturer of cable management systems. WIBE has developed a unique closed profile to provide low weight and high point loads. In the Middle East, WIBE is today an approved supplier of power and desalination stations in UAE, Qatar, Oman, Kuwait and Saudi Arabia. Elsewhere, these systems are distributed through local agents.



Installation & Maintenance



OUR SALES OFFICES AND CENTRES OF EXCELLENCE ARE LOCATED AROUND THE WORLD AND ARE STAFFED BY OUR EXPERT ENGINEERS.

Service and support

Cavotec's service teams support your installation, commissioning and maintenance requirements, and are available around the clock to deliver on- or off-site assistance.

We also provide on-site commissioning and training, as well as dedicated training classes at our Centres of Excellence. Our highly qualified engineers provide all training levels and maintenance instruction.



With a global presence of sales and manufacturing companies across six continents, Cavotec ensures each of our clients receives personal and local service.

Cavotec's creativity and professionalism is founded on teamwork: working closely with clients, exchanging knowledge and ideas.



We are present in:

Argentina
Australia
Bahrain
Belgium
Brazil
Canada
China
Denmark

Finland
France
Germany
Hong Kong
India
Italy
The Netherlands
New Zealand

Norway
Russia
Singapore
South Africa
South Korea
Spain
Sweden
Switzerland

UAE
UK
USA

For more information please visit our website www.cavotec.com
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