

POWER

IN CONTROL



-power in control

DEIF is an experienced player in the international markets for engine & gen-set controls, marine bridge instrumentation, switchboard instrumentation and renewable energy controls. Since 1933, we have given our customers a competitive edge by delivering state-of-the-art solutions based on superior product quality, flexible functionality, service and commitment. We take pride in cooperating with our customers to develop the necessary solutions. Solutions which one can rely on, even under the harshest weather conditions. That is the very meaning of "Power in Control" – it characterises everything we do.

Many tend to compare products on technical specifications and price alone. We believe that durability, future-proofing and hassle-free performance are ever more important features. So, we never compromise on quality.

Your worldwide supplier of flexible control solutions



Photo source: Atlas Copco

Humans make the difference



At DEIF, we are not like everyone else, and that is our very strength. We take pride in what we do and it shines through in all stages of our organisation. Those who develop and test the products, those who assemble and configure and those who implement the finished solutions in the field – all of them are enthusiastic about what they do, and they know that what they are delivering is reliability. When you choose DEIF, you do not risk being abandoned in the middle of nowhere. We will stay with you all the way, make a determined effort to understand your needs, develop things with you and make sure that everything works as it should.

No problem is too small to be taken seriously – we are always ready to talk, but perhaps not in a way you are accustomed to. We have become known for the way we are and how we cooperate with our customers. We are straightforward and open by nature and we say things the way we see them. We never press and cajole customers simply to win an order. We believe in long-term relations based on respect and mutual trust.



A reliable partner

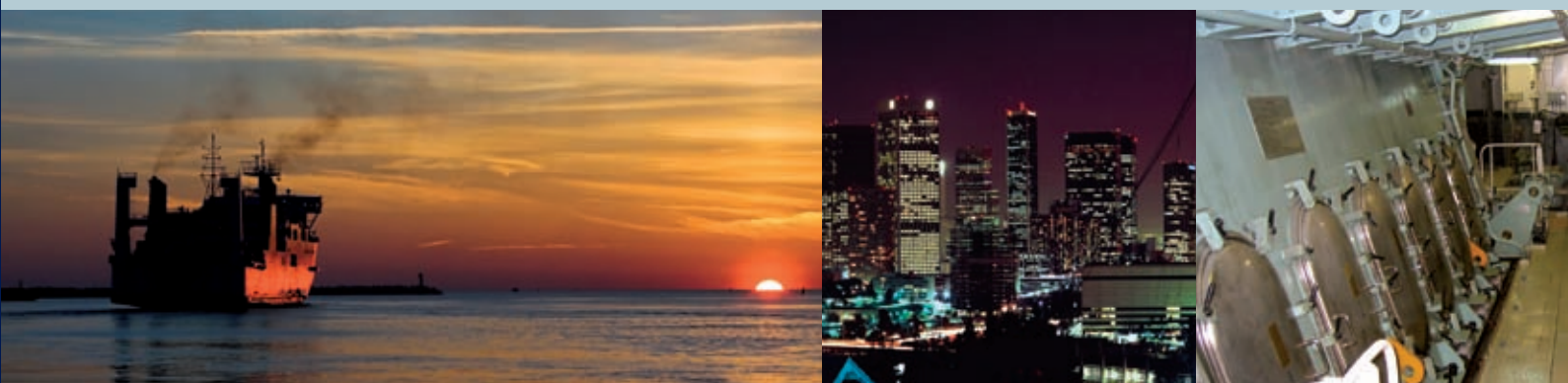
Customer trust is something we must earn. Therefore, we take full responsibility for the quality of our solutions and for making sure that each and every single customer experiences smooth implementation and operation. All tests are carried out in our own in-house facilities. We offer training in fully equipped training centres in all subsidiaries. The cooperation also includes subsequent service and support. Should a problem occur, we will assist you at once – no matter where you are!

Reliable power supply under all conditions is vital in many situations. Not only onboard ships of course, but also on firm ground in airports, at hospitals and in remote locations possibly lacking reliable public power supply. Here, one is completely dependent on diesel generators using an operationally proven power management system.

Engine & Gen-set Controls

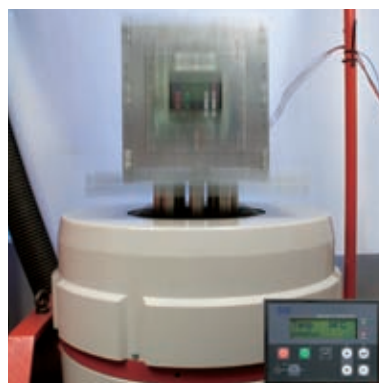


Dedicated and focused product development



What really separates DEIF from the competition is our ability to offer flexible control solutions on all market levels. Right from manual engine starters to emergency generator control. As a result of dedicated and focused product development, we offer competitive products ranging from standard controller units to fully customised power management systems. Our most advanced system has been fitted in more than 1,000 applications. With this range of possibilities, DEIF is your perfect partner for honest discussions of the real requirements for your specific application.

Important elements in DEIF's power management concept are the standard open protocols for serial interface to integrated alarm, monitoring and control systems and our long list of state-of-the-art engine communications.



All DEIF products have been tested in our in-house test centre in Denmark and are part of our quality management system which has been certified in accordance with ISO 9001.

The main switchboard is the central electrical nervous system of any power plant, be it located onboard a ship or in a factory. It is connected to a number of sub-distribution switchboards and is vital to power supply, control and system monitoring. Therefore, heavy requirements have been placed on these switchboards and all the instruments that form part of them.

If a switchboard component fails, it could be critical to continued operation and expensive to repair. Many switchboard manufacturers and their customers prefer DEIF components due to robustness and high quality, and because the switchboard manufacturers can purchase all instruments from one supplier, have them customised to fit their individual project and not least delivered on time. DEIF components are not always the cheapest to purchase, but it is more than likely that we deliver the lowest total cost of ownership.

Switchboard Instrumentation



The electrical central nervous system



DEIF offers to customise instruments to specific customer requirements in terms of logo, scales and colours – and we will still deliver within one week. To us, superb logistics are an integral part of being competitive. Switchboard manufacturers around the world can be confident that they will receive their instruments on the day we have promised. Due to our subsidiaries and offices in many countries, you can always reach a competent DEIF technician in your time zone and vitally important – in your own language.



Our wide range of switchboard instrumentation is an independent business area, but we highly complement our business area for engine and gen-set controls and provide great logistical advantages to our customers.

Marine Bridge Instrumentation

At sea, one cannot just pull into the emergency lane if a technical problem occurs – at sea you are on your own. Therefore, requirements for operating and control systems onboard ships are, quite rightly, extremely onerous. These requirements concentrate concern on precision, robustness and reliability. The responsibility for all systems onboard and the ship as such, lies with the officer or captain on watch. He must be able to rely 100% on the instruments and signals indicating the operating situation of the entire ship accurately and reliably.

A special requirement for bridge instrumentation is that both instrument and display must be readable in broad daylight and in the dark.



Precise, robust and reliable



At DEIF, we have worked for generations to develop the optimal design and illumination of instruments and displays. We were the first to apply diode light in place of glow lamps for instrument illumination. The diode light is much easier to control and will last for as long as the ship stays in operation.

The most recent innovation in bridge instrumentation, the XL indicator range, has been developed with the focus on quality. Quality is secured by means of a new, patented technology that does not just make the indicators extremely robust – it also makes them the worlds' most accurate.

Today, where the majority of new ships are being made in the Far East, robustness is precisely one of the most important features in order to avoid the transport damages that often occur on the "older" style moving-coil based indicators. The X-coil technology ensures that when the indicators arrive at the shipyard, they will be exactly as accurate as they were when shipped from our production in Denmark.



Being the shipbuilding industry's preferred supplier of bridge instrumentation on a worldwide scale, we offer to tailor our instruments to the customer's own design.

The ever-increasing size of wind turbines and hydro power plants also increases the requirements for generator control and the public electricity grid.

DEIF's Renewable Energy Division delivers controller technology to the international wind industry. Through intensive and targeted development, we succeeded in creating one of the most advanced and integrated controllers available today. We have successfully integrated our well-proven hardware and software platforms into a uniquely flexible controller, and best of all, it only takes three print modules to handle all applications.

We know that our customers not only need high-quality and state-of-the-art technology products, but also stable access to the specialised and up-to-date know-how which is crucial for players in this business. Therefore, we clearly aim at building lasting partnerships with our customers. We do not rest, until our customers are satisfied.

Renewable Energy Controls



Advanced and integrated controls



Our integrated wind turbine controller systems are based on a well-proven hardware platform used in thousands of controller systems from oil rigs in the North Sea to power stations in the deserts of Sahara. We have the certificates to prove it!

Sine 1933, DEIF has developed and manufactured control systems for machines and plants with a long service life in critical operation such as power plants and ships. We have developed a unique mind-set which gives us additional strength within renewable energy where the same conditions apply.

Our success in developing marine-approved products is your guarantee of maximum robustness and durability.



The TCM-1 offers superb protection of your drive train. The unique rpm-based cut-in reduces grid impact to an unmatched level.

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In addition, DEIF has many distributors throughout the world.
For a complete and updated list of DEIF subsidiaries and distributors, please visit www.deif.com.

