

ACUTUS WHITE PAPER 2022



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About Acutus

Acutus specializes in Marine and Industrial HVAC and refrigeration, inspections, commissioning, spare parts and automation systems. Acutus also offers worldwide service, repairs, and parts for HVAC and Refrigeration for marine and industrial clients.

Acutus is a team of employees with strong Oil and Gas, Maritime, and Manufacturing industries expertise. With experience from many use-cases and multi-level cases, we curiously look for new challenges to solve. Acutus helps clients enhance their performance by developing, upgrading, and servicing marine and industrial equipment – we always aim to increase efficiency, equipment lifespan, stability, operational scalability, and optimal operability.

Our technicians travel worldwide on short notice to provide fast and reliable service to our clients. In several country's we have highly skilled partners that provide service on behalf of Acutus. Spares and other equipment are shipped the fastest way possible to prevent downtime for our clients. Helping clients and partners fulfill their goals and objectives to achieve success is Acutus's primary goal.

A vision to be successful in our ventures rests heavily on our goal to help our clients achieve their success. To do so, the entire Acutus team lives by our exceptional work ethic and philosophy to be a team dedicated and cooperative:

Seeking the optimal solution for the given goal.

Giving quick turnarounds on any changes to deliveries

Devoting passion and drive to provide the best possible result.

Seeking to reduce the risk of human errors in operations

Provide outstanding service and exceptional quality of work.

Flexible, competent, and up to date with the best technologies.

Seeking to increase client's success rate and ability to innovate.



Acutus Commissioning

Our professional technicians take care of A-Z commissioning, report through the entire process, and provide final commissioning reports with detailed information and work documentation. Worldwide services & repairs at quayside, shipyard, or underway sailing.

Professional technicians

Acutus offers professional expertise in HVAC, Refrigeration, automation, software, and instruments. Acutus also provides technicians for all types of refrigerants: HFC, CO₂, NH₃, and more, as well as flooded systems.

All technicians hold a certificate and perform all jobs per regulations and norms. Information during all stages of commissioning.

During commissioning, a detailed daily report is issued to our client to provide information about project progress, this in addition to a final report, signed timesheets, and picture documentation.

Software adaptation for automation systems. If there is a need to change or update software during commissioning, our trained service technicians can upload and/or update our clients (on client's demand only).



Acutus Services

HVAC

Acutus can offer technicians for Service at HVAC systems. All technicians have extensive experience with ventilation systems and water systems. The technicians are equipped with the latest measuring equipment to give the best possible result and comprehensive documentation.

Refrigeration

Acutus can offer technicians for service at refrigeration systems. All our service engineers have all the necessary and statutory certificates to work with synthetic refrigerants and natural refrigerants. Our technicians have extensive experience with medium-sized and large plants.

Automation

Acutus can offer technicians for service, conversion, and new electrical cabinets. All our technicians are certified and have the required courses and competence per current regulations. Our technicians use the latest measuring tools and equipment to ensure the best possible result and outstanding documentation. For service, we can offer energy measurements, thermography, mega testing, and much more. We also provide an emergency call to our clients.

Software

Acutus can offer software engineers for troubleshooting and/or correction in software. Our engineers have extensive experience in software development of control for refrigeration and HVAC systems. We also provide an emergency call to our clients.

Mechanical

Acutus can offer mechanics and technicians for service on refrigeration and HVAC systems. Our technicians provide all the necessary tools for the work. Acutus can also offer welders and plumbers through our partners. We can provide assembly and disassembly of entire plants. We also offer an emergency call to our clients.

Compressor and Motor Overhaul

Acutus specializes in maintenance and repair of compressors and electric motors used in the marine and offshore industries. We overhaul semi-hermetic and open compressors of most brands and types. We work with the latest and most innovative technology and meet our customers' high demands for quality and documentation. Acutus uses advanced equipment and technicians with high professional knowledge in order to ensure customers' needs. When overhauling, Acutus inspects all moving and wearing parts for damage and any damage/wear is carefully measured and documented.

Instruments

Acutus can offer highly qualified technicians for troubleshooting and correcting errors on sensors and collaboration; with several worldwide suppliers, both parties will have easy access to spare parts. We also offer an emergency call to all our clients.



Retrofit Installations

Retrofits and adaptation of older HVAC, Refrigeration, and automation systems with replacements of obsolete equipment or parts.

Inspections

Inspections and detailed reports with measurements, pictures, and suggestions on services needed to prolong equipment's lifespan.

Offers

Acutus can offer to do the retrofit, service job, design, software, and/or spare parts.

Rebuilds

Acutus can do the actual rebuild as well, with all changes needed to systems.

Replacement of obsolete Equipment

Acutus can help find replacements to obsolete equipment on any system to prolong the plant's lifespan.

Software adaptation

If software needs updating due to new equipment, Acutus can adapt to new equipment installed.



Control Systems

PLC and HMI

Acutus offers control systems for HVAC, Refrigeration units, DX-plants, water chillers, and heat pumps.

Do you have an old unit looking to change your control systems because of obsolete PLCs or HMI displays?

We can offer to upgrade hardware and software; in some cases, we can even migrate software from the old system to new hardware to hold costs to a minimum.

Scada Systems

Acutus offers Scada solutions with various options as OPC UA, alarm servers, and more. It is even possible to fit a system to old equipment to get more information, reliability, and maintenance needed.

Note

Read Acutus Industrial IoT White Paper for more information on how we can accommodate digitalizing operational platforms, Control systems, and more.





Spare Parts

Acutus's goal is to be your preferred supplier when it comes to spare parts. We deliver the correct parts in due time. We can fulfill almost all demands regarding HVAC and Refrigeration spares. Acutus has access to products and reserves for almost every compressor brand, like Bitzer, GEA Bock, Refcomp, Carrier. Acutus cooperates with several of Europe's largest suppliers of industrial and commercial refrigeration manufacturers, and this ensures you, as clients, good access to the right parts. Parts can either be delivered to your local forwarder for consolidated freight or directly to vessels worldwide using courier transport. We offer a full range of parts and installations as follows:

Filters, Inlet & outlet louvers,
Recovery wheel replacement,
Refrigerant, HFC, NH3 & CO2.

Cooling & heating coil installation & replacement.

Fan-coil delivery, installation, replacement & service.

Fire and regulation damper installation & replacement.

Cabin unit delivery, installation, replacement & service.

Air handling unit delivery, installation, replacement & service.

Self-contained unit delivery, installation, replacement & service.

Axial, centrifugal, plug fan delivery, installation, replacement & service.



Industrial IoT

Acutus can be your partner for digitalization and contribute to turning your data into value. With realtime data collected from sensors, opportunities are only limited by imagination.

Improve safety

Increase uptime

Increase efficiency

Lower greenhouse emissions

Increase return on investments

Optimize reservoir depletion strategies

Predict and make decisions based on facts

Integration and interoperability.

Utilize existing sensor data available and collect data across assets.

Collect, Organize, Process, Contextualize, Visualize, use OPC UA as platform and utilize data to boost your production quality.

Equipment and facility information used in ERP/CMMS, Distributed Control Systems, Asset Performance Management, and more are updated manually or semi-automated today, which is prone to error. The result is poor information integrity over time and leads to improper equipment maintenance, poor operation planning and monitoring, replacements purchase, and incorrect decisions. Lack of standardized information platforms, harmonized data sources and integration between systems for management, operations planning, maintenance and procurement lead to inconsistencies in information consumed in different departments. Non-existing contextualized and structured data to enable human resources to find and identify correct data conveniently, automated reporting, monitoring and advisory applications. The short-term costs for investing in digital transformation often overshadow the long-term gain and lead to hesitation to take the step.

Harmonizing and data models reflecting real assets.

Get greener, increase efficiency, increase return on investments, and base your decisions on facts and not on assumptions.





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