



Rolls-Royce

Innovation based on experience

exploration
and production

offshore





Rolls-Royce

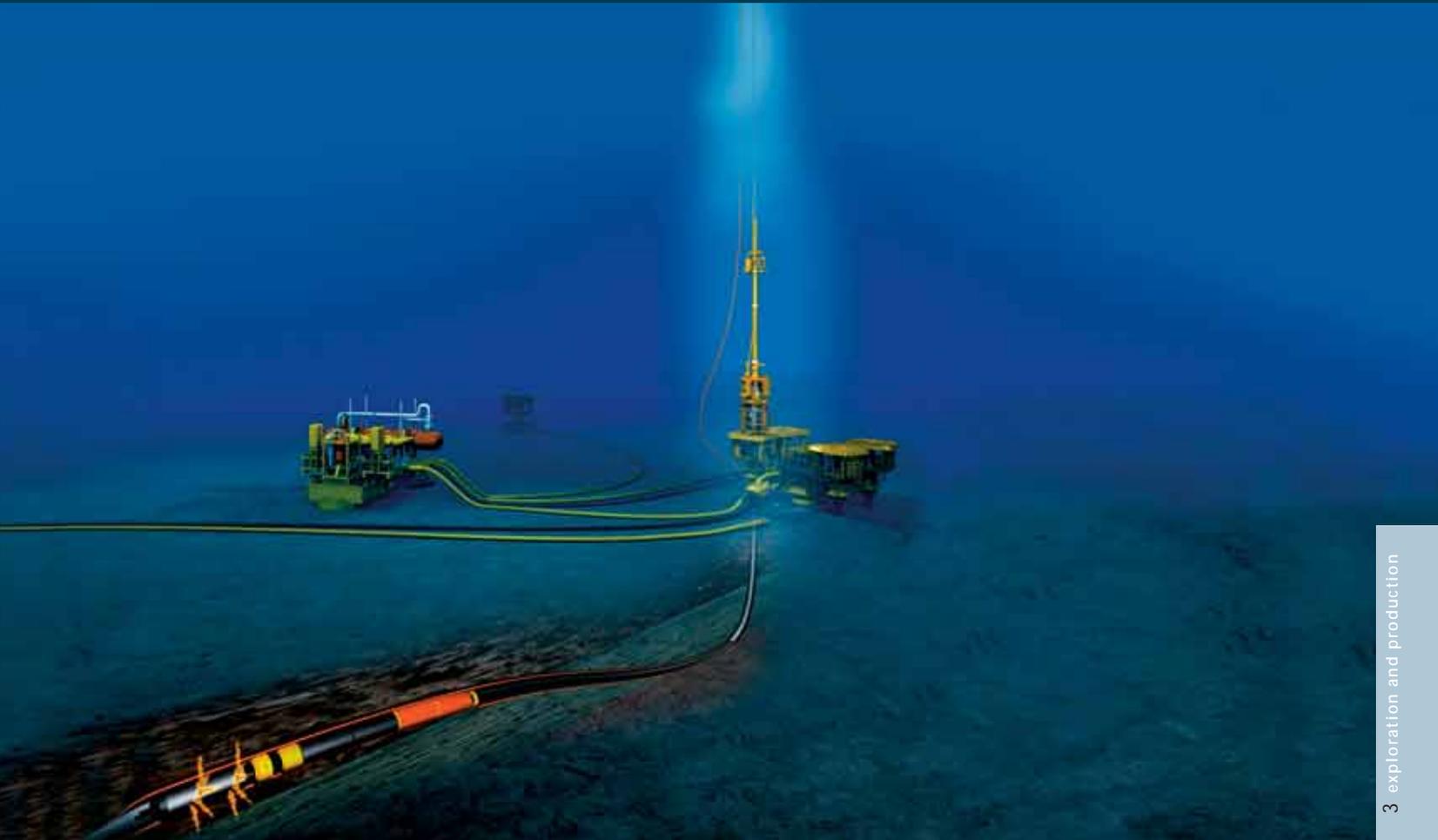


MANOEUVRING SYSTEMS

DECK MACHINERY

GENERATING ENGINES

GLOBAL SUPPORT





Rolls-Royce

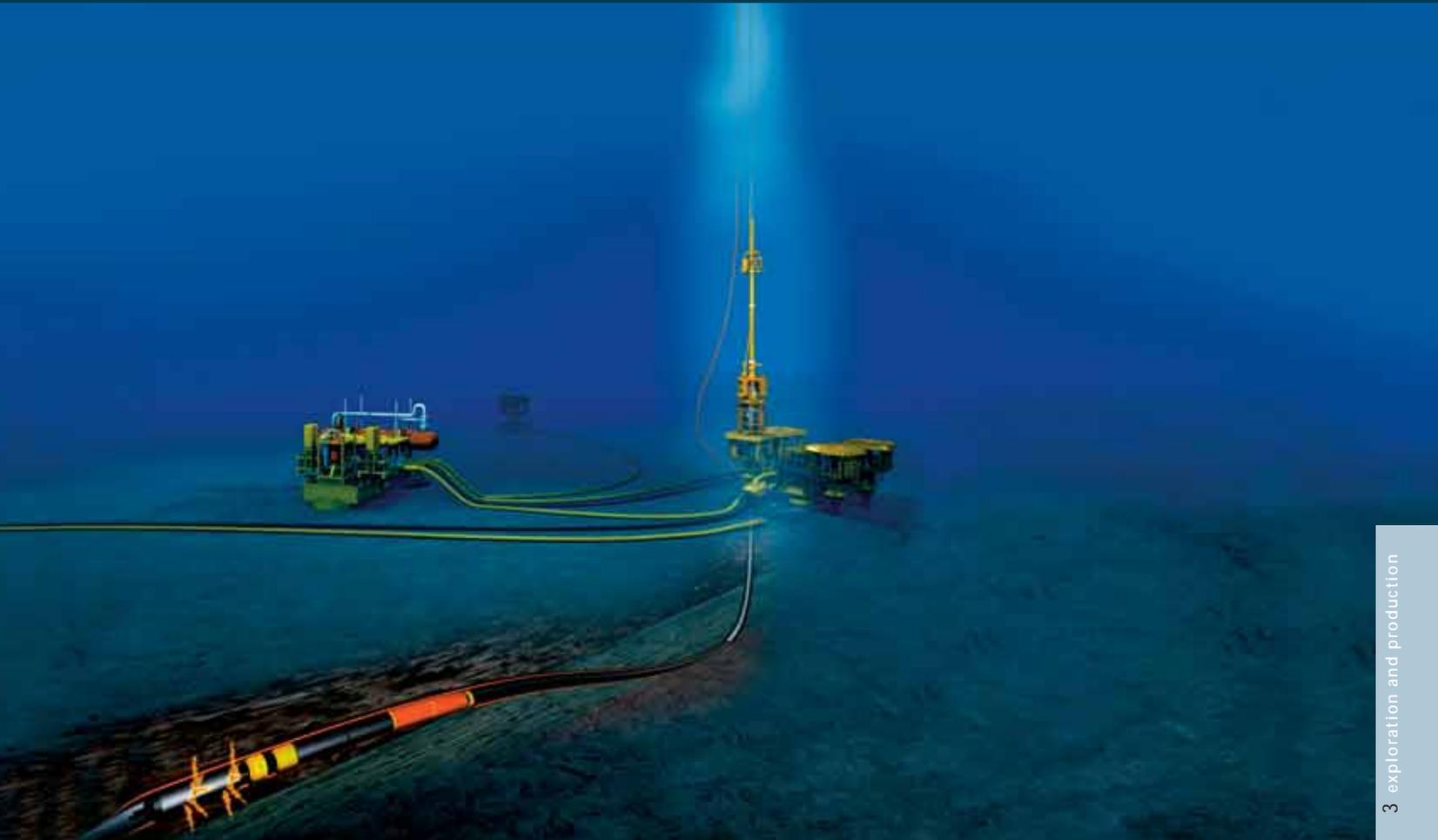


MANOEUVRING SYSTEMS

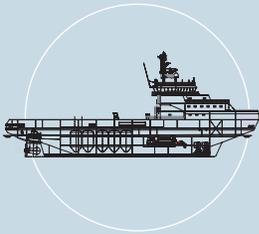
DECK MACHINERY

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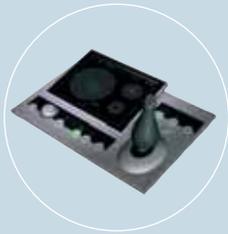


System solutions



Design and ship systems

- UT-Design
- Tailored equipment
- Consultancy
- Finance



Automation systems

- DP systems
- Monitoring and control
- Bridge controls
- Switchboards
- Consoles



Bulk handling systems

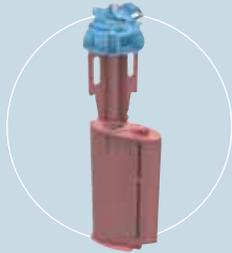
- Pneumatic tanks
- Compressors
- Valves
- Control systems



Propulsion Systems

- C.P. propellers
- Reduction gears
- Diesel engines





Manoeuvring Systems

- Steering gear
- Rudders
- Thrusters



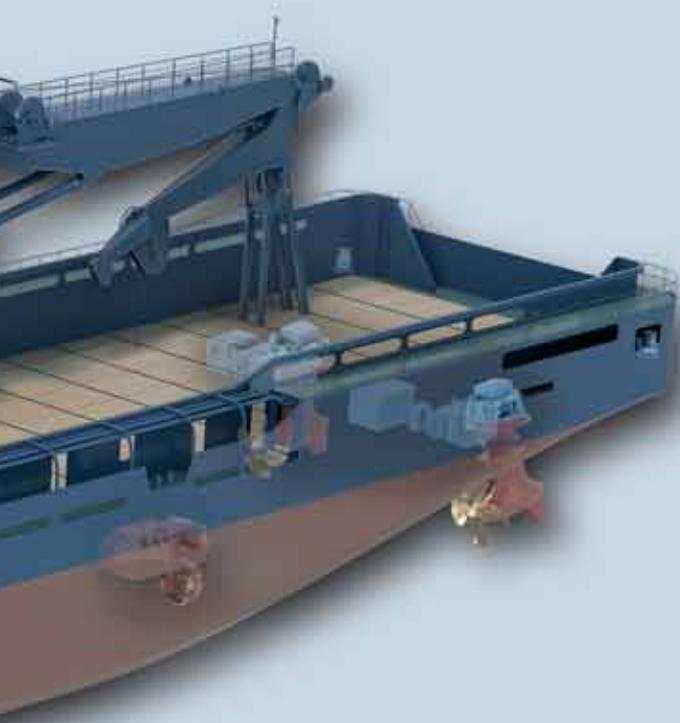
Thruster Systems

- Tunnel thrusters
- Azimuth thrusters



Deck Machinery

- Tow and anchor handling winches
- Deep sea cable traction systems
- Control systems
- Anchoring and mooring winches



A smart choice when the job calls for a complete system

Rolls-Royce meets the growing requirements for fully-integrated ship systems with innovative and competitive solutions that deliver low life-cycle cost for our customers.

We provide a wide range of ship systems, ranging from small automation systems to complete ships, customised to your requirements.

Both design and equipment packages are developed and manufactured in close co-operation with you, the customer, to secure the optimum solution for your operations. This gives you complete co-ordination between the products involved, in terms of delivery and guaranteed quality.

In addition, we offer the know-how of our experienced consultants from the development of ship design to the vessel's equipment, global support, maintenance and finance.

Whether you choose a fully-integrated ship system or a single product, we know that you need cost-efficient solutions with high operating profitability.

Technological strength and decades of experience gives us the ability to design, build, deliver and support fully-integrated ship systems.

UT-Design



Every day, we challenge the perception of what is the optimum ship design and technical solution for our customers' offshore operations. We keep pushing the bounds of technology beyond today's limits. We do this for one reason only – your vessel's future profitability.

Nothing is as important as our customer's experience and requirements to achieve the best solutions possible. Close customer co-operation has laid the foundation for our success in designing highly specialised vessels and equipment for exploration and production offshore.

We offer complete project implementation. We can therefore follow the customer through the entire process, from the idea phase until the application is ready. In addition, we tailor vital equipment to your specified application.

The UT-Designs for exploration and production offshore cover seismic survey-, intervention service- and drilling vessels. Vessels with the benefits of cutting-edge technology, safe and flexible solutions – purpose fitted for their operations.



We are committed to the future

Typical applications



Ship name: Island Wellserver
Owner: Island Offshore
Type: Subsea/intervention vessel
Design: UT 767 CD
Yard: Aker Yards, Langsten



Ship name: Western Trident
Owner: Seismic Shipping Inc.
Type: Seismic research vessel
Design: UT 753
Yard: Ulstein Verft AS



Ship name: TBA
Owner: Farstad Shipping
Type: Subsea/trenching/construction vessel
Design: UT 761 CD
Yard: Aker Yards, Langsten



Ship name: Bigorange XVIII
Owner: Wilh. Offshore Services
Type: Well stimulation vessel
Design: UT 725
Yard: Ulstein Verft AS



Ship name: Island Frontier
Owner: Island Offshore
Type: Subsea/intervention vessel
Design: UT 737 L
Yard: Aker Yards, Soviknes



Ship name: Crystal Sea
Owner: Brovig Offshore AS
Type: Offshore oil/gas production vessel
Design: UT 729
Yard: Aker Yards, Langsten

A large offshore oil rig is shown at sea under a blue sky with scattered white clouds. The rig's complex metal structure, including cranes and platforms, is visible against the horizon. The word 'Transocean' is partially visible on one of the rig's structures.

Propulsion and manoeuvring

OE&P vessels demand reliable and accurate propulsion. Seismic operations demand low noise. Dynamic positioning and movement of large offshore applications demand expertly designed propellers and thrusters. We keep you on station, but we also let you strike out any direction with a product range that is the broadest in the business.

Developed to keep you on station, and for optimal propulsion and manoeuvring

Dynamic positioning and low noise propulsion are essential for the performance of precision offshore tasks. Rolls-Royce is the largest supplier of propulsion and manoeuvring systems offshore. Rolls-Royce propulsion systems are used in offshore applications all over the globe, delivering reliable power wherever required. The systems are well known for their optimum design, flexibility and functionality.



Typical applications



Ship name: Discoverer Clear Leader
Owner: Transocean Inc.
Type: Deepwater drillship
Yard: Daewoo, Korea



Ship name: Deepwater pathfinder
Owner: Conoco/R&B Falcon
Type: Dynamically-positioned drillship
Design: R&B/Conoco - double hull
Yard: Samsung Heavy Industries, Korea



Ship name: Normand Pioneer
Owner: Solstad Shipping, Norway
Type: Multipurpose offshore vessel
Design: UT 742
Yard: Ulstein Verft AS



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Thrusters

The world's widest range of thrusters



Ulstein Aquamaster azimuthing underwater mountable thrusters



Electrical podded azimuthing propulsor



Azimuth/side thrusters
• Ulstein Aquamaster combined azimuth/side thrusters



Retractable thrusters



Tunnel thrusters

Azimuth thrusters

(500 kW – 10 MW)

Ulstein Aquamaster azimuth thrusters are available:

- with ducted or open propellers
- with fixed or C.P. propellers
- with solutions for diesel engines or electric motors for the following applications:
 - hull-mounted (fixed)
 - hull-mounted (retractable)
 - containerised (retrievable)
 - underwater demountable
 - swing-up
 - swing-up/combined azimuth and tunnel thrusters
 - other special applications

Tunnel thrusters

• Kamewa Ulstein tunnel thrusters (150 – 3,700 kW)

Podded thrusters

• Mermaid by Kamewa/Alstom (5 MW – 25 MW)

Typical applications



Ship name: Sedco 706
Owner: Transocean
Type: Semi-submersible drilling unit
Design: MODU (CSDU) Earl & Wright
Yard: Kaiser Steel, Oakland, USA



Ship name: Stena DrillMAX
Owner: Stena Drilling Ltd.
Type: Dynamically positioned drillship
Yard: Samsung Heavy Industries, Korea



Ship name: Saipem 10000
Owner: Saipem
Type: Ultra deepwater drillship
Design: Samsung
Yard: Samsung Heavy Industries, Korea



Propulsion systems

Complete propulsion system



DP systems Monitoring and automation

- Multifunctional automation systems
- Switchboards and consoles



Steering gear

- Tenfjord steering gear
- Frydenbø steering gear

Steering gear and rudders

We provide a complete range of rotary vane steering gear and rudders for any offshore operations. The products are designed for a vessel's exact working area to obtain maximum manoeuvrability and reliability.



Propeller systems

- Kamewa Ulstein C.P. propeller systems (500kW – 50MW)
- Kamewa F.P. propeller systems (4m – 8m diameter)
- Kamewa adjustable bolted propeller systems (4m – 8m diameter)



Rudders

- Ulstein Hinze rudders

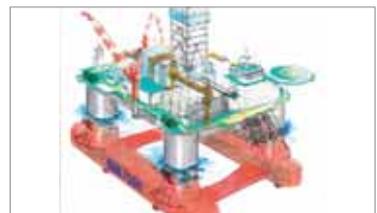
Typical applications



Ship name: SeaDrill 8 & 9
 Owner: Seadrill
 Type: Column-stabilized Semi-submersible Mobile Offshore Drilling unit (MODU)
 Design: F&G ExD
 Yard: Jurong Shipyard



Ship name: Noble Dave Beard
 Owner: Noble Drilling
 Type: Semi-sub
 Design: Friede & Goldman Modified 9500 Series Enhanced Pacesetter
 Yard: Vyborg Ussr Shipyard



Ship name: TBN - SeaDrill 12
 Owner: Seadrill
 Type: Semi-submersible drilling rig
 Design: GVA 7500
 Yard: Daewoo, Korea



Typical applications



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Design: UT 742
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Winches





Do you have the right deck machinery to handle your future business?

We do. We have the expert insight and the technology to provide you with mooring systems, that will make all the difference to your offshore operations.

Rolls-Royce Rauma Brattvaag supplies mooring, riser pull-in systems for floating units in the offshore oil & gas industry. We have achieved a reputation for excellence in the supply of high-quality and reliable machinery for safe operation in all climate zones.

Being a total supplier with "in-house" design and production of all major items, we give you a single point of contact, enabling us to develop the best solutions possible for every task.

We have always regarded close customer co-operation and fast and efficient service as an integral part of our product, as our highest priority at the top of our list of priorities.



• Anchor mooring winches for chain



Anchor mooring winches for wire

- Traction winches
- Drum winches



• Chain stopper



• Chain fairleads
• Wire fairleads

Typical applications



Ship name: West E-drill
Owner: Eastern Drilling ASA
Type: Advanced Dual RamRig
Design: Moss Maritime AS
Yard: Samsung Heavy Industries



Ship name: Sevan "SSP 300 for Chestnut"
Owner: Sevan Marine ASA
Type: FPSO - Floating Production, Storage and Offloading
SSP 300
Design: Yantai Raffles Yard, China



Ship name: Dalia FPSO
Owner: Total
Type: FPSO
Yard: Samsung Heavy Industries (SHI)



Ship name: Red Hawk SPAR
Owner: Kerr-McGee Corp.
Type: Cell Spar platform
Yard: Gulf Marine Fabricators Yard, USA

Generators and engines



C-engines

- Bergen C-engines with outputs from 1800 - 2700 kW



B-engines

- Bergen B-engines with outputs from 3000 - 6000 kW



Generating engines

- Bergen generating engines with outputs from 1440 - 6000 kW

To keep your application working you need generators this good

Rolls-Royce provides complete solutions for marine propulsion, auxiliary power and offshore power plants. Our customers' endorsements of our engines include superior performance, high reliability and cost efficiency.

The Rolls-Royce engines have become internationally renowned by seismic survey and research vessel owners and operators for their silent and low vibration characteristics. Our diesel and gas generators, supplying energy to offshore installations, combine the most stringent environmental requirements with high performance, resulting in cost-effective and reliable production of electricity and heat.

Typical applications



Ship name: Sevan "SSP Piranema"
Owner: Sevan Marine ASA
Type: Ultra deepwater drilling rig
Design: SSP 300
Yard: Yantai Raffles Yard, China



Ship name: Aker H-6e
Owner: Eastern Drilling and Aker Drilling
Type: Ultra deepwater semi-submersible drilling rig
Yard: Aker Kvaerner Stord AS



Ship name: Polar Pioneer
Owner: Transocean
Type: Semi-sub drilling rig
Yard: Hitachi Zosen KK, Japan



Ship name: Bourbon Opale
Owner: Island Offshore
Type: Well test service vessel
Design: UT 745 E
Yard: Aker Yards, Langsten



Rolls-Royce

Think about it. Marine generators run your vessel, haul in your cables, power your pumps, turn your thrusters, and keep the crew busy with day to day tasks. Rolls-Royce generators and propulsion engines keep your vessel working. Year in – year out.



Global Service and Support

The Rolls-Royce Service and Support concept has been developed to secure complete life-cycle support for your ship and its equipment. Our goal is to make your investment profitable for as long as possible, and to protect your values through our dedicated and global service network.

We enable you to choose the kind of service level you need in the most cost-efficient way. Choose between day-to-day servicing, service agreements or a comprehensive service solution.

THE PARTNER SOLUTION

A comprehensive service agreement

Lifelong support means less downtime, low life-cycle costs and proven high second-hand value. The Partner Solution provides you with these important advantages. This service solution allows you to optimise your daily routines, and ensures that our servicing puts your investment in the best hands. This also allows you to structure your own after-sales service to increase reliability and economy for your applications' operating conditions.

SERVICE AGREEMENTS

We save you time and money

Time is crucial, so swift and correct response to enquiries or problems is of mutual benefit. Our aim is to increase your profitability by implementing long-term and cost-effective service agreements. These include delivering original replacement units, regular on-site inspections and personnel training.

BASIC SUPPORT

We get you back in business

Our Service and Support is based on reliability, determination and the expertise to carry out services and deliveries at short notice. The Basic Support Agreement gives you access to our skilled field workers and genuine spare parts supplies, wherever and whenever you need them. The agreement also includes access to our in-house repair and maintenance centres all over the world.

WORLD-WIDE AVAILABILITY

We are always present

A Rolls-Royce service centre is never far away, no matter where you are. With a comprehensive network of service centres around the world, we are a global company and yet still local. We offer 24-hour availability worldwide, backed by a first class logistics system, which secures you rapid response to inquiries within the shortest possible time.

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