



energy

the unseen advantage



A leading global manufacturer of custom precision rubber seals, gaskets and mouldings for the energy market

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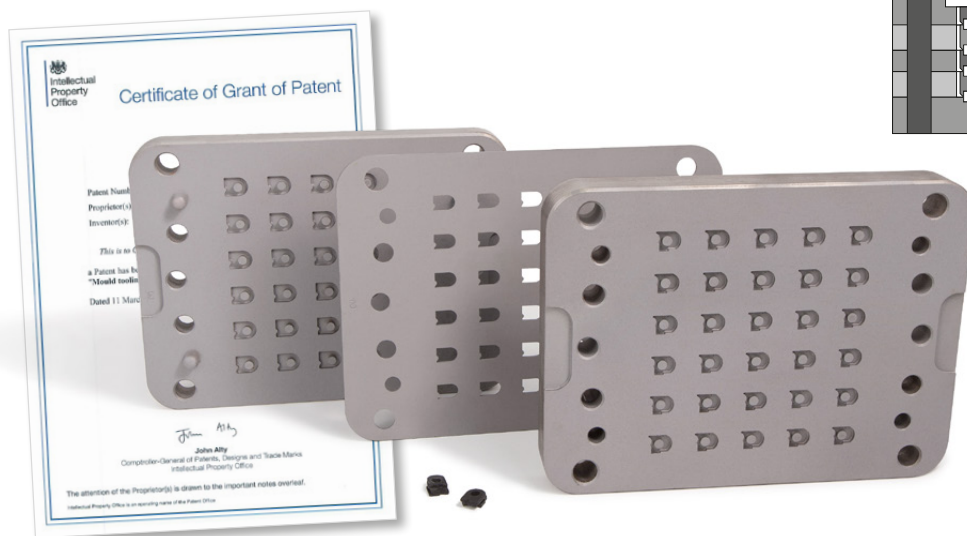
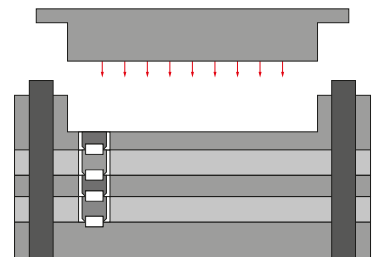
## A dynamic heritage and future

DP Seals is a leading manufacturer of custom rubber seals, gaskets and mouldings for the global energy market.

Our mission is to produce specialist custom mouldings for like minded innovative engineers.

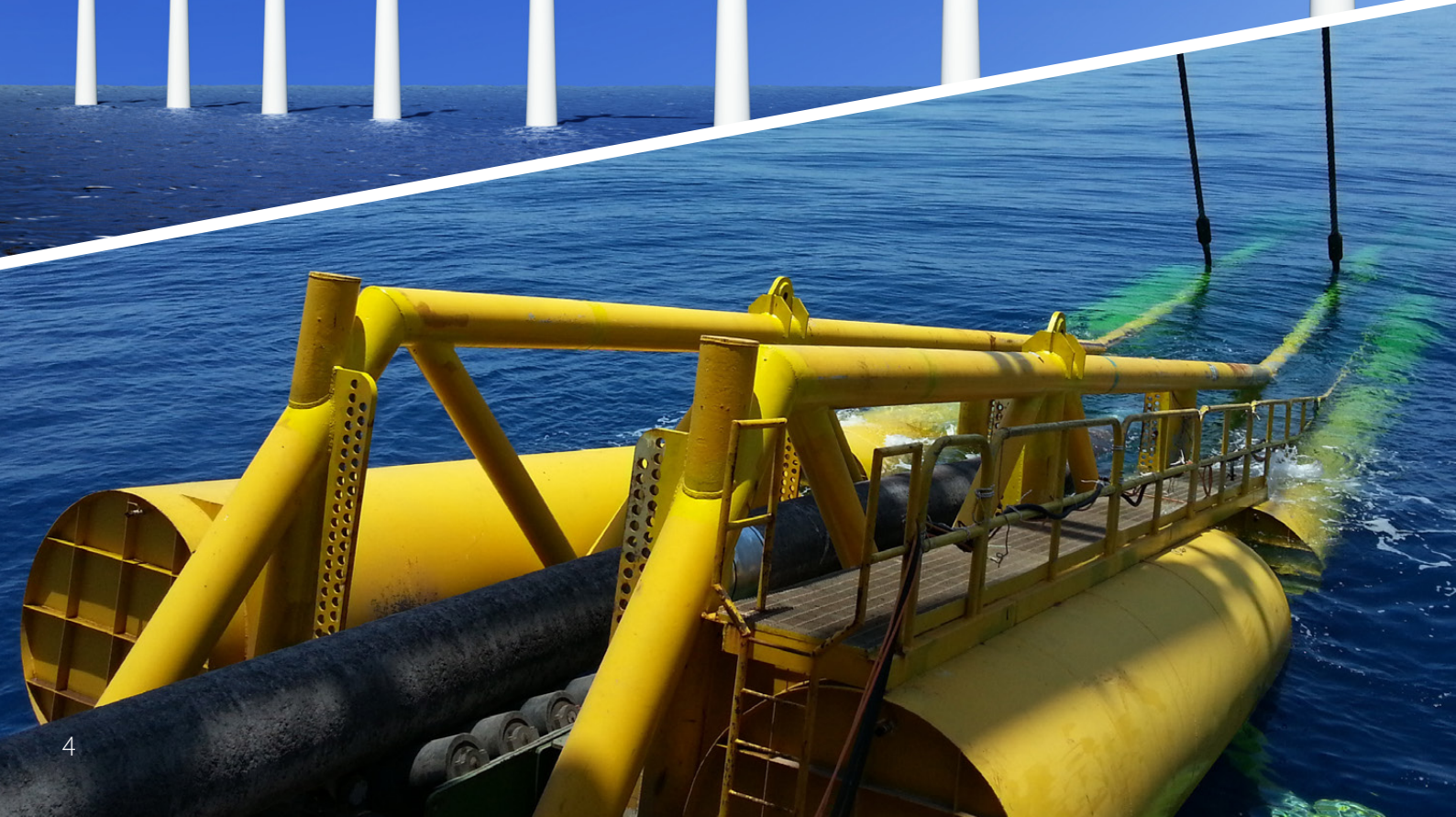
Our vision for the future is to expand and push the boundaries of what is possible in our industry by:

- Continuous growth
- Improving facilities and systems
- Conducting and investing in research and development into new innovations
- Leading the market for quality control procedures
- Building on our unique, patented tooling design to create the highest quality moulds and tools



**As the energy industry transforms to a sustainable future, DP Seals is changing with it to meet any new challenges head on.**







# dp seals

## A powerful reputation

We have been operating for more than 45 years and are a leading energy moulding supplier to energy engineering teams across the globe including:

- Siemens
- GE - Baker Hughes
- Teledyne
- RMS PumpTools
- TE - SEACON
- One Subsea

**You can rest assured that you'll be in good company with us!**





## Custom precision rubber seals, gaskets and mouldings

As a custom manufacturer we love a challenge more than most. Specialists in precision parts, including 0.2mm features and tolerance holding of 0.05mm, all our mouldings are produced to the highest levels of quality.

With ingenious and effective solutions we're set up to provide a comprehensive range of parts to help solve the most demanding challenges from ingress, vibration, friction, insulation, electro-magnetic interference and pressure.

Our parts are used in a range of applications including:

### Oil & Gas

- Subsea
- Oil and gas exploration
- Sonar
- Surveillance
- Real-time video systems
- Down-hole data logging equipment
- ROV

### Downstream

- Pumps, valves & compressors
- Process instrumentation





## Power

- Switchgear, transformers, as well as ancillary systems for control, protection, communication and condition monitoring
- Transmission system equipment
- Cable connector seals
- Batteries

## Renewables

In the Wind, Solar, Hydro and BioMass sectors our mouldings help protect components from a wide range of contaminants, wear and tear. This includes things such as:

- Exposure to heat and sunlight
- High and low temperatures
- Harsh weather conditions
- Electrical insulation and co-moulding of conductive and non-conductive materials for sensitive electronic components
- Leakage of fluids from joined mechanical mechanisms
- Moving parts that require high tear resistance



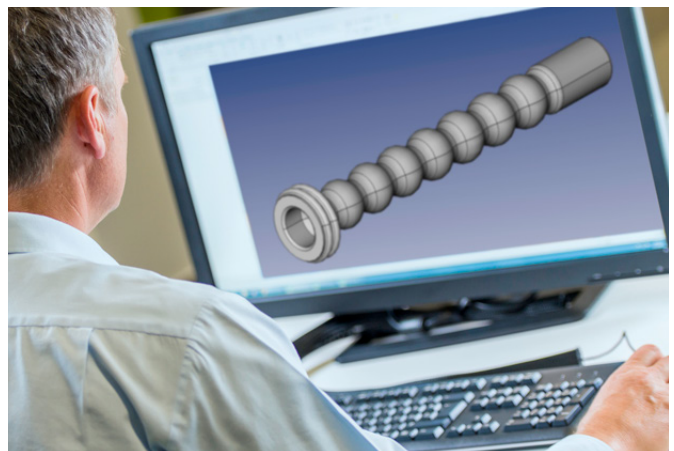
**Top engineering teams across the world choose us because of the innovation, quality and reliability of our parts which place us firmly at the forefront of our industry.**



Our **dedicated Energy unit** provides our customers with unrivalled experience and expertise from design, research, development and prototyping right through to manufacturing.

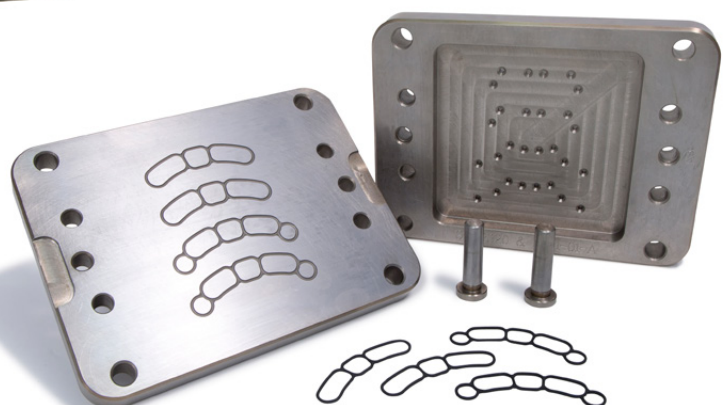
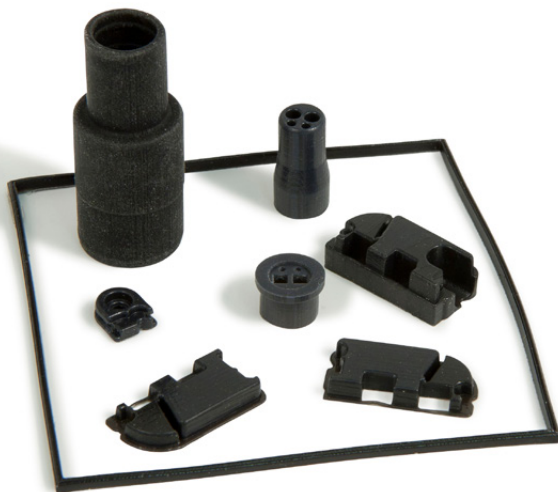
## Design

We offer CAD support and co-operate with design engineers to add value to this stage of their project.



## 3D Printing and Prototyping

3D printing and prototyping helps us identify faults early. In addition it can help visualise the end result and speed up the development process.





## Tool and mould making

Whether we are producing **one-off mouldings for prototypes, or multi-cavity tools** for mass production, our busy in-house tool room benefits from having the latest rubber mould tool design technology.



Operated by dedicated and highly trained staff all CNC machinery is directly linked to our design centre, closing the link between client engineering drawing and custom tooling. This eliminates any area for potential error.

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## Materials expertise

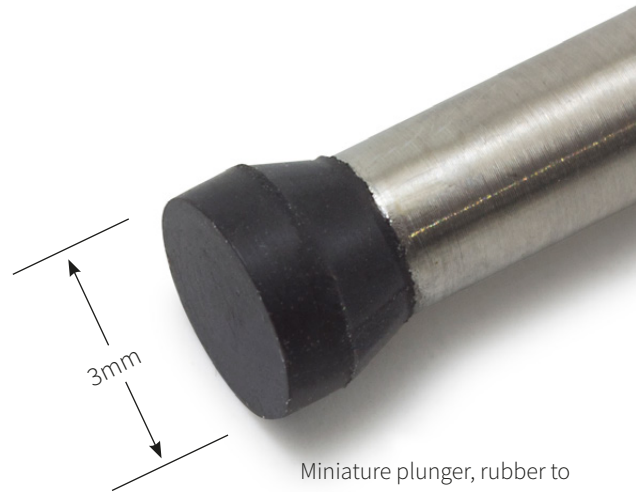
We are experienced in using **specification materials** and these are readily available in-house. We stock a large range of quality raw materials enabling us to offer fast turnaround to tight deadlines.

However we also specialise in providing customised rubber solutions, made from bespoke materials, to survive extremely aggressive environments. This includes high end FFKM Perfluoroelastomers, multi layered silicone in highly conductive and insulative material grades to custom compound HNBR.

In addition we also have **expertise in the production of exciting new materials**, putting us at the forefront of custom rubber moulding, and enabling us to develop exactly the right blend for your requirements.

## Rubber to metal bonding

Our reputation for innovation and materials expertise has proved invaluable in the production of bonded seals and mouldings. You can expect unrivalled materials knowledge and in-tool moulding expertise when you partner with us. This is especially true where high performance and longevity in hazardous environments are of paramount importance.



Miniature plunger, rubber to metal bonded for sampling and analysing sea water samples on mini-sub drone.



## Cryogenic cleaning

Our fully-automated CNC- controlled cryogenic deflashing machines are some of the most advanced of their kind in the world. They make the essential cleaning process faster, more efficient and effective by freezing components to their 'glass temperature' T<sub>g</sub>. Then by blasting parts with polycarbonate beads any brittle flash is removed.

## Fluorination

By partnering with experts in the use of gas phase fluorination, we are able to achieve precision modifications to the surface properties of polymers and rubber. This helps us reduce friction and enhance a number of other characteristics in even the smallest and most complex of components.



We are committed to quality and safety to help our customers meet the strict standards required in the Energy industry. This starts internally with our approach to the health and safety of our people. All staff are provided with information, instruction, training and supervision to safeguard their health and safety. As such all employees contribute towards making the work areas as safe as possible and ensuring the safest practical methods are adopted.

Our Total Quality Management approach is second to none. DP Seals was one of the first custom rubber moulding companies in the UK to achieve **ISO 9001** accreditation. This was soon followed by **ISO 14001** and **ISO 45001**. We have also held **AS9100** approval since 2009.

We know how important it is that you can rely on components to function effectively in incredibly hostile environments. So to give you an unequivocal assurance of quality, performance and durability, we also work to the **NORSOK M-710** standard. Although materials can be approved in five different grades, we're one of the few manufacturers to exclusively use the top two grades alone. This guarantees the highest possible levels of quality and a greatly reduced margin of error where performance criteria are concerned.

Materials must achieve accepted criteria for both rapid gas decompression (RGD) – also known as explosive decompression (ED) – and sour gas ageing (H<sub>2</sub>S). These are proven indicators of long-term performance and viable life expectancy, to ensure constant, predictable performance far beyond the likely practical life of any particular component.

As a demonstration of our commitment to quality we consistently operate at an actual defective parts per million (**DPPM**) of **below 200**.



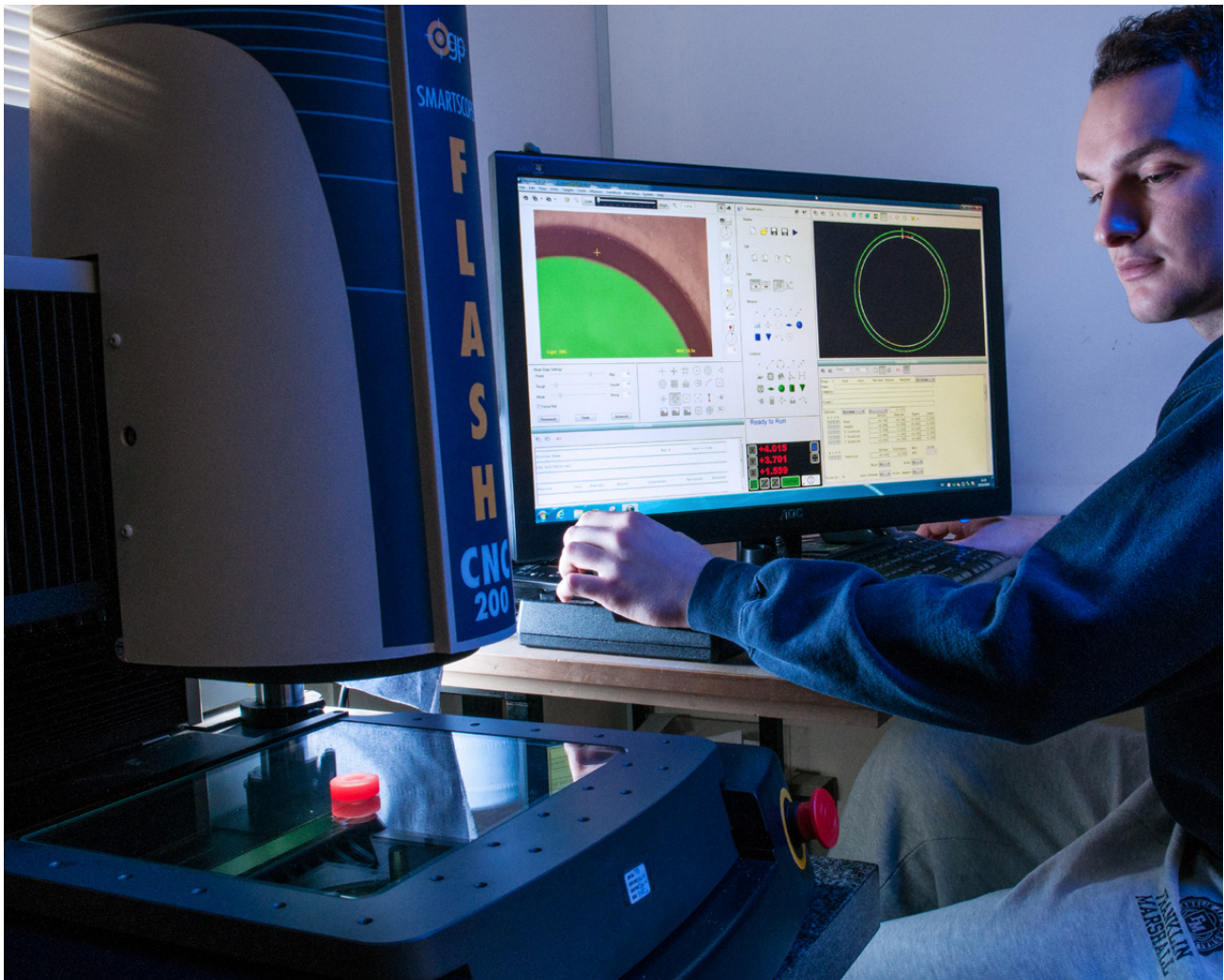




## Cost-effectiveness and value

We work closely with customers to deliver cost-effective solutions and add value to every phase of production. Custom materials and parts can often provide a more efficient solution due to longer life, reduced maintenance and operational costs. On top of this they can also deliver greater sealing surface, lower friction and improved quality of finish.

Our project managers ensure budgets and capacity plans are managed efficiently and as such we have some of **the best on time delivery rates in the industry**, consistently operating **above 98.5%**.





Environmentally friendly

We have **ISO 14001 Environmental Management approval** which demonstrates our commitment to reducing any actions that have an adverse effect on the environment. We aim to prevent pollution, fulfil our compliance obligations and save natural resources by operating in the most environmentally efficient and friendly way, recycling and reusing where practical.





Choosing the best partner for your project can be a key factor in its success. So when you decide we're the people for the job, what can you expect from us?

### **On time, every time**

- In-house project management to keep things on track
- On-line data exchange and CAD/CAM links to speed up communication
- In-house tool room for faster production
- 3D printing of prototypes to speed up testing and quickly iron out problems

### **Quality without compromise**

- One of the UK's first custom rubber moulding manufacturers to achieve ISO 9001
- Accredited to ISO 14001, ISO 45001, AS 9100 Rev D and BAE systems approval
- Unique closed cavity moulding process
- Automated cryogenic cleaning systems for flashless mouldings

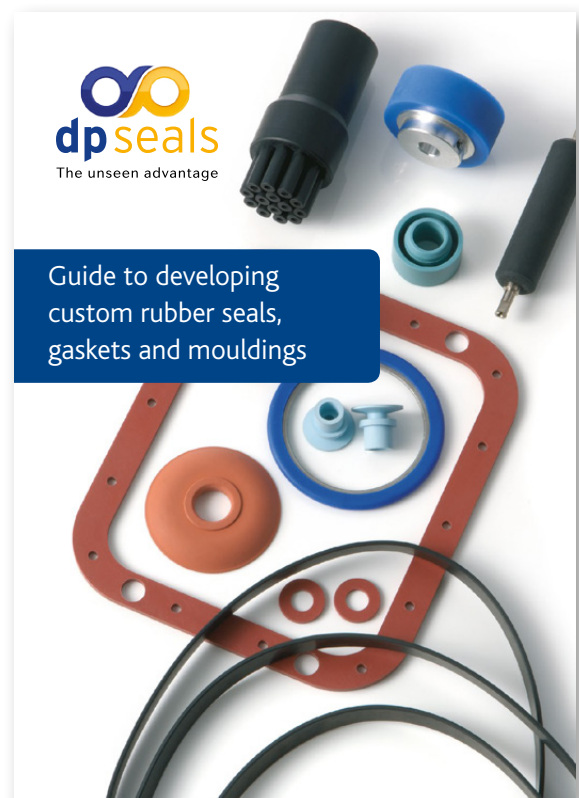
### **Specialist expertise**

- In-house tool making and complete design process to solve your most difficult issues
- Unrivalled materials expertise in advanced rubber technology for extreme environments
- Pioneers in precision moulding extremely soft rubbers down to 10 Shore
- In-tool rubber-to-metal bonding



## Added value, extra support

- Chemical Compatibility app to help you research rubber material suitability any time, anywhere
- Exclusive 'In conversation' videos for invaluable advice on designing custom rubber seals and mouldings
- Unique Guide to custom rubber seals to broaden your knowledge still further
- No obligation, expert advice from our materials technologists





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