



Aluminium, environment and society



Meet a global leader

Hydro's dedicated offshore team is specialized in developing profiles to create innovative solutions for the offshore industry.

We provide you with non-corrosive value-added extrusions and turnkey solutions for low maintenance and lightweight design, that help you to meet and exceed the challenges of harsh environments.

Aluminium extrusions offer the potential to achieve designs that are durable, high in strength and light in weight. Further more aluminium is non-combustible. It has better fire protection capabilities than carbon fiber, which has flammable resins in it.

At Hydro we share our extensive knowledge of aluminium extrusion technology, Friction Stir Welding (FSW) and other techniques with the offshore industry to achieve weight and production savings which improve performance, enhance quality and increase cost efficiency.

Our experienced engineers and industry-trained specialists will be delighted to discuss your needs and applications for your projects - nevertheless if it is machined, pre-assembled or finished components you are looking for.

We explain the wider benefits of using aluminium extruded solutions and provide you with design and engineering support.



Extruded Solutions locations

The future is made of aluminium – that's what we believe in at Hydro and that's why we invest all our vigor and commitment to create innovative solutions that make a difference to our customers.

Hydro is a fully integrated aluminium company with 35,000 employees in 40 countries on all continents, combining local expertise, worldwide reach and unmatched capabilities in R&D.

In addition to production of primary aluminium, extruded and rolled products and recycling, Hydro also extracts bauxite, refines alumina and generates energy to be the only 360° company of the global aluminium industry.

Low-maintenance aluminium solutions for the offshore industry

We develop aluminium solutions for offshore and marine construction.

We work with you to create and supply machined, pre-assembled and finished components to your precise requirements, using our extrusion technology and Friction Stir Welding (FSW) techniques.

Compared to steel, aluminium is significantly lighter, but without sacrificing strength, and it can also improve structural quality and efficiency. Aluminium can cope with heavy structural loads and hostile environments, and the unique qualities of extruded component design provide exceptionally high torsion resistance.



Leaders in Friction Stir Welding (FSW)

Using FSW, Hydro can join profiles into panels up to 18 meters long and 3.5 meters wide. FSW joins flush metal surfaces through the effects of a rotary tool, pressure and heat. No filling is needed and FSW provides better properties and less heat deformation than other forms of welding.

Fire resistant, strong and durable

Aluminium is commonly used in offshore and marine structures. In areas where special fire classes, such as A60, are required, we also use protective materials such as mineral wool or ceramic fibres – we review each project to provide the optimum solution. Even with additional insulation weight, the aluminium solution is still far lighter than steel.

A lighter, brighter alternative

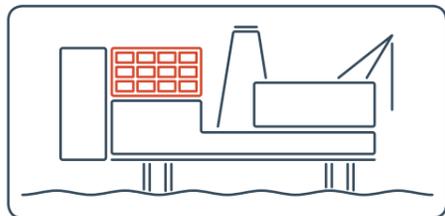
We friction stir weld and machine some of the longest and widest panels in the world, and weight-optimize individual profiles and join them into large panels, without sacrificing strength, yet maintaining superior tolerances. The weight saving compared to steel is easily in the range of 30% to 50%. This makes aluminium a safe, lightweight solution.

Perfectly suited to the offshore environment

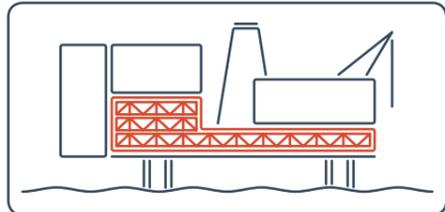
In the right alloy, aluminium forms a natural oxide layer that protects the material from corrosion, and can be further enhanced by adding surface treatment. Aluminium also ensures effective and reduced maintenance, thanks to the non-corrosive material.



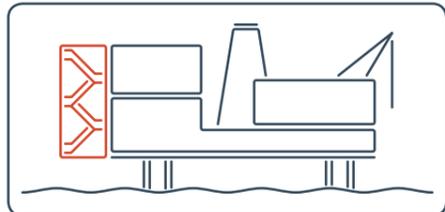
More than just an aluminium profile ...



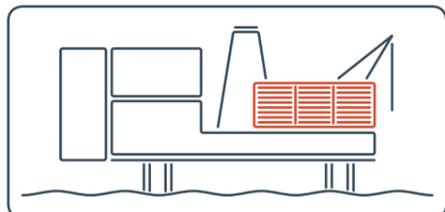
1 Living Quarters
Aluminium panels are used in areas where fire classes as A60 are required



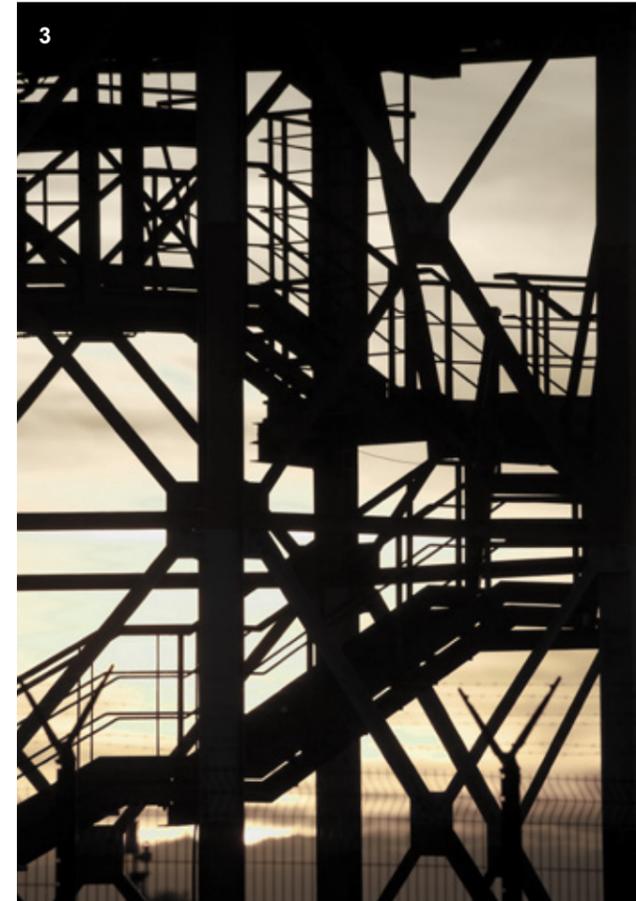
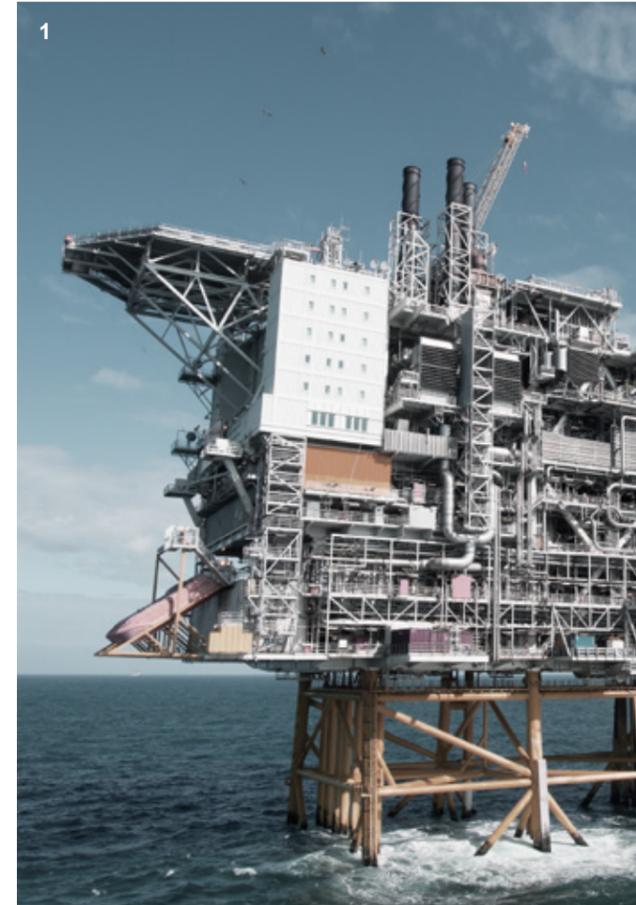
2 Topside Decks
Easy installation of low weight solutions reduces working time



3 Stairs & Handrails
Robust lightweight designs for stairs with integrated handrails and walk ways



4 Climate Shields
Anti corrosive properties ensure long life and low maintenance of offshore transformer stations





We are aluminium

Get in touch with us for more information
or a detailed offer.
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