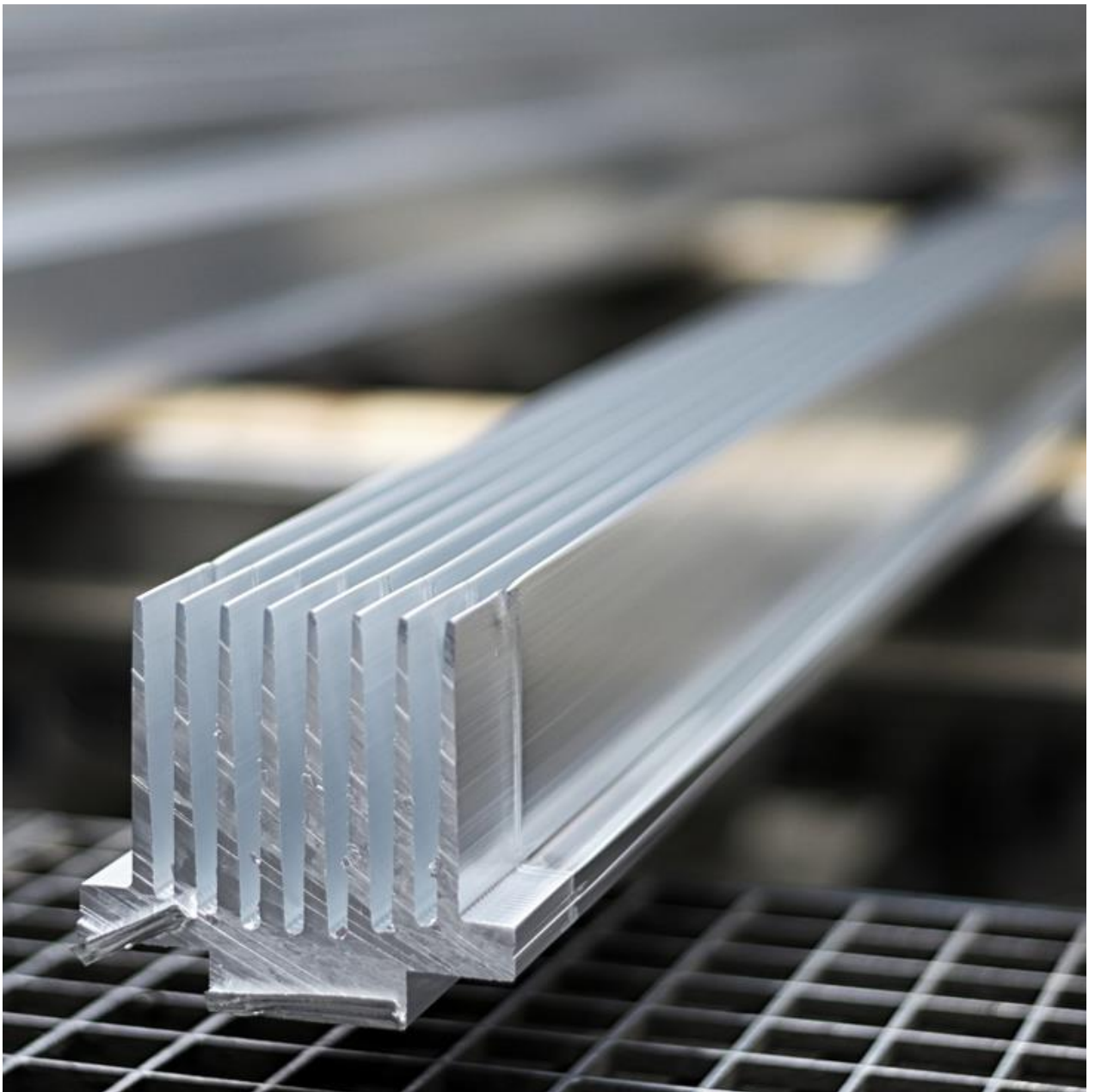




AL-LEAN™ - next generation alloys.

Re-think what's achievable in aluminium extrusions.
More possibilities, less material.



AL-LEAN™. The future of alloy design for extruded profiles and solutions.



Manufacturers are under increasing pressure to reduce weight, lower costs and cut carbon footprints all while maintaining or improving product performance.

AL-LEAN™ has been developed by Hydro to help designers meet these challenges in extruded profiles and components.

Unlike conventional extrusion alloys, AL-LEAN™ has been engineered to enable lower-pressure extrusion while expanding the possibilities for product design and manufacturing.

The result is an alloy that delivers measurable improvements throughout the value chain; from production efficiency to product performance.

Benefits of AL-LEAN™

- Lower material consumption
- Enhanced lightweighting
- Reduced product CO₂ footprint
- Increased productivity
- Greater design freedom
- Improved surface quality
- Enhanced thermal conductivity
- Improved weldability
- Potential cost savings



Hydro Extrusions Europe has 53 extrusion presses across 26 manufacturing locations.

Application driven alloy development.

Traditionally, alloy selection and development has focused on what can be extruded. AL-LEAN™ has been developed to meet the requirements of the application from both a performance and design aspect.

By combining the possibility for thinner profile walls with more complex shapes and improved production efficiency, AL-LEAN™ helps designers optimize both product performance and sustainability.

Proven value

Working with partners across Europe, AL-LEAN™ has demonstrated:

- More than 20% weight reduction
- More than 20% reduction in product CO₂ emissions
- 5–7% higher thermal conductivity in selected heat sink applications
- More competitive designs through increased design freedom
- Lower material consumption and improved manufacturing efficiency

Applications

Whether your goal is reducing weight, improving sustainability or unlocking new design opportunities, AL-LEAN™ is suitable for a variety of industries and applications including:

- Automotive & Transportation
- Thermal Management
- Building & Construction
- Consumer Electronics
- General Engineering

Alloy	Temper*	Ultimate Tensile Strength (MPa)	Yield Strength (MPa)	A50mm (%)	A (%)
AL-LEAN™	T6	140	115	12	6
AL-LEAN™	T6510	150	125	12	6
EN AW-6060	T6	190	150	6	8



Industries that matter

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Hydro is a leading aluminium and renewable energy company committed to a sustainable future. Our purpose is to create more viable societies by developing natural resources into products and solutions in innovative and efficient ways.