



Green Hydrogen Driving Clean Energy Solutions

Hydrogen's potential as a clean energy carrier has sparked interest in the hydrogen economy, supporting the EU Green Deal's sustainability goals. Green hydrogen, produced through electrolysis with renewable energy, holds immense promise for transforming various sectors, including chemical production, power supply and transportation.

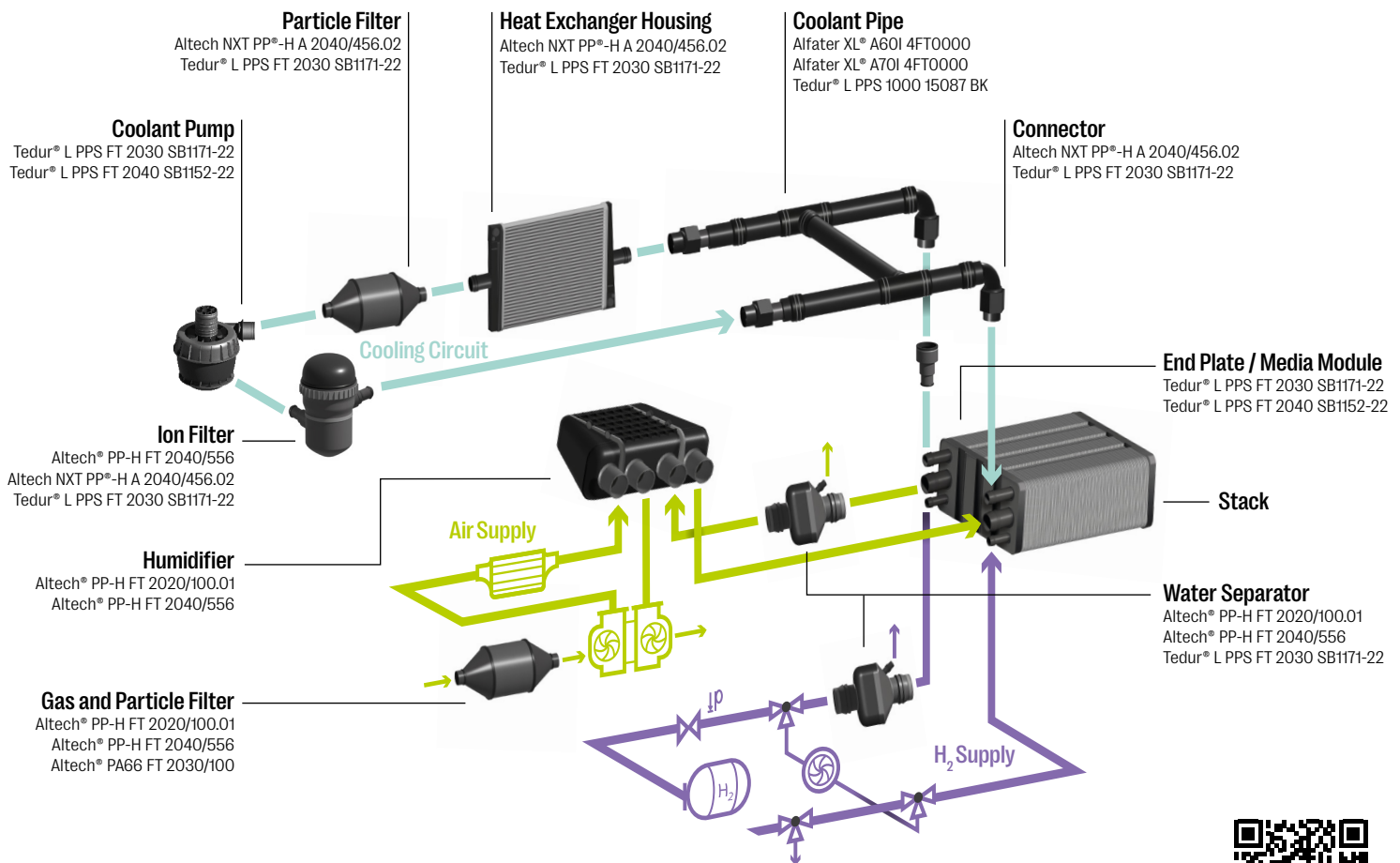
Moreover, the advancement of green hydrogen technology has far-reaching implications for clean energy systems. Electrolyzers, key components in hydrogen production, can utilize plastic materials for their construction, enhancing their efficiency and durability. Lightweight and corrosion-resistant plastic components enable electrolyzers to operate efficiently and economically, accelerating the adoption of green hydrogen production.

Similarly, fuel cell systems, essential for converting hydrogen back into electricity and heat, can benefit from incorporating plastic components. High-performance plastics can improve the system's overall efficiency, reducing weight and enhancing reliability. This integration aids in the widespread deployment of fuel cell technologies, powering vehicles, buildings and various industries with clean energy.

Plastics in hydrogen economy: the advantages of MOCOM as a partner

- **Low ion leaching** – grades with low ion leaching in deionized (DI) water
- **Low TOC (Total Organic Carbon)** – detection of low TOC values after storage in DI water
- **Low volatiles** – grades measured with low VOC/FOG values according VDA 278
- **Cooling media resistance** – retention of high mechanical values after storage in water-glycol based coolants at elevated temperatures
- **Lightweight** – to increase efficiency and milage of fuel cell electric vehicles
- **Customization** – according to specific project requirements

Requirements	Sealings	Endplate	Media Module	Cell Frame	Pipes	Filter Housings	Cooling Circuit Parts	Humidifier
Low Ion Leaching	✓	✓	✓	✓	✓	✓	✓	✓
Lightweight	✓	✓		✓	✓		✓	
Flame Retardancy		✓	✓					
Water-Glycol Resistance	✓	✓	✓	✓	✓	✓	✓	✓
H ₂ Permeation	✓		✓		✓			
Low Volatiles	✓	✓	✓	✓	✓	✓	✓	✓
Low Compression Set	✓							
Products	Alfater XL® FT	Tedur® FT			Alfater XL® FT Altech® FT Tedur® FT	Altech® FT Altech NXT PP® Tedur® FT		



non-exhaustive list



MOCOM Datasheets

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