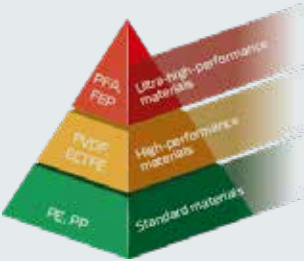




AGRU at a Glance

- Founded by Mr. Alois Gruber (1925–2014) in 1948
- Global HQ: Bad Hall, Austria
- Sales in over 100 countries
- 150 distribution sites
- More than 1,000 employees



Thermoplastic Solutions

- XXL and industrial piping
- Single- and double-walled piping systems, valves, fittings
- CUSTOMIZED PARTS



Engineering, Planning & Installation Support

- CAD/BIM Libraries (Revit, Plant 3D)
- Extensive project experience
- Material selection & pipe stress analysis



Plants, Branches & OSM Pre-Fabrication Fabs

- Production sites in Europe, North America, Asia
- Global OSM pre-fabrication fabs
- Manufacturer and supplier of thermoplastic pipes, valves & fittings



Installation & Welding

- Welding according to DVS standards
- Welding equipment (butt, infrared, electrofusion,...)
- Pipe support system (AGRU SmartFit Pipe Clip)
- Welding training & project supervision on-site
- Prefabricated headers, skids



DESIGN & PLANNING

CAD



BIM

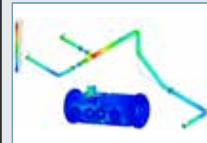


Design Support



ENGINEERING

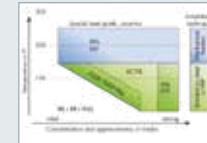
Pipe Stress Analysis



Pipe Class Specs



Material Selection



INSTALLATION

Welding Technology



SmartFit Pipe Clip



OSM Pre-Fabrication



AGRU

HYDROGEN ENERGY SOLUTIONS



AGRU

HYDROGEN ENERGY
SOLUTIONS

GREEN HYDROGEN



BLUE HYDROGEN



GREY HYDROGEN



Infrastructure for a Sustainable Future.



H2 Ready System

- H2 Ready is a quality mark by DBI Germany
- Certifies that gas-related products are suitable for hydrogen transport
- Tested for suitability, leak tightness, and permeation for 100% hydrogen



RO/DI Water

- PVDF and PP piping systems are suitable for RO/DI water in heavy industrial applications
- PVDF and PP piping systems can assist in meeting the MegOhm resistivity



Storage and Transport

- H2 Ready system for hydrogen transport and storage
- Thermoplastic liner for high-pressure tanks
- Robust network of certified fabricators

Made with Advanced PE (PE100-RC)

- Excellent physical and mechanical properties
- Resistance to stress cracks, slow crack growth, impacts, and abrasion
- H2 Ready and ideal for chemical applications



Hydrogen Production

- PE100-RC for water and hydrogen transport
- Polypropylene (PP) piping systems for hydrogen production
- Complete valve and actuation product offerings for ammonia processes



Hydrogen Use

- Manufacturing agricultural fertilizers, such as ammonia
- PE/ECTFE piping and semi-finished products for ammonia plants
- Piping and customized solutions for fuel cells and steel production



XXL Piping (PE4710/PE100-RC)

- Solid-walled HDPE pipe available up to OD 137" (3500 mm)
- Designed for high-volume flow pressure applications
- Available as pipe segments or long strings to facilitate multiple installation methods



Meeting Hydrogen Production Needs

- Thermoplastic solutions for desalination and water treatment
- Chemical-resistant piping and tank lining for alkaline electrolyzers
- Technical assistance to support hydrogen projects



Project Technical Support

- Project assistance, material selection, engineering design support, and fulfillment
- Pre-fabrication/custom fabrication solutions
- Advanced welding technology, training, and field installation assistance

