



**POLYPROPYLENE** THE STABLE ALTERNATIVE  
INSTEAD OF STEEL  
**IN PLANT CONSTRUCTION**



**aquatherm**

state of the pipe



Price fluctuations are rarely positive in business. For example, the prices for the raw materials copper and steel have almost doubled within only 11 months. The construction industry and its customers are confronted with this price volatility when steel piping systems are to be used in building services engineering.

**PRICES FOR STEEL  
FLUCTUATE STRONGLY**



# **SUPPLY PRODUCTION CAPACITIES** **DEMAND STATE OF THE** NATURAL DESASTERS **GLOBAL ECONOMY**

Factors influencing fluctuating commodity prices.



Rising steel prices on the world market in 2020, for example, have led to double-digit inflation surcharges being imposed on numerous products at the beginning of 2021.

In addition, there are supply bottlenecks that can result in delivery delays of several months.

# AVOID UNCERTAINTIES **THANKS** TO **POLYPROPYLENE**

alternative, taking into account price stability, durability and CO<sub>2</sub> footprint. The price of PP pipes has remained remarkably stable and predictable over the years. Engineers designing HVAC/P systems and contractors bidding on them can be assured that the price of PP pipes will not fluctuate due to changes in the commodity markets.

Given the uncertainties and price volatility of the steel market, polypropylene (PP) pipes are the safest alternative,





At a time when price fluctuations and other unpredictable factors negatively affect the use of steel pipes, it is a great advantage if the total cost of a pipe installation remains predictable. However, stable pricing is only one of the many advantages that PP pipes offer over steel. Significantly lighter weight, longer service life and virtually leak-free joints when properly welded are also among the positives to consider.



UNLIKE METAL  
**PP-R**  
DOES NOT  
**CALCIFY OR CORRODE**

# LESS

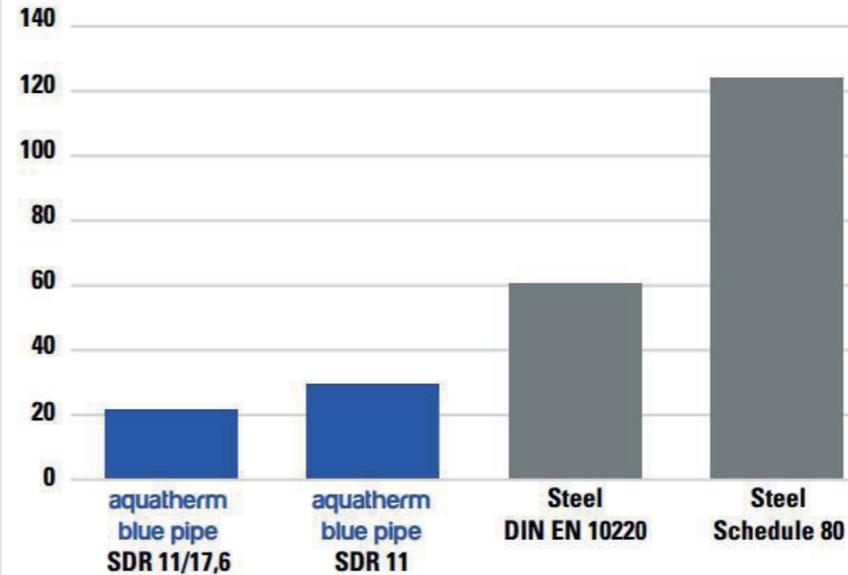
# CO<sub>2</sub>

# EMISSIONS

Polypropylene helps reduce our environmental footprint on the planet: For example, the manufacture of a PP cooling water system in ship-building produces only one sixth the harmful CO<sub>2</sub> emissions of a steel system.

**CO<sub>2</sub> EMISSION (TONS)\* FOR PP AND STEEL PIPES BASED ON THE CHILLED WATER SYSTEM FOR A SHIP WITH APP. 200 CABINS**

(approx. 5700 m pipe in 32-355 mm)



\*Source: CO<sub>2</sub> emissions for PP (1.70 kg/kg) are based on EU Plastics Association and for Steel (1.54 kg/kg) on Fraunhofer Institut

# HEAT FUSION BENEFITS

No open flame, no flying sparks: aquatherm products are also superior to steel in their connection technology. Pipe and fitting are briefly heated with the help of tools provided for this purpose and then simply joined together. Thereby the plastic melts to a homogeneous, cohesive and thus permanently safe unit.





With aquatherm prefabrication, installers save time and money on site. aquatherm plans and builds manifolds and special components directly in its own factory according to customers' specifications and ships them ready for installation to any place in the world.

**DELIVERED**  
AS  
**PLANNED**

# TRUST THE GLOBAL LEADER

Not all PP pipes are the same. That is why, for almost 50 years, customers worldwide have trusted aquatherm, the world's leading manufacturer of plastic piping systems made of polypropylene for plant construction and building services.





In an ever-changing business climate where prices for metal pipe systems change frequently and new market entrants come and go, aquatherm consistently helps contractors, engineers, facility managers and building owners maintain their competitive edge. To manufacture safe and innovative piping systems

"Made in Germany": That is our promise.



# Made

# in

# Germany



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