

AGRUCHEM POLY-FLO

DOUBLE CONTAINMENT
PIPING SYSTEM





The Plastics Experts.

AGRU Kunststofftechnik GmbH is a family-owned, high performance enterprise, headquartered in Austria with worldwide activities in production and sales of high-quality thermoplastic polymer products. The product group AGRUCHEM offers a wide range of pipes, fittings, valves and special components for the transport of aggressive media. In order to cover the various operating conditions in industrial applications, a multitude of materials such as PE, PP, PVDF and ECTFE are offered. Besides the variety of piping materials, a wide choice of piping products enables the construction of pipelines in a wide range of dimensions and flow rates. Especially for the transport of aggressive and acidic media, the excellent properties of plastic piping systems ensure high durability for many years and offer the user a sustainable solution.

The installation of industrial piping systems can be performed by means of established welding technologies such as heating element butt-, heating element socket-, infrared- and electrofusion welding. Accessories facilitate assembly and welding machines round off the extensive range of products from AGRU.

Quality

AGRU Kunststofftechnik GmbH operates a quality and environmental management system in accordance with ON EN ISO 9001:2015 and ON EN ISO 14001:2015 and has introduced an occupational health and safety management system in accordance with ON EN ISO 45001:2018.



Poly-Flo - The ready-to-use double containment piping system

Poly-Flo includes a complete piping system made of PE 100-RC and PPR for the safe transport of hazardous media through groundwater protection areas or in chemical plants with a high hazard potential. The high level of cost-effectiveness and decades of research and development make Poly-Flo a reliable partner. The compactly designed double containment piping system is available in PE 100-RC and PPR materials in dimensions ranging from OD 50/32 mm to 225/160 mm. The pressure ratings can be selected between SDR 17/11 and SDR 33/17.

Complete product range

Pipes and fittings from a single production facility for maximum dimensional accuracy

One stop shopping

- because all components are precisely matched to each other
- because technical advice is also included
- supports your construction site logistics with on-time delivery

Permanently maintenance-free piping

Welding and materials ensure operational reliability

Welded Poly-Flo piping is well-suited because it

- is homogeneous, longitudinally force-fit and leak-proof
- enables time-saving simultaneous welding

High cost-effectiveness

due to easy installation and extreme service life

Saving time and money

- with accelerated installation due to dimensionally stable pipes and fittings
- compared to prefabricated systems
- through an innovative production method

High-quality materials

through the use of certified raw materials

Outstanding material properties of PE 100-RC and PPR enable

- high creep strength
- a sand-bed-free installation when using PE 100-RC
- a higher temperature range if PPR is used



Poly-Flo components are made from one piece and are ready to use right out of the box. Due to the small annular space, the system is compact and suitable for use in confined spaces.

Supply Range:

SUPPLY RANGE PIPES 5 M



PE 100-RC / PPR

DIM 50/32 – SDR 17/11

DIM 90/63 – SDR 17/11

DIM 160/110 – SDR 17/11

PE 100-RC / PPR on request **

DIM 160/110 – SDR 33/17

DIM 225/160 – SDR 33/17

DIM 225/160 – SDR 17/11

SUPPLY RANGE FITTINGS



Elbow 90° *
injection moulded



Elbow 90°
from 2 Elbows 45°
injection moulded + welded



Elbow 45°
injection moulded



Tee
injection moulded



45° Tee
segmented



End Cap
machined



Instrumentation Fitting
machined



Measuring Fitting
end termination
machined



Measuring Fitting
machined
• one side leakage control
• both side leakage control

Other fittings are available on customer request

* Fittings only available in DIM 50/32 - SDR 17/11

** Bends and tees only available segmented



SUPPLY RANGE FITTINGS



Stub Flange

machined

- with flow through + groove for O-Ring
- with flow through
- without flow through



Reducer

concentric
machined



Induction E-Coupler

injection moulded



Dog Bone

machined

- restraint, solid
- restraint, with flow through



Dogbone

end Termination
machined



Outer Wall Adaptor

machined



Measuring Fitting

for vacuum and overpressure monitoring
transition to single pipe
machined



End Cap

with test connection (FPR 1/2" brass)
machined



Safety Floor Drain

with perforated covering plate



OIL AND GAS

Fracking,
Petrochemical
Exploration,
Flow-Lines



INDUSTRY

Chemical Industry,
Steel Galvanisation,
Automotive

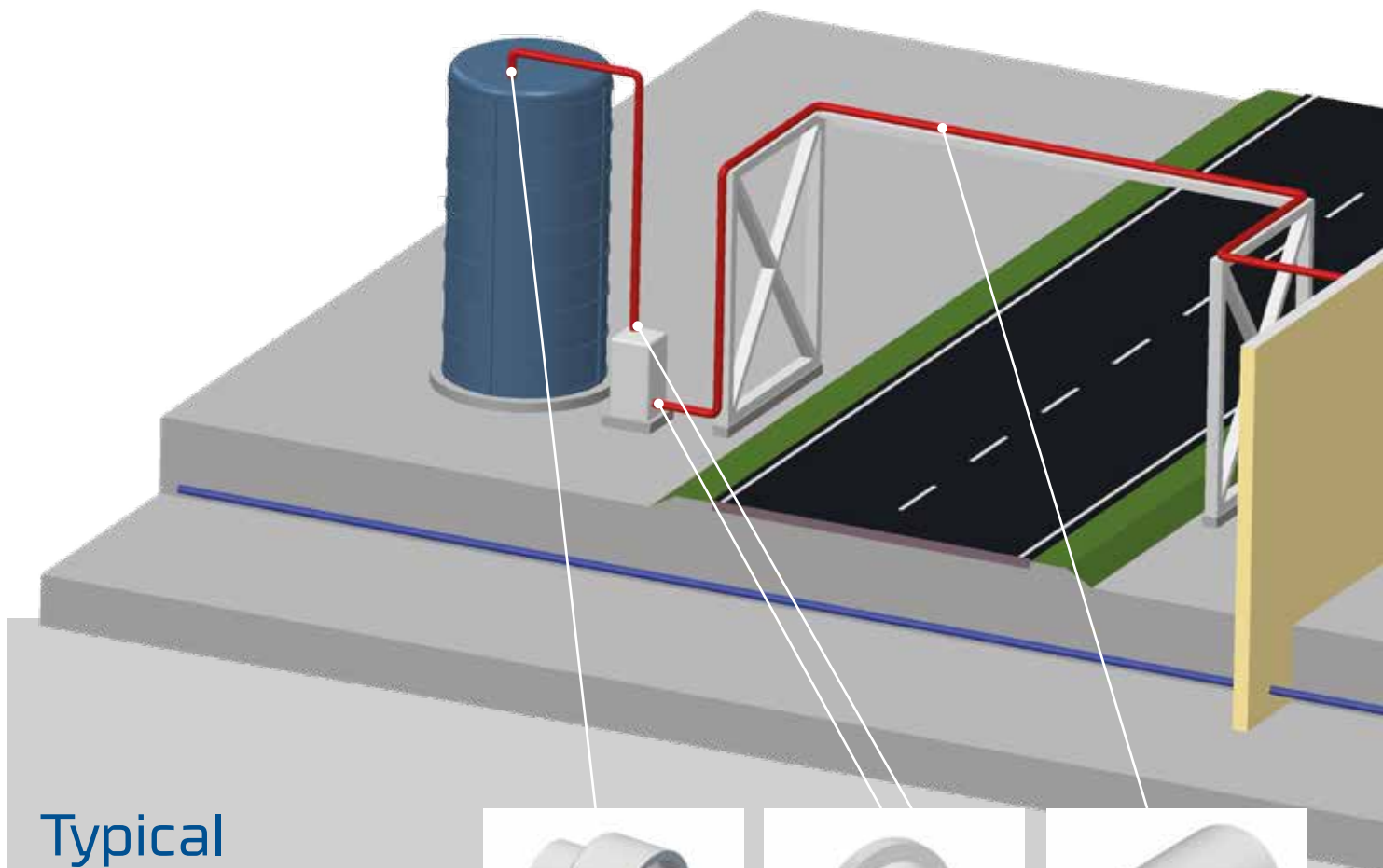


MINING



INFRASTRUCTURE

Airport,
Power Plants
(Waste drain)



Typical applications for Poly-Flo piping systems



DOG BONE

End termination transition for double to single wall piping systems



STUB-FLANGE

For connections where welding is not possible or piping system must be dismantable



POLY-FLO PIPE

PPR grey and PE 100-RC black, suitable for above and underground installation



FOOD AND BEVERAGE

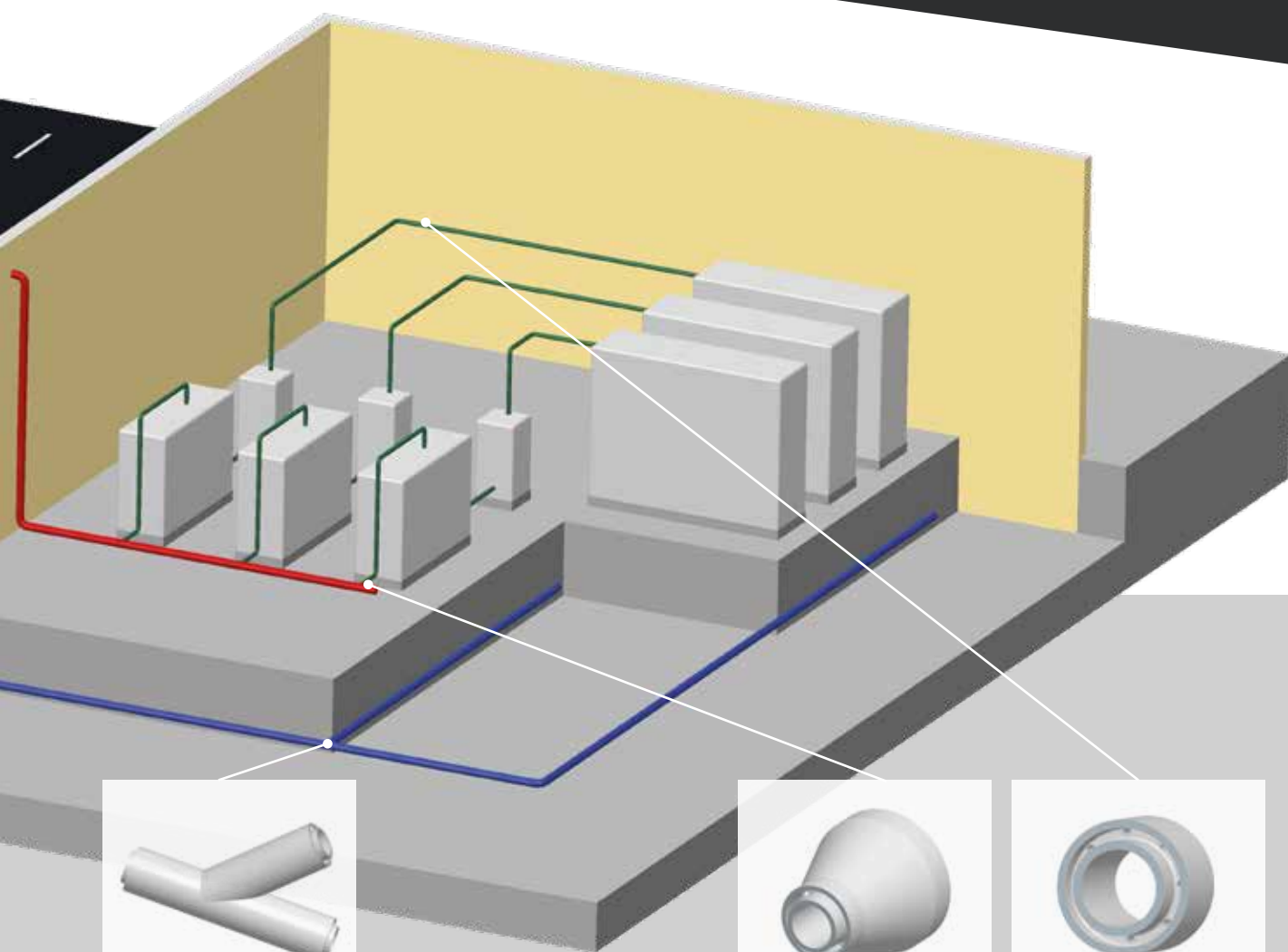
Microelectronic, Life-Science Industry, Laboratories, Waste drain pipe, Chemical process piping



WATER AND WASTE WATER TREATMENT

Chemical feed lines, Chlorination pipes

Application areas for Poly-Flo piping systems



45° TEE

Specially for drainage applications with excellent flow behaviour



REDUCER

Transitions from larger to smaller diameters



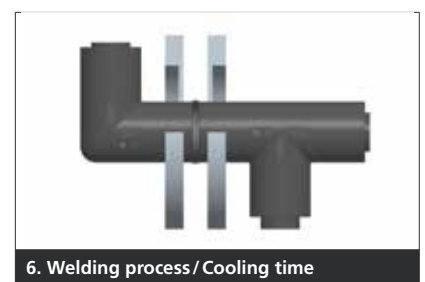
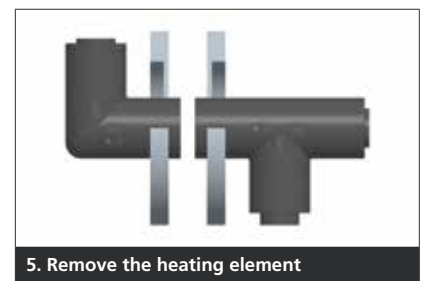
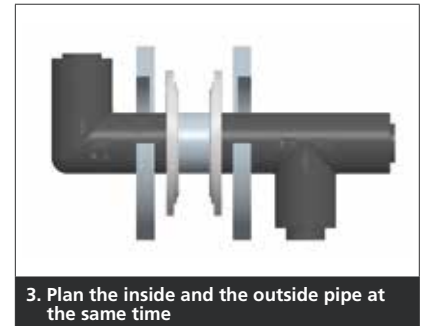
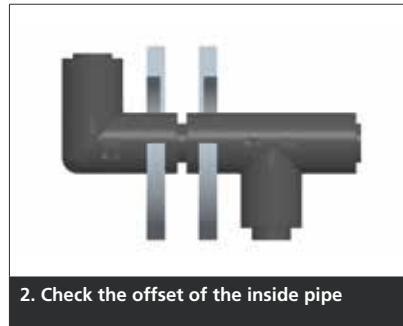
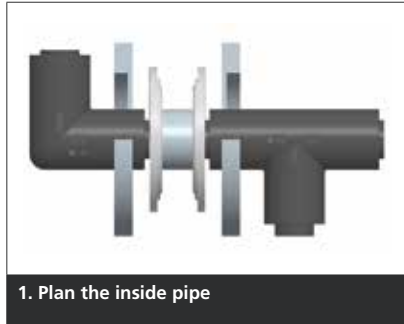
DOG BONE

Fixation against pipe expansion

Poly-Flo welding method

Simultaneous welding

Simultaneous welding has been used successfully for AGRU double containment piping systems for many years. This welding method is also applicable for our Poly-Flo system. The main advantages of this welding method are the fast installation time and the possibility of using an IR-welding machine or standard butt welding machine.



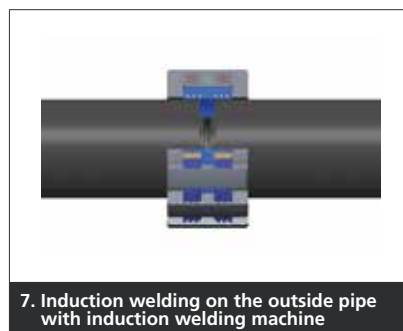
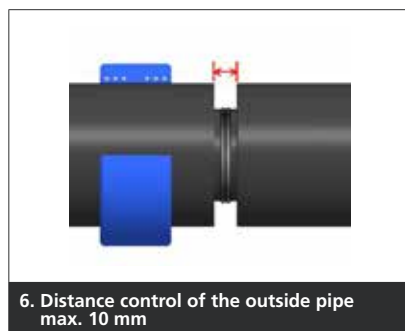
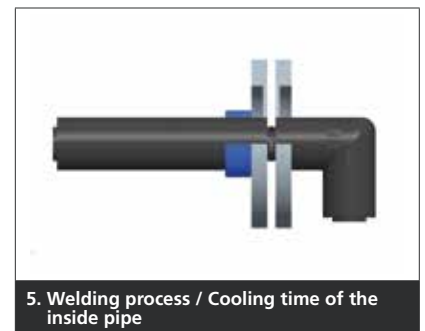
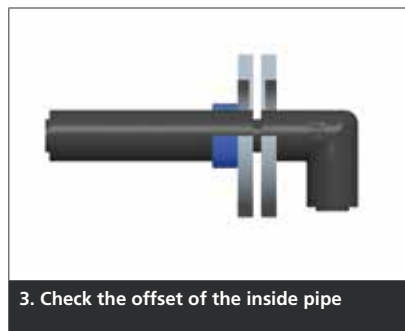
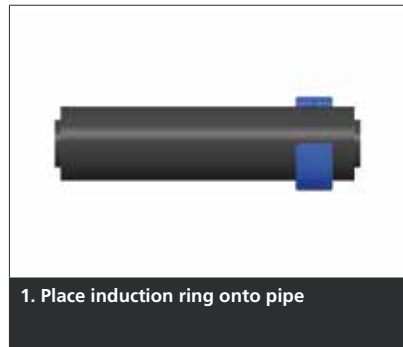
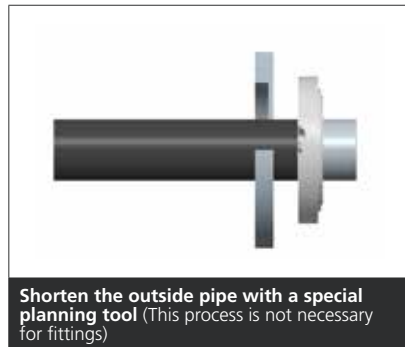
Poly-Flo welding method

Cascade welding

With butt welding, infrared welding and induction welding

Advantages:

- The weld seam of the inside pipe can be checked visually.
- A pressure test on the inside pipe is possible before the outside pipe is welded.



Piping system with double safety

The AGRU double containment pipes have been used very successfully in a wide range of applications for many years. They fulfil today's high requirements in the field of chemical process engineering. Our Poly-Flo system is an extension of our double containment piping system, which has proven its worth over many years. For leak detection in the double containment piping, different leak detection methods are offered.

AGRU double containment piping systems ensure a system which is perfectly designed and adapted for the application (high pressure resistance of the media pipe, materials which are resistant to the transported media). Furthermore, space-saving options including the option for leak detection are available.



Pipe clamp



SUPPLY RANGE



Pipe Support
20 - 50 mm
injection moulded
PP-FRP black



Pipe Clip
63 - 225 mm
injection moulded
PP-FRP black



Pipe Clip
250 – 450 mm
injection moulded
PP-FRP black

PP pipe supports and pipe clips offer many advantages:

Advantages of AGRU pipe support

- Easy and robust construction
- Simple application with snap fit
- Different possibilities for fixation

Advantages of AGRU pipe clip

- Easy and robust construction
- Using the additional clamp enables hanging installation
- Multiple mounting possibilities
- Easy mounting and demounting
- The inside diameter of the pipe clamp is designed so that the pipe can slide in the clamp even under extreme pressure and temperature loads (No fixed point)

Leak Detection Systems



AVAILABLE IN TWO VERSIONS



Monitoring-and location system DF1000i
for 99 sensors; selective monitoring



Monitoring-and location system DF1100i
for 6 sensors; selective monitoring



Leak Detection Sensor
+5 m Cable with measuring head



End Unit
for Leak Detection System



The Plastics Experts.

Your distributor:

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