

SIMONA

**NOW
WITH PVDF**

SIMODUAL²

Dual pipes for double the protection:
Ensuring the safe transport of hazardous
substances



SIMODUAL²

A PROTECTIVE SHIELD

YOU CAN RELY ON

Safety is of paramount importance in modern-day industrial settings. This applies in particular to pipe systems designed to convey highly aggressive chemicals. After all, in the event of an unexpected leak, the general impact from environmental pollution and the consequences for human health may be very serious indeed.

The SIMODUAL² double-containment piping system offers a “protective shield” for the transport of hazardous substances – for consistent safety. The high-quality SIMONA plastics that form the basis of these pipes are designed to extend the service life of the inner pipe carrying the substance. Additionally, the outer pipe boasts such a high-pressure resistance that it guarantees tightness and maximum protection in the event of an unexpected leak.



NOW AVAILABLE IN PVDF

BEST QUALITY FOR THE HIGHEST DEMANDS

MAXIMUM SAFETY AT HIGH TEMPERATURES

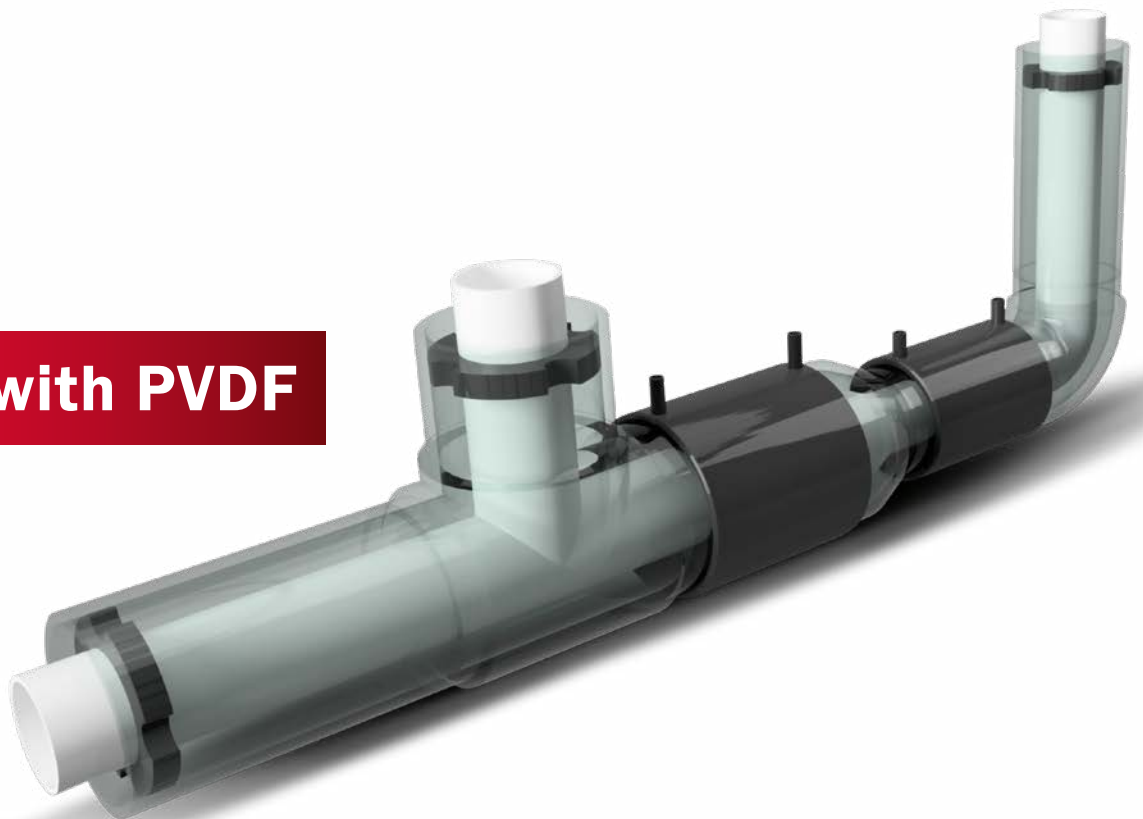
- Broad temperature range from -30 to $+140$ °C
- Exceptional strength
- Low-flammability plastic

EXCELLENT CHEMICAL RESISTANCE

- Resistant to highly aggressive chemicals and almost all organic and inorganic substances, e.g. chromic acid
- Suitable for a wide range of hydrocarbons (e.g. oil industry and fuels), halogens, nitric acid and sulphuric acid, etc.
- Physiologically safe, high purity
- Excellent leaching resistance
- Longer durability
- Resistant to UV and gamma radiation



NEW with PVDF





TOP 5 BENEFITS

1. Safety x 2:

Highest safety standard for the protection of people and nature thanks to the full pressure load capacity of the outer pipe in the event of an accident.

2. Minimised risk in the event of a leak:

Integrated sensors for leak detection permanently monitor the annular space in the double-containment pipe system. Deviations are reported immediately, enabling rapid action and maximum protection of people and nature.

3. Lower cost of installation:

The inner and outer pipes are positioned at fixed anchor points, thus reducing the need for welding work.

4. Faster installation:

Thanks to factory-integrated anchor points, the inner pipe remains in place. This makes handling much easier and helps to speed up installation.

5. Minimal maintenance costs:

The chemically resistant inner pipe ensures a longer service life, which translates into reduced downtime and streamlined maintenance expenses.

HIGH DEGREE OF SAFETY FOR INDUSTRIAL APPLICATIONS



Water
treatment



Wastewater
treatment



Chemical process
industry



Semiconductor
industry



Pharmaceutical
industry



Food and beverage
industry



LONG SERVICE LIFE AT EXTREMELY HIGH TEMPERATURES

Maximum service temperature in °C according to service time in years

| Material | 1 year | 5 years | 10 years | 20 years | 25 years | 50 years | 100 years |
|----------|--------|---------|----------|----------|----------|----------|-----------|
| PE | 80 | 60 | 55 | 50 | 45 | 40 | 35 |
| PP | 120 | 100 | 90 | 80 | 70 | 60 | |
| PVDF | 140 | 140 | 140 | 130 | 120 | 100 | |

The service life time temperature limit is mainly governed by effects related to thermooxydation. (Source: DVS 2201-1 BB 5)

PREMIUM-QUALITY CORROSION-RESISTANT PLASTIC: SIMONA® PP-H ALPHAPLUS®

Thanks to the specially modified formulation, pipes and fittings made of SIMONA® PP-H AlphaPlus® offer a much higher level of resistance. The attack by aggressive chemicals is thus significantly slower, the benefit being a longer service life and safe operation at all times.

HIGHEST LEVEL OF SAFETY

Pipes and fittings made of PP-H AlphaPlus® (approval certificate Z-40.23-325), PE 100 (approval certificate Z-40.23-311) and PVDF (Z-40.23323, Z-40.23324) have building authority approval and are externally monitored by TÜV Süddeutschland. This ensures a consistently high level of safety during application.

SIMPLE PLANNING WITH FREE DIGITAL TOOLS

No complicated design concepts apply to SIMODUAL² double-containment pipes. Instead, they are based on simple planning principles: the materials employed depend on the chemical stresses involved. You can refer to the free SIMONA online databases SIMOMaterials and SIMCHEM (www.simchem.de) for an initial assessment of 4,500+ media and commercial products available for your specific application.

PROFESSIONAL SUPPORT

Our skilled experts with decades of expertise look forward to providing you with technical advice tailored to your individual requirements. We offer global consulting services, headed by highly qualified staff at our Technical Service Centre and within our field sales organisation – from project planning to on-site assistance for your specific applications.

YOUR PARTNER FOR CUSTOMISED SOLUTIONS – WORLDWIDE

Based on your specific requirements, we will work with you to design a customised double-containment piping solution. Our team of experts around the globe looks forward to assisting you as a trusted partner with decades of experience.

EXCELLENT ADVICE: FROM PLANNING TO COMMISSIONING AND TRAINING

Our global service and support network is available to you worldwide, covering every aspect from planning to commissioning – comprehensive support and exceptional service guaranteed. This is complemented by global training opportunities for the purpose of further enhancing operational safety at your sites.

CUSTOMER SATISFACTION: ABOVE AVERAGE

At SIMONA we are particularly proud of the fact that our customers have acknowledged our customer service by awarding it a grade of 1.5 (“very good”) (University of Heilbronn 2023: Customer Satisfaction Analysis). This puts us well above the average – a trend that has been on the rise for years.

Please feel free to get in touch with one of our experts to assess the potential of a SIMODUAL² double-containment piping system at your facility.

GLOBAL THERMOPLASTIC SOLUTIONS

Contact and more:

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