



**Double protection  
means double safe**

CONTAIN-IT Plus  
Double Containment  
Piping System



**+GF+**

**GEORG FISCHER**  
PIPING SYSTEMS

# Optimized safety for the world of today and tomorrow



## Responsible and future-oriented – CONTAIN-IT Plus of GF Piping Systems stands for this

A growing number of companies are interested in telling the public about their commitment to environmental protection.

Pollution is a topic of concern, more than ever today. That is why environmentally friendly performance is an important issue at GF Piping Systems, firmly integrated in its corporate policy. Responsible and future-oriented business activities are required to protect our environment. For us and for our children.

A declared goal of our corporate policy is to keep pollution to a minimum in creating products and services. A persuasive example of this is our double containment piping system, CONTAIN-IT Plus.

### **Future-oriented planning and production**

Production and product design which take environmental aspects into consideration are entirely feasible today, over the whole gamut of process steps – from purchasing to disposal of remaining stock.







Planning with foresight means reducing or even eliminating many sources of pollution in the development of products as well as during the entire product life cycle. And we are convinced that environmentally safe production and performance are also becoming vital arguments for our customers.

**Minimize environmental risks**

Responsible decision-makers have recognized that when stocking or transporting hazardous media only products which offer increased safety should be used. Public authorities have reacted with more restrictive legal requirements. This is the only way in which we can optimize environmental protection in this area. Above and beyond this, the risk of accidents and the related litigation and compensation demands for companies working with environmentally hazardous media need to be cut back. The answer of GF Piping Systems is CONTAIN-IT Plus, the double containment piping system.



In the context of ISO 14001 certification, environmental risks are systematically examined and, if indicated, measures are introduced to minimize them. Modern corporations today demand analyses from their suppliers and the corresponding action. GF Piping Systems supports this actively. Most of our companies are already certified or are in the process of acquiring certification.







# CONTAIN-IT Plus for highest demands



## Application areas

Double containment piping systems are used where there is an unconscionable threat to people, land or equipment. Regulations already in effect or governmental ordinances can dictate double containment systems. Wherever environmentally hazardous media need to be conveyed, the accident risk can be practically eliminated with the use of double piping and leak detection.

The following areas are especially interesting application examples:

- effluent treatment plants with contents hazardous to water
- effluent plants in water protection areas
- battery manufacturing
- chemical industry
- semiconductor industry
- PCB production
- power plants
- metal working / finishing
- paper / cellulose
- dumping ground drainage
- life science

## Materials

For operational safety and full use of the specified minimum service life, the choice of material and pressure rating of the piping system components is decisive.

The most important factors to be considered are:

- working pressure
- working temperature
- medium conveyed
- duration of service load





#### State-of-the-art technology

The principle behind the patented double containment pipe joining technology of GF Piping Systems is based on the so-called initial jointing of the inner pipe. With this technology, the inner and outer pipes can be installed separately. This permits laying a double containment pipeline analog to a single pipeline. The DVS guidelines (German Federation for Welding and Related Procedures) which stipulate visual inspection of each joint are observed resolutely. The so-called «last joints», which occur with every change of

direction in other systems and which usually have to be done «blind», do not exist with this method. After joining the inner pipe, there is a 30-mm gap between the ends of the outer pipe. This gap serves to test the inner pipe according to DVS guidelines. When the pressure test is successfully completed for the inner pipe, this gap is closed with a snap ring. Finally, an ELGEF® Plus electrofusion socket or a rubber collar is placed over the ring and the pipe end, and then fused or screwed down.

#### Compact design

There is only a minimal difference in the diameter ratio of the inner pipe and the outer pipe. The clearance may not, however, be too small so that the conveyed medium does not block off the annular passage in the case of damage.

Double containment piping system solutions meet the highest quality requirements

# Safety at every level



The greatest possible safety for your employees with CONTAIN-IT Plus

## **Job safety for every job**

We take our responsibility seriously. By participating in the worldwide initiative, «Responsible Care», GF Piping Systems demonstrates its commitment to safeguarding equipment, products, transportation and to protecting health and the environment. We are dedicated to transparent safety: everywhere, where there are people. Whether at work, at home or on the road. Our performance is your safety.

## **Highest standard of quality management**

Safety is of course also directly related to quality. Our technologies and our quality correspond to the highest standards. This high quality of our products is warranted by ISO 9001 certified quality management systems. In our DIN ISO/IEC 17025 accredited test laboratory, we define the criteria for the market. This is how we make sure our products function perfectly, providing you with the necessary safety.



## **Calculation programs / «Static evidence»**

In planning thermoplastic double containment piping systems, the material characteristics must be considered in conjunction with work-related and external effects. Such influencing factors can lead to mechanical, thermal and chemical stress.



# Professional support at all times



## Worldwide project and user support

GF Piping Systems offers you the expertise of its experienced specialists. This also includes intensive customer support on site during the whole project phase. And of course afterwards as well.

Our sales companies in over 24 countries and an extensive, qualified network of distributors together with our modern logistics system guarantee high availability.

## Planning support and training

In the construction of pressure piping systems, qualified professionals ensure correct installation. That is why we recommend to have double containment piping systems only installed by experienced personnel that has been authorised by us.

GF Piping Systems offers comprehensive training programs for employees and customers worldwide. Several of these programs can be completed with a certificate.

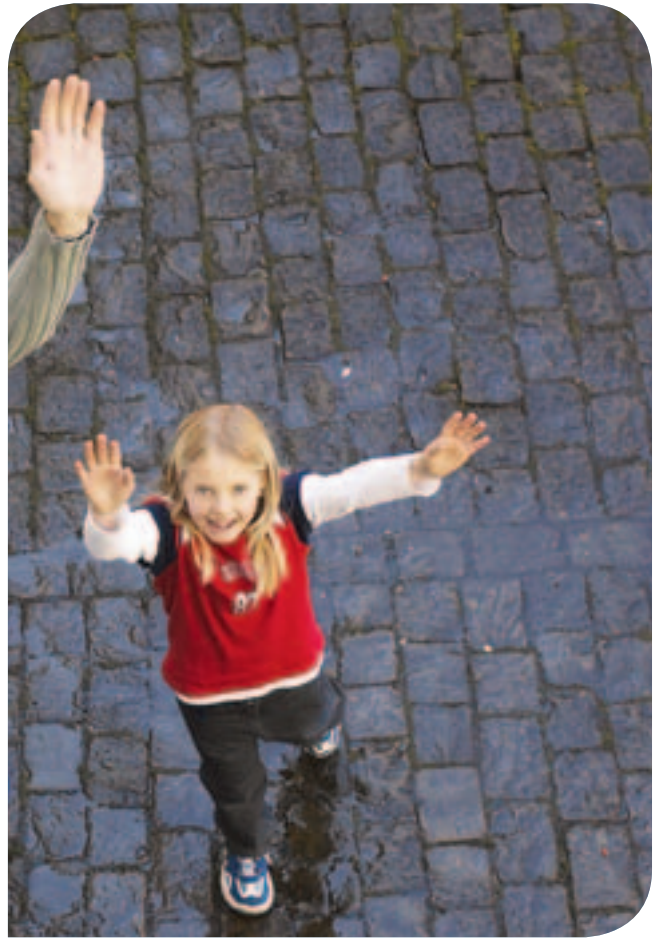
Please contact our central Training Center in Schaffhausen or one of our local training centers all over the world for more information.



**Take advantage of our know-how.**  
**We are glad to share it with you.**  
**Welder, maintenance, installation and quality control training with certificate.**

To calculate the layout of a double containment piping system, the stresses and consequences thereof must be analyzed under test, installation, operation and damage conditions. If you wish, we make it our job to calculate this static evidence for you.

GF Piping Systems is an active partner in every phase of your project.



The technical data are not binding and not expressly warranted characteristics of the goods. They are subject to change. Our General Conditions of Sale apply.

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