



Semperflex INDUSTRIAL Informs

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VARIETY OF CORRUGATED HOSES

enlarges our product portfolio

Following our strategic focus on the large-scale production of high-quality industrial hoses, Semperit is now capable to broaden the Semperflex Industrial product portfolio by offering corrugated hoses up to 61 meters (up to and including 6") and maximum 30,5 meters for diameter 8".

Previously Semperit offered corrugated hoses in small quantities and as specialty product only (e.g. Flexichem-Mobil, TMSL). Our continuous investments in the production lines in the factory in Odry, CZ, however, now enable us to produce **large quantities at competitive prices and conditions**. Due to a greater variety of production methods and with state-of-the-art production engineering, Semperit can deliver corrugated hoses not only in the premium specialized segment but also in the high volume market.

First tests from customers confirm the excellent quality, surface and flexibility in comparison to hoses already present on the market. Also, utilizing the **ultra-modern trolley production in Odry** results in a very even corrugation of the hoses, especially in comparison to the often used manual production.



Peter Krapfenbauer from Semperit states:

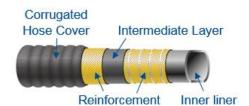
"Following Semperflex Industrial's key growth strategy and investing further in our production site in Odry, we are now able to offer corrugated hoses in large quantities and to competitive prices."



Attributes & Benefits

Corrugated hoses unite the attributes of smooth and the additional benefits of corrugated hoses.

Although characterized by same nature and the basic identical structure as smooth hoses, the production of high-quality corrugated hoses relies on an **extensive input of know-how and R&D work**.



One of the main challenges is to ensure the **highest possible flexibility** and **small bending radii** without the hose kinking. Therefore, the balancing act within the development phase is to identify the ideal depth and width of the corrugated deepening.

At the same time an **optimal durability** needs to be achieved. The requirement for it is that despite corrugation, a sufficient cover layer must remain in the indentation between the corrugated ridges.

Based on those properties, the corrugated hoses can be utilized in manifold applications and find their use especially where **more flexibility** and **smaller bending radii** are a particular issue, such as in areas with limited space.

For small diameters (up to DN50), the bending radius is comparable to the smooth hose, but the bending force is already noticeably smaller, making it easier to bend. For large nominal widths (from 2" / DN50), the bending radius and bending force are significantly lower. The corrugated hoses provide a higher flexibility whereat they **remain extremely robust** and have an **equal vacuum durability** at the same time.

Due to our thorough development and production, Semperit can now deliver high standard corrugated hoses and provide the already **well-proven general Semperit hose quality and performance**. The corrugated hose production rests upon the corresponding rubber compounds, layers, equal maximum working pressure as well as equal safety factor to our smooth hoses.



- √ higher flexibility
- ✓ smaller bending radii
- ✓ equal vacuum durability



Types & Applications

Depending on our customers' needs and the chosen application, Semperit with its state-of-theart trolley production in Odry, CZ, is prepared to offer all three common surface designs:

Corrugated, flat corrugated and square corrugated (see pictures below)





B) Flat Corrugated



C) Square Corrugated





The fields of applications of corrugated hoses is divers but mainly concentrate on the areas of **suction & delivery**, which comprise **water** (waste, sewage, service), **abrasion** (silos and silo trucks) and **mineral oil** usage (tanks, petrol tankers and ships).

The **corrugated** hose A) can be referred to as **"standard"** product being the most economic hose amongst the three common types. In the industry, it is commonly used in mobile water applications.

Due to the increased contact surface area, the **flat corrugated** hose B) combines the advantages of smooth and corrugated hoses. It marks its **"high performance"** characteristics especially in heavy-duty applications such as mineral oil transport and is extremely robust by keeping the necessary flexibility at the same time.

The most "special" type is classified as the square corrugated hose C). With its extremely small bending radius and high flexibility, it is perfectly suited for areas with limited space such as within machines. Preferably these hoses are used in fixed installations since the rather sharp edges increase the possibility of getting stuck when being moved.

From Semperit all hose types can be ordered up to 200 ft. / 61 m for dimensions up to 6" and maximum 100 ft. / 30,5 m for dimension 8". With our modular system, we are prepared to also meet individual customer demands to offer customized products.



Gerhard Mahlfleisch from Semperit explains:

"Depending on the industry and fields of application, different corrugated types are preferred and chosen. In general, we can identify that the **corrugated** hose is mainly used in **mobile water** applications, the **flat corrugated** on the other hand for the transportation of **mineral oil**. Specifically, for **machines** and **fixed installations** is the **square corrugated** favourably to our customers."

We welcome the new family members of Semperflex Industrial:

IFSD corrugated, IESD square corrugated, TM30 flat corrugated, SMSP corrugated

For more information on the suitable corrugated hose for your needs, please check out the datasheets on our on our website or contact our team for expert advice.



