Semperflex INDUSTRIAL informs

Newsletter April 2021 | P 1/4

Complete redesign of the Semperit premium chemical hoses

The next generation with impressive improvements

With a clear focus on far increased **flexibility**, extended **lifetime** and being linked to the digital **HOSE WIKI APP**, intensive work has been done in recent months on the further development of our premium chemical hoses. The **key success factors** for the upgrade are based on **unique compounds** in combination with a **new hose design**. **High performance and safety standards** as well as the step towards **digitization** are met by the hoses with braided reinforcement. Marked with a corresponding QR code, important up to date product information can now easily be accessed by the user in real time.

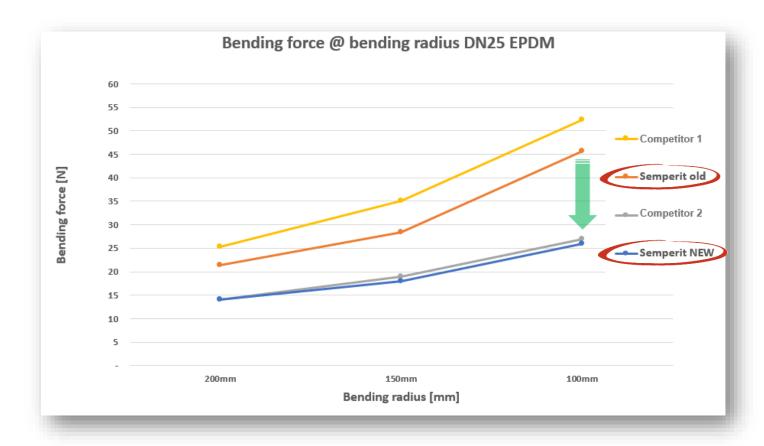
The **most important developments** of the new generation of braided chemical hoses can be summarized as follows and are explained in more detail on the following pages:



Higher flexibility for easier handling

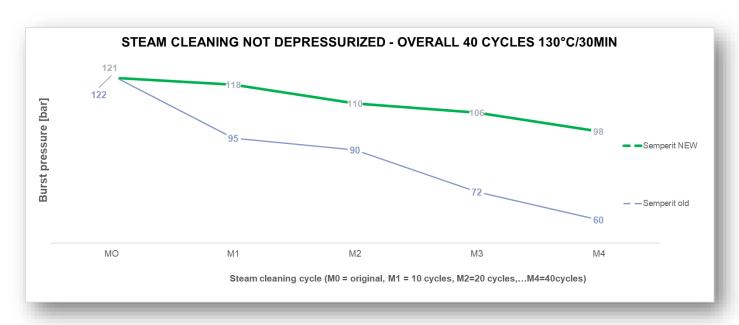
One of the main criteria for the chemical hoses is its **flexibility** in accordance with a high robustness. With the new design Semperit provides a **significant improvement** by **reducing the bending force by 50% and bending radius by 40%** (measured on reference DN25; see chart below). With the increased flexibility, the installation and handling of the hose in the application is supported and facilitated significantly.





Prevention against risk of wrong steam-treatment

Even after 40 cleaning cycles with not pressurized steam the new design shows high values for burst pressure. Whereas the old design drops by 50% during incorrect steam-treatment, the new design only shows a decrease of 20% (Hose assembly test: 4 cycles in a row - each cycle 10 times steam cleaning at 130°C / 30 min **NOT depressurized**).





Higher robustness for increased lifetime

After laboratory simulation of real conditions, the new resist U/E hoses show **no damage** such as cracks or fissures below the clamps on the hose cover after 14 days. The perfected interaction between the rubber hose and the metal half-shells of the couplings thus ensures a longer lifetime and a lower probability of failure of the hose assembly in use.



Digitization

With the development of the Semperit **HOSE WIKI APP**, both our customers and the end users are provided with a full product information transfer of up to date product information.

Our chemical hoses are now marked with a **QR code** that guides the user to valuable product and additional relevant information, specifically related to the respective hose application. These encompass e.g. the **product datasheet**, **supporting documents** (i.e. REACh), **certificates**, **chemical resistance chart**, , **safety instructions**, **contact information** and more features.

The QR code can be scanned directly from the hose by any mobile device, providing **quick** and **easy accessibility** for all hose users. (link to the QR Code newsletter)

Explore and test our new digital feature directly by scanning the QR code with your mobile device:



All benefits at a glance



- Easier handling and installation of the hose assembly due to reduced bending force (-50%) and bending radii (-40%) of the hose
- More durable and robust:
 - Improved temperature resistance and permeability behavior of the peroxide crosslinked rubber compounds
 - Improved hose construction with stronger braid, double spiral and higher burst pressure
 - Low burst pressure loss in case of improper steam cleaning
 - Secure fitting fit due to excellent recovery behavior of the rubber compound
- QR code for easy access to important product information



Order & Delivery

Please <u>contact our customer service team</u> for expert advice and place your order now. Further technical details can be obtained from the respective datasheets on our <u>website</u> and please also refer to the Semperit chemical hoses resistance list online.

Already available from stock is the

- RESIST U UPEL-P \rightarrow DN 19 x 6,0 / 25 x 6,0 / 32 x 6,0 / 38 x 6,5 / 50 x 8,0

Further dimensions and types will be available within the next months:

- **RESIST U UPEL-P** → DN 75 x 8.0

→ **RESIST E EPDM** → DN 25 x 6.0 / 32 x 6.0 / 38 x 6.5 / 50 x 8.0 / 75 x 8.0

 \rightarrow RESIST E EPDO \rightarrow DN 19 x 6.0 / 25 x 6.0 / 50 x 8.0



Gerhard Mahlfleisch (Product Manager, Semperflex Industrial):

"The careful and safe handling of chemicals requires a high level of safety, which must be supported by the materials used. With the upgrade of our chemical hose, we are also reacting to the known problems in the daily handling of chemical hoses, primarily incorrect steam cleaning in operation. Therefore, it was also our intention to develop the new chemical hose as one of the most robust and resistant designs on the market. High burst pressure, noticeable flexibility and consistent quality throughout the entire service life are the focus."







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