



Whether PCR, TBR, OTR, BIAS or other tires, the conditions in tire curing presses are extreme. Valves are challenged especially with respect to their service life and reliable functioning. Also their control accuracy plays an important role for precise temperature control. For decades we have been a trusted partner for tire manufacturers and offer customized solutions for your individual application.

On/Off Valves

The Schubert & Salzer **seat valves** in stainless steel, feature high C_{vs} values in a very compact design, a variety of possible connections, and very easy maintenance. High-temperature versions, developed especially for tire curing presses, ensure a high degree of tightness and long service life even in nitrogen, steam and hot-water applications up to 220 °C. The special seat construction proves to be particularly robust, especially also with vacuum and drain.

In comparison with conventional seat valves the 7010 valves have significantly larger C_{vs} values:

| Comparison of C_{vs} values | | |
|-------------------------------|-------------------------------|------------------------------|
| Nominal size | Conventional seat globe valve | Schubert & Salzer 7010 valve |
| DN 15 | 2.9 | 4.1 |
| DN 20 | 5.4 | 9.3 |
| DN 25 | 8.6 | 17.4 - 18.6* |
| DN 32 | 13.2 | 24.4 - 27.8* |
| DN 40 | 22.1 | 34.8 - 40.6* |
| DN 50 | 28.8 | 46.4 - 63.8* |

* Depending on the size of the drive / stroke

Thus, not only the nominal sizes of the valves, but also the nominal sizes of the pipes, can be reduced by at least one nominal size. A 7010 valve in nominal size 32 can even replace a conventional valve with a nominal size 50 without reducing the flow rate. The entire steam package is thus more compact and more economical. C_{vs} advantages over other solutions are also available with 3-way valves and flanged globe valves from Schubert & Salzer.



Summary of your benefits:

- Long service life with over 1 million switch cycles and highly leakproof even with slightly contaminated media.
- Very simple maintenance: The valve body can remain installed in the pipeline during valve maintenance. The actuator including the plug can be easily unscrewed.
- This easy-to-maintain design optionally allows an economic and space-saving welded-in construction that prevents any leakage and steam losses at the connections.
- Every part of the valve is available as a replacement part.
- A temperature range of -100 °C to 220 °C is possible.
- Available in nominal sizes DN8 to DN80, up to pressure rating PN40.
- Easy handling and reduced storage: The identical valve body is the basis for line strainers, check valves, manual valves, pneumatic valves and control valves.
- Flexible pilot air connection thanks to an actuator bonnet which can rotate 360°.
- Valve position indication, even in the "normally open" versions.

Energy savings through:

- Permanent leakage-free integration into the pipeline.
- Long-term tightness at packing and seat.
- Efficient insulation.



Control Valves



The GS-Valve and its applications – See the movie at: controlsystems.schubert-salzer.com/en/gs-film

The unique **sliding gate valve** of Schubert & Salzer has proven itself as the superior control valve solution in tire curing presses all over the world. In internal and external heating, it controls steam, hot water and nitrogen precisely, quickly and economically.

Summary of your benefits:

- Very high control accuracy through intelligent positioners and quick reaction times due to the short stroke. The accuracy that can be achieved in the temperature control often allows the curing time per tire to be reduced!
- A more compact and integrated positioner requires no additional, remote I/P converter, resulting in no continuous consumption of control air.
- The quick opening time allows the time-optimised filling of the bladder.
- Also high differential pressures can be regulated by the same valve; additional pressure reducers are not required. Control of high and low pressure steam with only one valve.
- Regulation can be optimised or adjusted by changing the C_{vs} value by means of replacing the fixed disc only.
- Compact construction and simple installation.
- 10 times less actuation force reduces energy consumption and is kinder for the climate and environment.
- Very easy maintenance through the simple replacement of the easily accessible disc pair.
- Short control paths reduce wear on packing and actuator and thus increase the service life.
- Maintenance-friendly replacement of the integrated positioner. Smart diagnostics software in the positioner as a valuable aid.

Our valves are not only used in tire curing presses, but of course also in the **main steam control system / steam header** or in the central steam, hot water or nitrogen supply, on the mixer and on the **calanders**.

Functionality of Sliding Gate Valves:

A sealing plate (3) fixed in the housing (1) perpendicular to the direction of flow has a defined number of transverse slots of the same size. A rotationally fixed disc (2) with the same arrangement of slots is moved vertically and thus changes the flow cross-section. The subsequent pressure difference presses the moving disc (2) onto the fixed disc (3).



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