

Checklist for the Calculation of a Thermowell according to DIN 43 772

Thermowell Information

Thermowell according to data sheet (please tick as appropriate)

<input type="checkbox"/> SF4	8.8110	<input type="checkbox"/> SF5	8.8120	<input type="checkbox"/> SK1	8.8140
<input type="checkbox"/> SF4.1	8.8111	<input type="checkbox"/> SF6/SF7	8.8121	<input type="checkbox"/> SK2	8.8141
<input type="checkbox"/> SF4 F	8.8112	<input type="checkbox"/> SF8	8.8130	<input type="checkbox"/> SK3	8.8150
<input type="checkbox"/> SF4.1 F	8.8113	<input type="checkbox"/> SF9	8.8131	<input type="checkbox"/> SK4	8.8151

Thermowell acc. to drawing no. _____
 (specify alternatively in case of special construction types and customer-specific versions)

Thermowell material _____

Thermowell Ø in mm (enter applicable diameters according to thermowell type)

internal Ø d1 _____

external Ø F1 _____

F2 _____

F3 _____

Thermowell lengths in mm (enter applicable lengths according to thermowell type)

L _____

U1 _____

U _____

Thermowell connection (please tick / fill in as appropriate)

Thermometer connection thread N clamping connection

Process connection thread E welding connection

flange

Application / Media Information

Water or air are standard media for the calculation of the thermowell safety according to DIN 43 772. Additionally, the selection of further media is possible. If the medium data are not provided, alternatively the medium density at design pressure and design temperature can be specified.

Medium (please tick as appropriate)

<input type="checkbox"/> water	<input type="checkbox"/> natural gas	<input type="checkbox"/> carbon dioxide	<input type="checkbox"/> propylene
<input type="checkbox"/> air	<input type="checkbox"/> natural gas L1	<input type="checkbox"/> carbon monoxide	<input type="checkbox"/> oxygen
<input type="checkbox"/> ammonia	<input type="checkbox"/> natural gas L2	<input type="checkbox"/> methane	<input type="checkbox"/> nitrogen
<input type="checkbox"/> butane	<input type="checkbox"/> natural gas L3	<input type="checkbox"/> OEVGW31	<input type="checkbox"/> ethane
<input type="checkbox"/> butylene	<input type="checkbox"/> GZ50	<input type="checkbox"/> pentane	<input type="checkbox"/> ethylene
<input type="checkbox"/> argon	<input type="checkbox"/> helium	<input type="checkbox"/> propane	

Medium density (kg/m³) _____

Design temperature (°C) _____

Design pressure (bar) _____

Flow rate (m/s) _____

Graphic Depiction of the Thermowell Rating

For known media, the following diagrams can be selected additionally to the calculation

- Load diagram according to DIN 43 772
- Permissible external pressure depending on the temperature
- Permissible flow rate depending on the thermowell length