

VALVESTAR® 7

Overview and Program Highlights



Objectives of this Presentation.

1. [Objectives](#) | 2. [General Remarks](#) | 3. [Sizing](#) | 4. [Reports](#) | 5. [Design and Handling](#) | 6. [Settings](#) | 7. [VALVESTAR®Web](#)

The aim of this presentation is to point out the **advantages** of the **LESER Sizing Software VALVESTAR® 7**.



General Remarks.

1. [Objectives](#) | 2. [General Remarks](#) | 3. [Sizing](#) | 4. [Reports](#) | 5. [Design and Handling](#) | 6. [Settings](#) | 7. [VALVESTAR®Web](#)

- **VALVESTAR® 7** supports all leading worldwide codes and standards.
- In addition to calculations and sizing the program provides user designed and configurable individual reports for technical documentation and archiving.
- **VALVESTAR® 7** is unique in form, functionality and quality.
- And it is **free of charge!**



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Sizing.

1. Objectives | 2. General Remarks | 3. Sizing | 4. Reports | 5. Design and Handling | 6. Settings | 7. VALVESTAR®Web

- **Sizing of safety valves**

for steam, gas and liquids according to leading worldwide codes and standards such as: API 520, ASME Sec. VIII, ISO 4126-1, AD 2000-Merkblatt A2

- **Calculation of two-phase flow**

in accordance with API 526 Appendix D (Ω -method) and fire case in accordance with API 521

- **Evaluation of inlet pressure drop, built-up back pressure in pipework, reaction forces as well as noise levels**

Create new sizing wizard - Service condition

At this step you need to set values for Input Pressure, Temperature, Massflow or Volumeflow.

| | | | |
|--|-------|-------|--------------------|
| Maximum allowable working pressure (MAWP) | | | psi-g |
| Set pressure | p | | psi-g |
| Superimposed back pressure | pbf | 0 | psi-g |
| Built-up back pressure | amb | | psi |
| Overpressure | dp | 10.00 | % |
| Temperature | T | | °F |
| Required massflow | qm,ab | | lb/h |
| Volumeflow to be discharged (working condition) | qv,ab | | ft ³ /h |
| Volumeflow to be discharged (std condition) [T=60 °F P=14.7 psi] | qm,ab | | SCMH |

Options:

Volume flow standard: ASME

Case for blow off:

Installations:

Rupture disc correction factor: 1,000

Buttons: Back, Next, Finish, Cancel

Create new sizing wizard - Valve selection

First, choose a valve group and then any one valve from that group.

| Type | Diameter range | Body material |
|---------------|----------------|---------------------|
| 441, 442 DN | DN 20 - 200 | 1.0619 / SA 216 WCB |
| 441, 442 Full | 1/2" - 4" | Lifting device |
| 441, 442 Full | DN 25 - 50 | Cap-VC |

| Capacity exceed [%] | Certified massflow [kg/h] | Article No. | DN inlet x DN outlet | d0 | Description |
|---------------------|---------------------------|-------------|----------------------|-----|------------------|
| -74,10 | 2.969,642 | 4412-4512 | 25x40 | 23 | Type 4412 DN 25 |
| -50,96 | 4.711,113 | 4412-4522 | 32x50 | 29 | Type 4412 DN 32 |
| -33,17 | 7.465,141 | 4412-4532 | 40x65 | 37 | Type 4412 DN 40 |
| 3,25 | 11.076,566 | 4412-4542 | 50x80 | 46 | Type 4412 DN 50 |
| 76,73 | 20.209,281 | 4412-4552 | 65x100 | 60 | Type 4412 DN 65 |
| 167,31 | 30.740,562 | 4412-4562 | 80x125 | 74 | Type 4412 DN 80 |
| 313,17 | 47.514,260 | 4412-4572 | 100x150 | 90 | Type 4412 DN 100 |
| 368,62 | 53.913,671 | 4412-4582 | 125x200 | 99 | Type 4412 DN 125 |
| 560,31 | 87.213.884 | 4412-4592 | 150x250 | 125 | Type 4412 DN 150 |

Buttons: Back, Next, Finish, Cancel

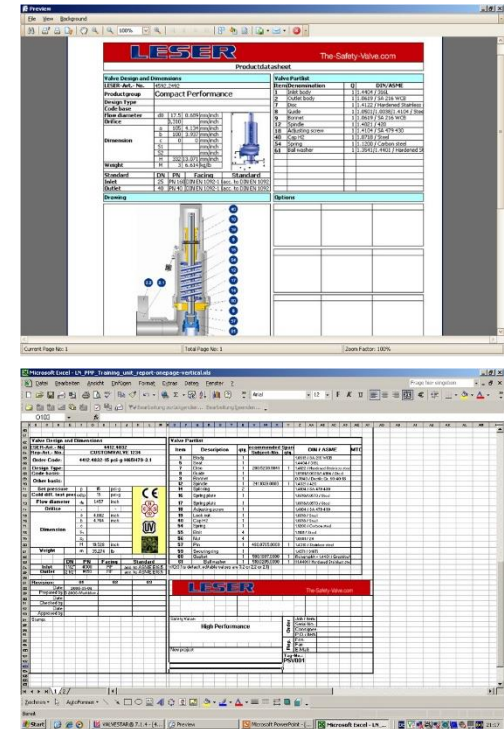
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Reports.

1. Objectives | 2. General Remarks | 3. Sizing | 4. Reports | 5. Design and Handling | 6. Settings | 7. VALVESTAR®Web

- **Selectable report types**, e.g. project report, single page report and product data sheet
- **Customizable design of report layouts** (company logo, address, etc.)
- **Range of data export formats**, e.g. XLS, RTF, PDF
- **Integrated material part lists and sectional drawings** for all LESER safety valves.
- **Spare part list as value related chapter in report** for complete project

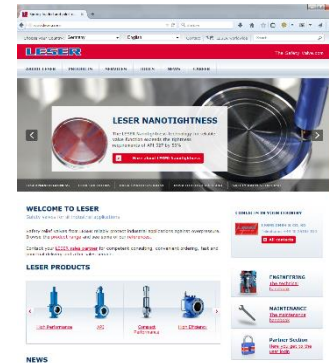


Design and Handling.

1. Objectives | 2. General Remarks | 3. Sizing | 4. Reports | 5. **Design and Handling** | 6. Settings | 7. VALVESTAR®Web

- **A user friendly wizard function** leads step-by-step through the calculations
- **Microsoft.Net based architecture** offers latest graphical user interface for easy handling and enhanced performance
- **Automatic update function** via internet

| | AD2000-A2 | API 520 | ISO / CD 4126-9 |
|------------------------------------|--------------------------|--------------------------|--------------------------|
| Reaction force | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Noise | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Fire Case | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Pressure drop inlet line | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Built up back pressure outlet pipe | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



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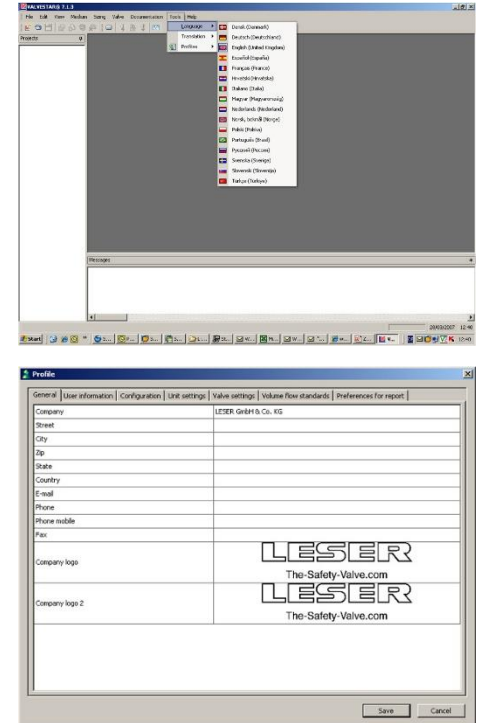
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Settings.

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Customizable user interface:

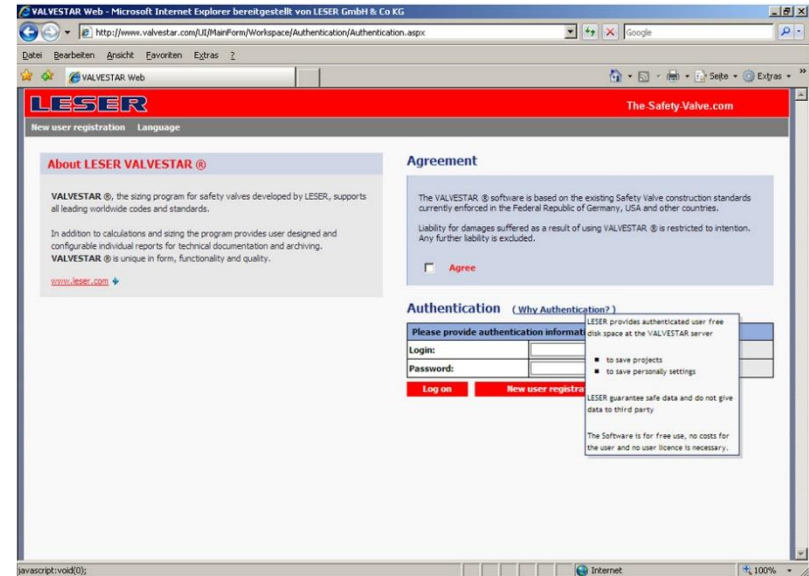
- **User specified profile settings** with pre-selection of units, calculation methods, etc.
- **More than 15 languages** selectable



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- Online-calculation for safety valves and projects at **www.valvestar.com** without any software installation
- Worldwide interchangeability of project files possible through the valvestar server



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Thank you for your attention.



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