

# Stainless Steel Tanks and Storage Systems for Industry 

 HydroSystemTanks ${ }^{\circledR}$ (HST)

## HydroSystemTanks ${ }^{\circledR}$ - pure innovation

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Advantages - Highest quality due to uncompromising use of high-grade stainless steel
(for example 304, 316Ti, S32101, ...)
    - High degree of safety and hygiene due to hermetic encapsulation and gapless
        design
    - Long service life and high economic efficiency
    - Open-air installation possible - with or without insulation
    - Wide variety of inexpensive building designs
    - Minimal incursion into ground, ideal with rocky conditions
    - Installation in buildings:
        A constant room temperature, therefore no condensation and an automatic
        high-pressure cleaning system are possible
    - Problem-free construction in situ - possible virtually everywhere
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Technology • Tank made completely of stainless steel, jacket welded using the winding method (Pat)


- Non-corrugated stainless-steel bottom with slope down to draw-off connection
- Conical roof with domed cover
- Siphoned overflow system
- Aeration and venting via replaceable heavy-duty filter elements
- Automatic cleaning system (Pat) for high-pressure interior cleaning (optional)
- Operator platforms with access via curved stairway or ladder

Versions Our special manufacturing method means that tanks can be built with diameters from 2.8 to 20 m and heights up to 15 m .

This makes capacities of as much as $4500 \mathrm{~m}^{3}$ possible for individual tanks (special sizes on request).

Applications - Pure water and storage tanks for industry

- Storage tanks for wine and beer
- Storage and mixing tanks for the foodstuffs industry
- Process-water tanks for the biochemical industry
- Reaction tanks
- Storm-water and sewage tanks in sewage treatment
- Special tanks (e.g. for palm oil)


Storage tanks

## Storage tanks

The problem In the industrial sector, and particularly in the beverages industry, tanks of the most varied sizes are required for storing liquids, both in the long term and as temporary storage.

Due to the restrictions imposed by transportation possibilities, there is a limit to the volume of tanks which can be built in the factory.
The HydroSystemTanks open up a new range of possibilities here.
On-the-spot manufacture of this extremely flexible system means that tank capacities up to 4,500 $\mathrm{m}^{3}$ can be built quickly and economically.

Necessary fittings, openings and connections, as well as in-tank equipment such as heating systems, can be positioned and installed to meet requirements.
The same applies to operator platforms, ladders, stairs and railings.

Advantages - Short construction time - even in the case of in situ construction

- Long service life, a high degree of hygiene
- Your choice of stainless steel quality
- Conical roof with domed cover D600
- Sloped bottom with a gradient of approximately $1.5 \%$ for emptying residue, lean-mixed concrete on the underside for an even load distribution
- Manhole DN 800 - optionally with sight glass
- Siphoned overflow system with connection for aeration and venting
- Tapping and filling connection as required
- Corner plates and eyes as per static calculations


Optional • Automatic high-pressure cleaning system (Pat)

- Insulation, lighting
- Platforms, ladders, steps, roof railings
- Conical floor

- Air filter system
- External pipes
- Tank lighting
- Pressure doors


Basic structure


Achievable The table below provides details of all achievable useful volumes. useful volume Special sizes on request.

| Diameter | Height $\mathbf{[ m ]}$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{D} \mathbf{[ m ]}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | $\mathbf{1 2}$ | $\mathbf{1 3}$ | $\mathbf{1 4}$ | $\mathbf{1 5}$ |
| $\mathbf{2 . 8}$ | 23 | 30 | 36 | 42 | 48 |  |  |  |  |  |  |  |
| $\mathbf{3}$ | 27 | 34 | 41 | 48 | 55 | 62 |  |  |  |  |  |  |
| $\mathbf{3 . 2}$ | 31 | 39 | 47 | 55 | 63 | 71 | 79 |  |  |  |  |  |
| $\mathbf{3 , 5}$ | 37 | 46 | 56 | 65 | 75 | 85 | 94 | 104 |  |  |  |  |
| $\mathbf{4}$ | 48 | 60 | 73 | 85 | 98 | 111 | 123 | 136 | 148 |  |  |  |
| $\mathbf{4 . 2 5}$ | 54 | 68 | 82 | 96 | 111 | 125 | 139 | 153 | 167 | 181 |  |  |
| $\mathbf{5}$ | 75 | 94 | 114 | 133 | 153 | 173 | 192 | 212 | 232 | $\mathbf{2 5 1}$ | $\mathbf{2 7 1}$ |  |
| $\mathbf{5 . 5}$ | 90 | 114 | 138 | 161 | 185 | 209 | 233 | 256 | 280 | 304 | 328 | 351 |
| $\mathbf{6}$ | 107 | 136 | 164 | 192 | 220 | 249 | 277 | 305 | 333 | 362 | 390 | 418 |
| $\mathbf{7}$ | 146 | 185 | 223 | 262 | 300 | 338 | 377 | 415 | 454 | 492 | 531 | 569 |
| $\mathbf{8}$ | 191 | 241 | 291 | 342 | 392 | 442 | 492 | 513 | 593 | 643 | 693 | 744 |
| $\mathbf{9}$ | 242 | 305 | 369 | 432 | 496 | 560 | 623 | 687 | 750 | 814 | 877 | 941 |
| $\mathbf{1 0}$ | 298 | 377 | 455 | 534 | 612 | 691 | 769 | 848 | 926 | 1005 | 1083 | 1162 |
| $\mathbf{1 1}$ | 361 | 456 | 551 | 646 | 741 | 836 | 931 | 1026 | 1121 | 1216 | 1311 | 1406 |
| $\mathbf{1 2}$ | 430 | 543 | 656 | 769 | 882 | 995 | 1108 | 1221 | 1334 | 1447 | 1560 | 1673 |
| $\mathbf{1 3}$ | 504 | 637 | 769 | 902 | 1035 | 1167 | 1300 | 1433 | 1565 | 1698 | 1831 | 1963 |
| $\mathbf{1 4}$ | 585 | 739 | 892 | 1046 | 1200 | 1354 | 1508 | 1662 | 1816 | 1969 | 2123 | 2277 |
| $\mathbf{1 5}$ | 671 | 848 | 1024 | 1201 | 1378 | 1554 | 1731 | 1908 | 2084 | 2261 | 2437 | 2614 |
| $\mathbf{1 6}$ | 764 | 965 | 1166 | 1367 | 1567 | 1768 | 1969 | 2170 | 2371 | 2572 | 2773 | 2974 |
| $\mathbf{1 7}$ | 862 | 1089 | 1316 | 1543 | 1770 | 1996 | 2223 | 2450 | 2677 | 2904 | 3131 | 3358 |
| $\mathbf{1 8}$ | 966 | 1221 | 1475 | 1730 | 1984 | 2238 | 2493 | 2747 | 3001 | 3256 | 3510 | 3764 |
| $\mathbf{1 9}$ | 1077 | 1360 | 1644 | 1927 | 2210 | 2494 | 2777 | 3061 | 3344 | 3627 | 3911 | 4194 |
| $\mathbf{2 0}$ | 1193 | 1507 | 1821 | 2135 | 2449 | 2763 | 3077 | 3391 | 3705 | 4019 | 4333 | 4647 |

Diameter $\mathbf{D}$ to 4.25 m manufactured at the works, from 5 m in the case of in situ construction

