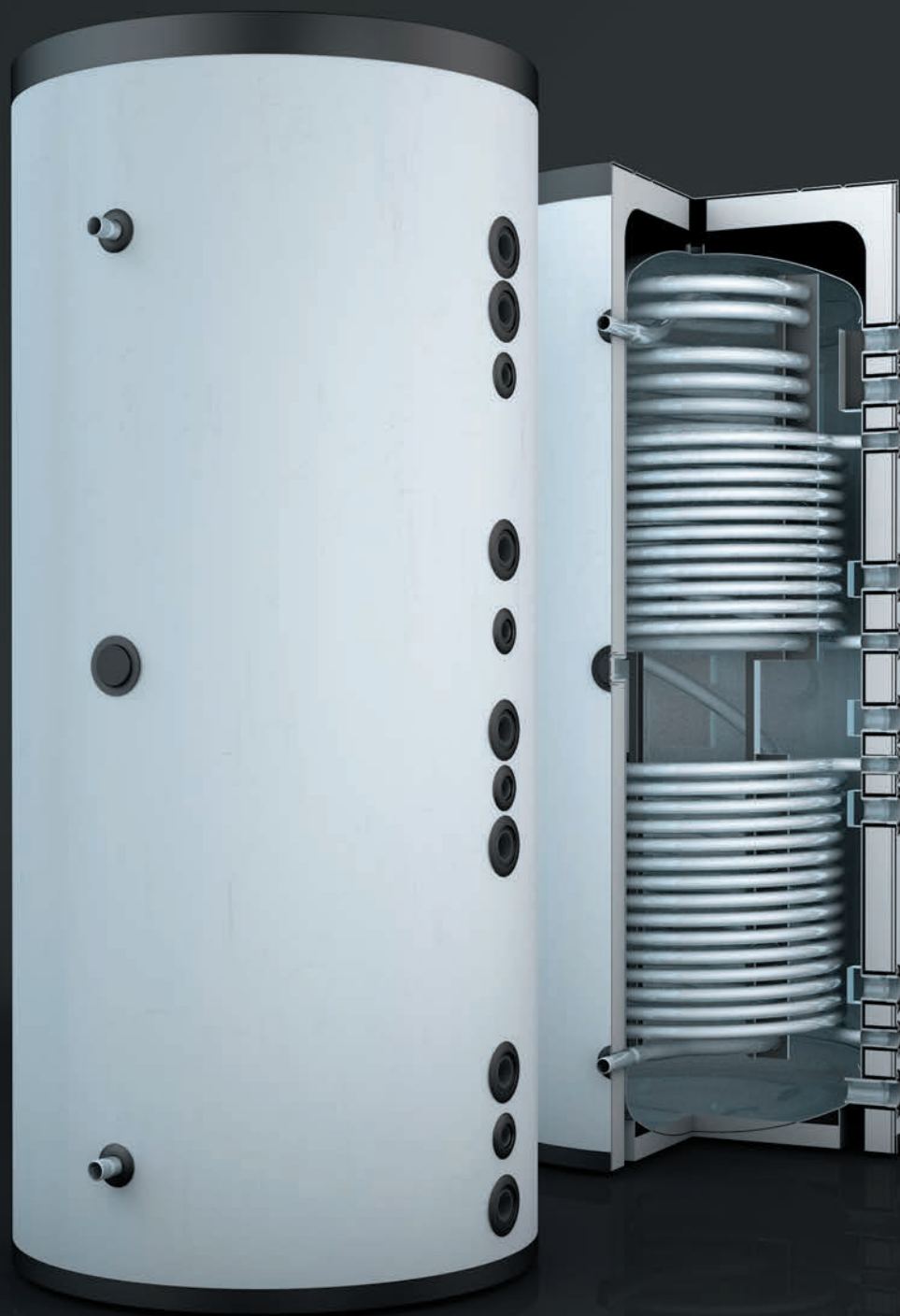


# HRR 500 - 2000



# Hygienic storage tank, solar HRR 500 - 2000

## Application

This buffer tank with its integrated stainless steel pipe and two solar heat exchangers can be used with various heating sources, such as boilers for gas, oil and solid fuels, or with heat pumps.

## Corrosion protection for parts with drinking water contact

Stainless steel 1.4404

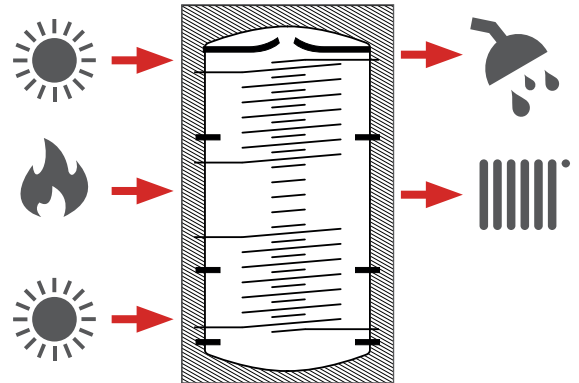
## External corrosion protection

Powder coating

## Heat insulation

Type 500-1000: 70 mm PU rigid foam half-shell with soft sleeve

Type 1500-2000: 110 mm half-shell made of EPS with ABS sleeve



### Model overview HR 500 - 2000

| Type     | Article no. | Volume | Height with insulation | Tilt height | Installation diameter | Weight (empty) | Surface corrugated pipe top/HE bottom/top | Output figure | Energy efficiency class |
|----------|-------------|--------|------------------------|-------------|-----------------------|----------------|---|---------------|-------------------------|
| Unit     | [-]         | [l]    | [mm]                   | [mm]        | [mm]                  | [kg]           | [m <sup>2</sup> ]                         | [-]           | [-]                     |
| HRR 500  | STD0500HRR  | 497    | 1750                   | 1740        | 650                   | 198            | 5.5 / 1.8 / 1.2                           | 3             | C                       |
| HRR 800  | STD0800HRR  | 772    | 1970                   | 1950        | 750                   | 221            | 6.0 / 2.4 / 2                             | 3.8           | C                       |
| HRR 1000 | STD1000HRR  | 902    | 2120                   | 2100        | 790                   | 254            | 6.0 / 3.1 / 2.3                           | 4             | C                       |
| HRR 1500 | STD1500HRR  | 1526   | 2240                   | 2240        | 1000                  | 308            | 9,8 / 3,5 / 3,2                           | 9,3           | C                       |
| HRR 2000 | STD2000HRR  | 1998   | 2420                   | 2430        | 1100                  | 369            | 9,8 / 3,8 / 3,5                           | 10,4          | C                       |

# Hygienic storage tank

## Technical specifications HRR 500 - 2000

| Type   | Unit    | HRR 500             | HRR 800    | HRR 1000   | HRR 1500   | HRR 2000   |
|--|---------|---------------------|------------|------------|------------|------------|
| Article no.  | [-]     | STD0500HRR          | STD0800HRR | STD1000HRR | STD1500HRR | STD2000HRR |
| Volume   | [l]     | 497                 | 772        | 902        | 1526       | 1998       |
| Content heating side                               | [l]     | 451                 | 715        | 839        | 1433       | 1921,5     |
| Drinking water content                             | [l]     | 28                  | 30         | 30         | 50         | 50         |
| Content HE bottom                                  | [l]     | 11                  | 15         | 19         | 22,5       | 24         |
| Content HE top                                     | [l]     | 7                   | 12         | 14         | 20,5       | 22,5       |
| Height with insulation                             | [mm]    | 1750                | 1970       | 2120       | 2240       | 2420       |
| Diameter with insulation                           | [mm]    | 810                 | 910        | 950        | 1250       | 1350       |
| Diameter without insulation                        | [mm]    | 650                 | 750        | 790        | 1000       | 1100       |
| Tilt height  | [mm]    | 1740                | 1950       | 2100       | 2240       | 2430       |
| Installation diameter                              | [mm]    | 650                 | 750        | 790        | 1000       | 1100       |
| Weight (empty)                                     | [kg]    | 198                 | 221        | 254        | 308        | 369        |
| Max. operating pressure heating side               | [bar]   | 3                   | 3          | 3          | 3          | 3          |
| Test pressure heating side                         | [bar]   | 4.5                 | 4.5        | 4.5        | 4,5        | 4,5        |
| Max. operating pressure hot drinking water side    | [bar]   | 6                   | 6          | 6          | 6          | 6          |
| Test pressure hot drinking water side              | [bar]   | 9                   | 9          | 9          | 9          | 9          |
| Max. operating pressure solar side                 | [bar]   | 10                  | 10         | 10         | 10         | 10         |
| Test pressure solar side                           | [bar]   | 15                  | 15         | 15         | 15         | 15         |
| Max. operating temperature heating side            | [°C]    | 95                  | 95         | 95         | 95         | 95         |
| Max. operating temperature hot drinking water side | [°C]    | 95                  | 95         | 95         | 95         | 95         |
| Max. operating temperature solar side              | [°C]    | 110                 | 110        | 110        | 110        | 110        |
| Surface corrugated pipe top                        | [m²]    | 5.5                 | 6.0        | 6.0        | 9,8        | 9,8        |
| Surface HE bottom                                  | [m²]    | 1.8                 | 2.4        | 3.1        | 3,5        | 3,8        |
| Surface HE top                                     | [m²]    | 1.2                 | 2          | 2.3        | 3,2        | 3,5        |
| Insulation thickness                               | [mm]    | 70                  | 70         | 70         | 110        | 110        |
| Max. installation length EHP                       | [mm]    | 500                 | 500        | 500        | 750        | 750        |
| Output figure                                      | [-]     | 3                   | 3.8        | 4          | 9,3        | 10,4       |
| On-demand heat overhead                            | [kWh/d] | 2.5                 | 3.1        | 3.4        | 4,1        | 4,5        |
| Holding losses                                     | [W]     | 104                 | 129        | 141        | 171        | 185        |
| Efficiency class                                   | [-]     | C                   | C          | C          | C          | C          |
| Insulation material                                | [-]     | PU rigid foam shell |            |            | EPS        |            |
| Corrosion protection                               | [-]     | Stainless steel     |            |            |            |            |

## Output data HRR 500 - 2000

|       | Storage tank fully charged                |          |          | Only top part of storage tank charged <sup>1</sup> |          |          |                                    |   |         |      |
|-------|---|----------|----------|--|----------|----------|------------------------------------|---|---------|------|
|       | Initial output without heat generator [l] |          |          | Initial output without heat generator [l]          |          |          | Values as per DIN4708 <sup>2</sup> |   |         |      |
|       | Draw-off rate                             |          |          | Draw-off rate                                      |          |          | NL                                 | Maximum draw-off performance in 10 min <sup>3</sup> |         |      |
|       | 10 l/min                                  | 15 l/min | 20 l/min | 10 l/min   | 15 l/min | 20 l/min |                                    | [l]   | [l/min] |      |
| HE TW | 500                                       | 373      | 319      | 281  | 260      | 234      | 209                                | 3.0 (29 kW)   | 232     | 23.2 |
|       | 800                                       | 573      | 519      | 456  | 382      | 322      | 275                                | 3.8 (30 kW)   | 260     | 26.0 |
|       | 1000                                      | 637      | 600      | 536  | 402      | 331      | 281                                | 4.0 (33 kW)   | 267     | 26.7 |
|       | 1500                                      | 700      | 650      | 547  | 430      | 358      | 301                                | 9,3 (70 kW)   | 399     | 39,9 |
|       | 2000                                      | 842      | 714      | 651  | 463      | 393      | 358                                | 10,4 (80 kW)  | 423     | 42,3 |

|           | Maximum heat exchanger output |     |            |
|-----------|-------------------------------|-----|------------|
|           | Dt = 5 °C                     |     | Dt = 15 °C |
|           | [kW]                          |     |            |
| HE bottom | 500                           | 76  | 216        |
|           | 800                           | 76  | 216        |
|           | 1000                          | 84  | 240        |
|           | 1500                          | 113 | 324        |
|           | 2000                          | 155 | 444        |

1 - Heating from CW 10 °C to WW 45 °C; storage tank temperature 65 °C

2 - Heating from CW 10 °C to WW 45 °C; supply 70 °C; storage tank temperature CW + 50 K

3 - Data relative to output figure

## Connections and dimensions HRR 500 - 2000

| Connections |                            | Unit | HRR 500        | HRR 800        | HRR 1000       | HRR 1500       | HRR 2000       |
|-------------|----------------------------|------|----------------|----------------|----------------|----------------|----------------|
| ENT         | Ventilation                | [mm] | 1670<br>1¼" IT | 1910<br>1¼" IT | 2060<br>1¼" IT | 2170<br>1¼" IT | 2350<br>1¼" IT |
| WW          | Hot water                  | [mm] | 1410<br>1" OT  | 1670<br>1" OT  | 1820<br>1" OT  | 1835<br>1" OT  | 2000<br>1" OT  |
| KV 1        | Boiler supply 1            | [mm] | 1470<br>1½" IT | 1670<br>1½" IT | 1820<br>1½" IT | 1835<br>1½" IT | 2000<br>1½" IT |
| KV 2        | Boiler supply 2            | [mm] | 1360<br>1½" IT | 1560<br>1½" IT | 1710<br>1½" IT | 1725<br>1½" IT | 1890<br>1½" IT |
| SVL 1       | Solar supply 1             | [mm] | 1250<br>1" IT  | 1450<br>1" IT  | 1600<br>1" IT  | 1585<br>1" IT  | 1790<br>1" IT  |
| HZV         | Heating supply             | [mm] | 1050<br>1½" IT | 1150<br>1½" IT | 1300<br>1½" IT | 1285<br>1½" IT | 1380<br>1½" IT |
| SRL 1       | Solar return 1             | [mm] | 950<br>1" IT   | 1050<br>1" IT  | 1160<br>1" IT  | 1105<br>1" IT  | 1270<br>1" IT  |
| EHP         | Electric heating cartridge | [mm] | 900<br>1½" IT  | 950<br>1½" IT  | 1100<br>1½" IT | 1065<br>1½" IT | 1230<br>1½" IT |
| KR 1        | Boiler return 1            | [mm] | 820<br>1½" IT  | 870<br>1½" IT  | 990<br>1½" IT  | 975<br>1½" IT  | 1030<br>1½" IT |
| SVL 2       | Solar supply 2             | [mm] | 720<br>1" IT   | 770<br>1" IT   | 890<br>1" IT   | 875<br>1" IT   | 930<br>1" IT   |
| HZR 1       | Heating return 1           | [mm] | 620<br>1½" IT  | 670<br>1½" IT  | 790<br>1½" IT  | 775<br>1½" IT  | 830<br>1½" IT  |
| KR 2        | Boiler return 2            | [mm] | 390<br>1½" IT  | 400<br>1½" IT  | 400<br>1½" IT  | 465<br>1½" IT  | 480<br>1½" IT  |
| SRL 2       | Solar return 2             | [mm] | 280<br>1" IT   | 290<br>1" IT   | 290<br>1" IT   | 355<br>1" IT   | 370<br>1" IT   |
| KW          | Cold water                 | [mm] | 260<br>1" OT   | 270<br>1" OT   | 270<br>1" OT   | 335<br>1" OT   | 350<br>1" OT   |
| HZR 2       | Heating return 2           | [mm] | 150<br>1½" IT  | 170<br>1½" IT  | 170<br>1½" IT  | 235<br>1½" IT  | 250<br>1½" IT  |

