

MEGAFILL 5000 ALU

FILLING UNIT



Filling unit for the preparation of heating water and coolant in accordance with VDI guideline 2035

DESCRIPTION

Demineralization unit for filling water in heating systems in accordance with VDI Directive 2035 for non-refillable use.

By mixing selected ion exchange resins and a pH stabilizer, the water is largely demineralized and at the same time alkalinized at pH values of between 8.2 and 9.0.

Since corrosive ions, such as chloride and sulfate, can also be removed, sustainable corrosion protection can be achieved.

MegaFill 5000 ALU is suitable for systems with/without aluminium components.

INSTALLATION

According to DIN standards, a system separator must be connected to the fresh water supply prior to filling.

A water meter should then be connected to measure the filling volume. For best results, the flow should not exceed 8 l/min during filling. This can be checked with a water meter or optionally with a TacoSetter.

For filling, the MegaFill is connected to the heating system in the direction of flow (arrow) by means of two single hose pieces with a 3/4" connection.

Ensure that the previously calculated maximum capacity is complied with when filling.

ADVANTAGES

- Prevention of damage in hot water heating systems
- Filling in accordance with VDI 2035 Part 1 and 2
- Preservation of warranty in case of damage
- Three functions combined in one: decalcification, demineralisation, pH stabilization
- No corrosion, no scale formation
- Improved energy utilization since no lime precipitates
- Low costs
- Also suitable for retrofitting, thereby extending the lifetime of the heating system
- Easy handling

MegaFill can be removed after filling and the heating system vented as usual. MegaFill is not suitable for permanent fixed installation. Used MegaFill filling units can be disposed of with residual waste.

OPERATION

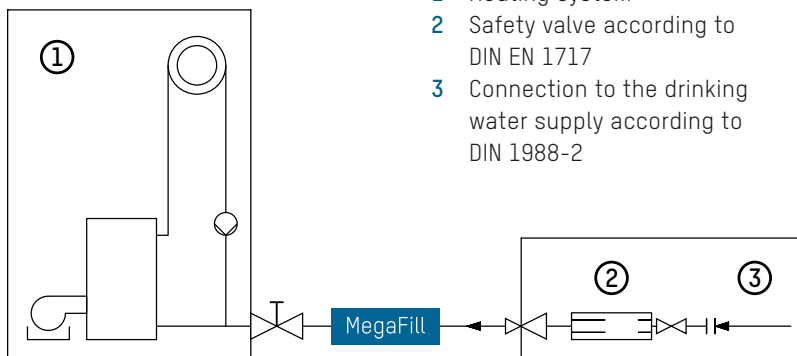
The cartridge contains a mixed bed resin with anion and cation exchangers and a pH stabilizer that neutralizes salts and carbonates in the drinking water.

BUILDING CATEGORIES

For pipe installations in drinking water, heating and cooling areas:

- Apartment blocks, housing estates
- Multiple dwelling units
- Residential care facilities and hospitals
- Administration and service buildings
- Hotels and restaurants, industrial kitchens
- School buildings and sports halls / sports facilities
- Commercial and industrial buildings
- Facilities with partial use, such as barracks, camping sites

SYSTEM/BASIC DIAGRAM



MEGAFILL | FILLING UNIT

TENDER TEXT

See www.taconova.com

TECHNICAL DATA

General

- Max. filling temperature $T_{F_{max}}$ 50 °C
- Max. operating pressure $P_{0_{max}}$ 6 bar
- Max. flow: 8 l/min
- Capacity: approx. 5000 °GSG (total salt content) × litre
- Lifetime: 36 months
- Dimensions and weight: see type overview
- Suitable for systems with/without aluminium components

Flow media

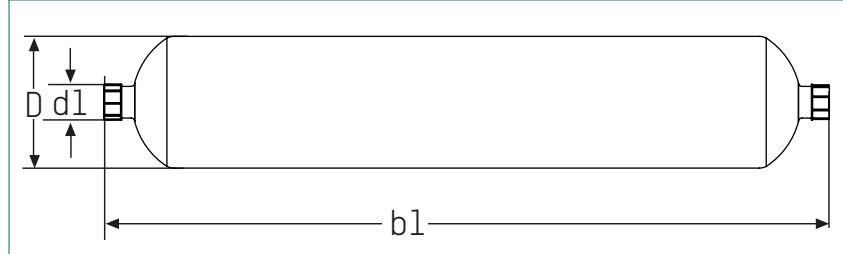
- Heating water (VDI 2035; SWKI BT 102-01; ÖNORM H 5195-1)
- Cold water according to DIN 1988-7

TYPE OVERVIEW

MegaFill 5000 ALU | Filling Unit

Order no.	D	d1	b1	kg	pH range
298.5041.000	110 mm	¾"	606 mm	4.5	8.2 - 9

DIMENSIONAL DRAWING



GUIDELINE VALUES FOR FILL AND TOP-UP WATER IN °D

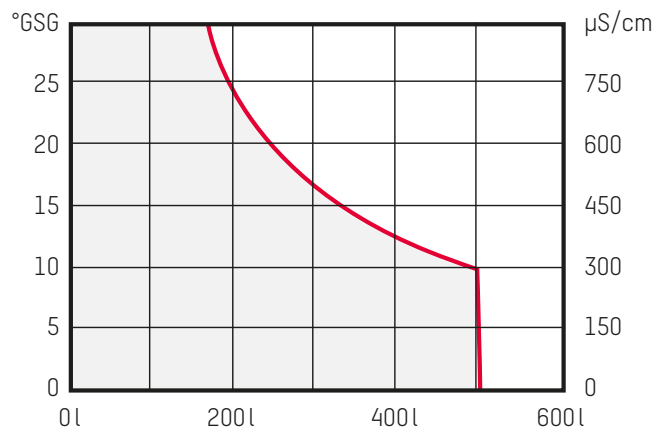
To determine the required target hardness, you need the boiler output and the specific system volume (SSV). The boiler output P is expressed in kW, the specific plant volume is obtained from the system volume in l divided by boiler output in kW and is specified in l/kW. Using the following diagram, you can calculate the maximum permissible hardness in °d for the heating system filling water for the respective application.

Boiler output P in kW	Specific system volume (SSV)	SSV < 20 l/kW	20 l/kW < SSV < 40 l/kW	SSV > 40 l/kW
	$P \leq 50$		-	$\leq 16,8$
$P \leq 50$ (for circulation heaters)		$\leq 16,8$	$\leq 8,4$	$< 0,3$
$50 < P \leq 200$		$\leq 11,2$	$\leq 5,6$	$< 0,3$
$200 < P \leq 600$		$\leq 8,4$	$< 0,3$	$< 0,3$
$P > 600$		$< 0,3$	$< 0,3$	$< 0,3$

CAPACITY OF WATER WITH LOW SALT CONTENT

5000 °GSG x L

- Determine the electrical conductivity of the untreated water in $\mu\text{S/cm}$
- Divide the value by 30 to calculate the total salt content (°GSG).
For example: $600 \mu\text{S/cm} : 30 = 20^\circ\text{GSG}$
- To calculate the maximum treatment quantity, divide the capacity of MegaFill by the specified total salt content of the untreated water.
For example: $5000^\circ\text{GSG} \times \text{L} : 20^\circ\text{GSG} = 250 \text{ litres}$



CONTACT AND FURTHER INFORMATION

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