

HRS Hardness Reduction System



HRS-100

HRS-200

The HRS-100 and HRS-200 systems are an advanced hardness reduction system for espresso-based coffee and steam equipment. It utilizes a five-step process to remove scale-forming ions to ensure equipment is protected from lime scale buildup.

The HRS-100 and HRS-200 systems also allow customers to specify the level of hardness reduction, optimizing both hot beverage quality and equipment performance while mitigating service issues and costs.

The HRS-100 and HRS-200 systems feature a low-cost installation package that includes the filter and head, which allows for quick, easy, and sanitary cartridge changeouts.

For the best results, the HRS-100 and HRS-200 systems should be installed after a VZN ultrafiltration system, which substantially reduces sediment, particulates, and chemical tastes and odors.

Features

- Optimizes beverage quality for espresso-based coffee and steam equipment.
- De-carbonization technology removes scale-forming ions.
- Blend setting for specifying the level of hardness reduction.
- Reduces service issues and costs.
- Can be installed and operated horizontally or vertically.
- System includes flush valve, carbonate hardness kit, and fittings to allow 1/2" ID hose and/or 3/8" OD tubing.

HRS Hardness Reduction System

Dimensions			
Model & Mfg. No.	Width (A)	Depth (B)	Height (C)

HRS-100 9700561	5 11/16" (145 mm)	5 11/16" (145 mm)	20 7/8" (530 mm)
HRS-200 9700562	7 1/4" (185 mm)	7 1/4" (185 mm)	23 5/8" (600 mm)

Shipping Dimensions				
Model & Mfg. No.	Length	Width	Height	Weight

HRS-100 9700561	12 5/8" (321 mm)	24 7/8" (632 mm)	12 5/8" (321 mm)	10.38 lbs. (4.7 kg)
HRS-200 9700562	12 5/8" (321 mm)	24 7/8" (632 mm)	12 5/8" (321 mm)	15.23 lbs. (6.9 kg)

Plumbing Connections

Inlet Connection	3/8" BSP Male
Outlet Connection	3/8" BSP Male

System includes flush valve, carbonate hardness kit, and fittings to allow 1/2" ID hose and/or 3/8" OD tubing.

Applications

Foodservice & Institutional

- Espresso Machines
- Combi Ovens/Steamers
- Flash Surface Steamers

Specifications		
System	HRS-100	HRS-200

Working Pressure	29-116 psi (2-8 bar)	29-116 psi (2-8 bar)
Flow Rate	0.5 gpm (1.9 lpm)	0.5 gpm (1.9 lpm)
Water Temperature	39-86°F (4-30°C)	39-86°F (4-30°C)
Ambient Temperature	38-100°F (4-40°C)	38-100°F (4-40°C)
Weight (dry)	8.38 lbs. (3.8 kg)	16.53 lbs. (7.5 kg)
Weight (wet)	13.23 lbs. (6 kg)	24.25 lbs. (11 kg)

Carbonate Hardness	HRS-100	HRS-200
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Capacity with Steam Generation*	2,565 US gal. (9,710 l)	4,528 US gal. (17,140 l)
Capacity without Steam Generation*	3,079 US gal. (11,655 l)	5,434 US gal. (20,570 l)
Capacity for Combi-Steamer/Oven*	1,947 US gal. (7,370 l)	3,434 US gal. (13,000 l)
Capacity for Chlorine, Taste and Odor Reduction**	5,389 US gal. (20,400 l)	9,510 US gal. (36,000 l)

* at 7 GPG/125 ppm CaCO₃ (7°dKH).

** at 2.0 mg/l influent concentration / chlorine reduction > 50%.

Additional Items

HRS-100 Replacement Cartridge	P/N 7000966
HRS-200 Replacement Cartridge	P/N 7000967
HRS Water Meter Monitor Kit	P/N 7000976
Carbonate Hardness Test	P/N 7000974

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