

Instruction Manual

Gesswein® Precious Metal Recovery Sink

SKU: 2121102



Gesswein®

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1. System Overview

Hand Washing Sink is a laboratory and industrial-grade sink with a built-in water filtration system. It is designed for environments that require cleanliness and chemical resistance, such as jewelry workshops and scientific laboratories. The main body is constructed from polypropylene (PP), which provides excellent resistance to corrosion and chemicals.

Cascade Sedimentation Chamber — The basin incorporates an internal cascade (baffle) system that slows water flow, allowing larger particles and debris to settle by gravity before water enters the filtration system. This pre-sedimentation stage extends filter cartridge life and improves overall filtration efficiency.

1.1 Main Components

No.	Component	Function
1	Sink Basin	Main washing area for water and cleaning liquids, Cascade Sedimentation Chamber Internal baffle system that slows water flow and allows large particles to settle before entering the filter
2	Faucet (Tap Water)	Controls on/off for regular water supply (Water Supply)
3	Faucet (DI Water)	Controls on/off for deionized water (DI Water)
4	Water Filter Cylinders (x2)	10"-micron filter cartridges that improve water quality before disposal
5	Pressure Gauge	Displays water pressure in the filtration system; warns when filter is clogged (pressure drops)
6	Drain Pump	Pumps water from the basin through the filter system before discharge to drain
7	Main Structure	Constructed from polypropylene (PP) — chemical-resistant and corrosion-proof

2. Technical Specifications

2.1 Unit Specifications

Parameter	Value
Type	Laboratory / Industrial Hand-Washing Sink with Filtration
Overall Dimensions (W x D x H)	600 x 900 x 1,270 mm
Main Body Material	Polypropylene (PP)
Water Inlet Connection	½" (Water Supply / DI Water)
Drain Connection Size	¾"

2.2 Water Filter Specifications

Parameter	Value
Filter Type	10" x 2 Filter Cartridge
Filtration Rating	10 Micron
Gate Thread	¼"
Operating Pressure	1—10 kg/cm²
Replacement Interval	Every 2 months (subject to usage and water quality)

2.3 Drain Pump Specifications

Category	Parameter	Value
Electrical	Power Supply	110 V AC, 60 Hz, 4.2 A
	Float Switch	Included
Performance	Flow Rate	20—150 L/min
	Max. Temperature	50°C
	Max. Solids Size	10 mm
Construction	Impeller Type	Semi-open centrifugal
	Shaft Seal	Oil lubricated mechanical seal + lip seal
	Bearing	Sealed ball bearing
Pipe Connection	Suction	Strainer
	Discharge Nozzle	G1¼"—UNI ISO 228
Materials	Pump Casing	AISI 304
	Impeller	PPE + PS Glass Fiber Reinforced
	Shaft Seal	Mechanical: Ceramic/Carbon/NBR Lip: NBR
	Casing Cover	AISI 304
	Shaft	AISI 303 + AISI 303 Ceramic Coated Sleeve
	Lubricating Liquid	White Mineral Oil — Esso Marcol 152
Standard	Applicable Test Standard	ISO 9906 — Annex A

3. General Operating Instructions

3.1 Starting the System

1. Ensure the main water inlet valve is open before use.
2. Open the faucet above the basin to allow water to flow from the tap.
3. Check the water flow rate. If flow is unusually slow, it may indicate a clogged filter or low inlet pressure — check the pressure gauge before proceeding.

3.2 Monitoring the Water Filtration System

- **Pressure Gauge:** Observe the gauge reading during operation. If pressure is significantly higher than the normal operating value (up to 1), the filter may be clogged and require checking or replacement.
- **Drainage:** The drain pump pumps water from the basin through the filter before discharging through the sewer. Ensure the drain hose is unobstructed and drains freely.
- **Sedimentation Chamber:** Periodically check for visible sediment accumulation in the cascade chamber. If sediment level is high, drain and clean the chamber to prevent blockage and maintain flow rate.

Note

Always check the pressure gauge reading before starting work. A reading significantly lower than normal is an early warning sign that the filter needs to be replaced soon.

4. Maintenance Instructions

4.1 Maintenance Schedule

Frequency	Task	Action if Abnormal
Weekly	Check pressure gauge reading while system is running	Pressure drop indicates filter clogging — schedule replacement
Weekly	Check pipe joints, faucet base, and filter housing for drips or leaks	Tighten fittings or replace rubber gasket
Weekly	Verify drain hose is unobstructed and draining freely	Clear any blockade in drain hose
As needed	Clean the basin using mild cleaner and non-scratching sponge or cloth	Rinse and dry thoroughly after cleaning
Every 2 months	Replace filter cartridges (subject to usage and water quality)	See filter replacement procedure below
Monthly	Inspect cascade/baffle chamber for sediment buildup	Drain and flush the chamber; remove accumulated solids

4.2 Filter Replacement Procedure

1. Close the main water inlet valve completely.
2. Unscrew the blue filter cylinder housing by turning counter-clockwise.
3. Remove the old filter cartridge and dispose of it properly.
4. Clean the inside of the filter cylinder housing.
5. Install the new 10" x 2 yarn filter cartridge of the specified type (10 micron).
6. Check that the rubber gasket / O-ring is in place to prevent leakage,
7. Re-tighten the filter cylinder housing and slowly re-open the main water inlet valve.
8. Check the pressure gauge — pressure should return to the normal operating value.

Cascade Chamber Cleaning: Open the drain valve at the base of the sedimentation chamber. Flush with clean water until discharge runs clear. Check baffle plates for damage or chemical corrosion.

WARNING — Filter Servicing

Filter replacement and water system repairs should only be performed by a knowledgeable person or qualified technician. Incorrect installation may cause leakage and damage to the unit.

5. Safety Precautions

- Filter replacement and water system repairs must only be performed by a knowledgeable person or qualified technician to prevent leakage and equipment damage.
- Always close the main water inlet valve before performing any maintenance on the filter system.
- When handling chemical waste water, wear appropriate PPE: gloves, goggles, and protective clothing.
- Do not use abrasive cleaners or scouring pads on the polypropylene basin — they will cause surface scratches.
- Ensure the drain hose is not kinked or blocked during operation to prevent water overflow.
- Check electrical connections of the drain pump regularly for signs of moisture damage or corrosion.

Contact Us

We're Here to Help

For any product questions, troubleshooting, or assistance, please reach out to our customer service team. We'll make sure you get the support you need.

Customer Support

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