

## ALKALI-SILICA REACTION BATH

STANDARDS: CANADA CSA-A23.2-25A

HR-A0925 Alkali-Silica Reaction Bath is used to keep 25x25x285 mm concrete samples in NaOH (sodium hydroxide) at a specified temperature. The temperature can be adjusted from ambient to 100 °C using a digital thermostat with 1 °C accuracy.

Temperature can also be monitored by an external 1°C accuracy PT 100 sensor placed in the water. The bath is completely made of stainless steel and has glass cover.

Samples are placed on a special rack where each sample stays independent from each other in a vertical position. The bath is also equipped with an electronic water level indicator which gives an alarm when the water level is lower than required.

The device is used to determine the potential alkali reactivity of cement-aggregate combinations (mortar-bar method). This mould is also used for determining the length change of hardened cement paste, mortar and concrete.

By removing the special rack, Aggregate Reaction Bath can also be used as a general purpose water bath.

Alkali Specimens Can is manufactured from stainless steel. It has a stainless steel hanger which can hold 3 pieces 25x25x285 mm specimens.

Alkali Reactivity Reaction Container is used for the chemical determination of the potential reactivity of aggregates with alkalis in Portland cement concrete in accordance with ASTM C289, UNI 8520:22, NF P94-048 standards. It is made of stainless steel and has an airtight cover. It has a capacity of about 60 ml.

Alkali Reactivity Reaction Container, Alkali Specimens Can, Length Comparator, Analog or Digital Dial Gauge or Heidenhain Digital Readout Unit with 30x0,0001 mm Length Measuring Sensor, Two Gang Prism Shrinkage Mould, Steel Inserts and Reference Rod should be ordered separately.



HR-A0925



HR-A0905 with HR-G0875



HR-CE9010

HR-CE9010/2

HR-CE9010/1



HR-A0925/1



HR-A0925/2

### Spare Parts & Accessories:

Product Code	Product Name	Dimensions (cm)	Weight (kg)
HR-A0925/1	Alkali Specimens Can	---	---
HR-A0925/2	Alkali Reactivity Reaction Container	---	2
HR-A0905	Length Comparator	18x18x45	6
HR-G0875	Analog Dial Indicator, 10 x 0,01 mm	---	---
HR-G0877	Digital Dial Indicator, 12.7 x 0,01 mm	---	---
HR-G0879	Digital Dial Indicator, 12.7 x 0,001 mm	---	---
HR-G0890	Heidenhain Digital Readout Unit with Length Measuring Sensor	---	---
HR-CE9010	Two Gang Prism Shrinkage Mould, 25x25x285 mm	33x19x7	4
HR-CE9010/1	Steel Insert for HR-CE9010 (Pack of 10)	---	---
HR-CE9010/2	Reference Rod	30,5	---



HR-A0905 with HR-G0877

## Technical Specifications:

Product Code	Product Name	Dimensions (cm)	Weight (kg)	Power Supply
HR-A0925	Alkali-Silica Reaction Bath with holding 36 samples	55x100x80	70	220 V, 50-60 Hz, 1 ph

## FREEZING AND THAWING CHAMBERS

STANDARDS: EN 1338, 1339, 1340, 1367-6, 12371, 13748-2, CEN/TS 12390-9

Used for the determination of resistance to freezing and thawing by providing freezing / thawing in air/water.

Freezing and Thawing Chamber can hold at constant temperature, heating and cooling at desired speeds, water intake and water discharge operations. There is a discharge valve for discharging operations.

2 models are available. Freezing and Thawing Chamber on Air and Freezing on Air and Thawing on Water Chamber.

Freezing and Thawing Chamber; automatically stops all operations when the end of the set cycle. If it is required to stay at a specified temperature at the end of the cycle, this can be done by adding to program before the program starts.

In the water thawing step; the water intake moment, the waiting period in water, the water discharge moment can be defined as parameters, each of which is a different step.

The cabin has a cover at the top and equipped with a piston pusher. The water intake tank is stand-alone.

The control unit is electronic and equipped with digital display with 0.1°C temperature resolution.

Software for data transfer to a computer is supplied complete with the cabinet, and data can be monitored during the tests.



HR-G6005

## Technical Specifications:

Product Code	Product Name	Capacity (lt)	Power Supply
HR-G6000	Freezing and Thawing Chamber on Air	250	220 V, 50-60 Hz, 1 ph
HR-G6000/AW	Freezing on Air and Thawing on Water Chamber	250	220 V, 50-60 Hz, 1 ph
HR-G6005	Freezing and Thawing Chamber on Air	500	220 V, 50-60 Hz, 1 ph
HR-G6005/AW	Freezing on Air and Thawing on Water Chamber	500	220 V, 50-60 Hz, 1 ph
HR-G6010	Freezing and Thawing Chamber on Air	750	380 V, 50-60 Hz, 3 ph
HR-G6010/AW	Freezing on Air and Thawing on Water Chamber	750	380 V, 50-60 Hz, 3 ph
HR-G6015	Freezing and Thawing Chamber on Air	1000	380 V, 50-60 Hz, 3 ph

Technical Specifications	Freezing and Thawing on Air	Freezing on Air and Thawing on Water
Temperature Range (Moisture free)	-20 + 25°C	-20 + 60°C / 0 + 60°C
Temperature Resolution	± 0,1°C	± 0,1°C
Power Supply	230 V, 50 Hz	230 V, 50 Hz
Controller	Step Controlled PLC	Step Controlled PLC
Internal Surface Material	Stainless Steel	Stainless Steel
External Surface Material	Steel with Electrostatic Powder Paint	Steel with Electrostatic Powder Paint