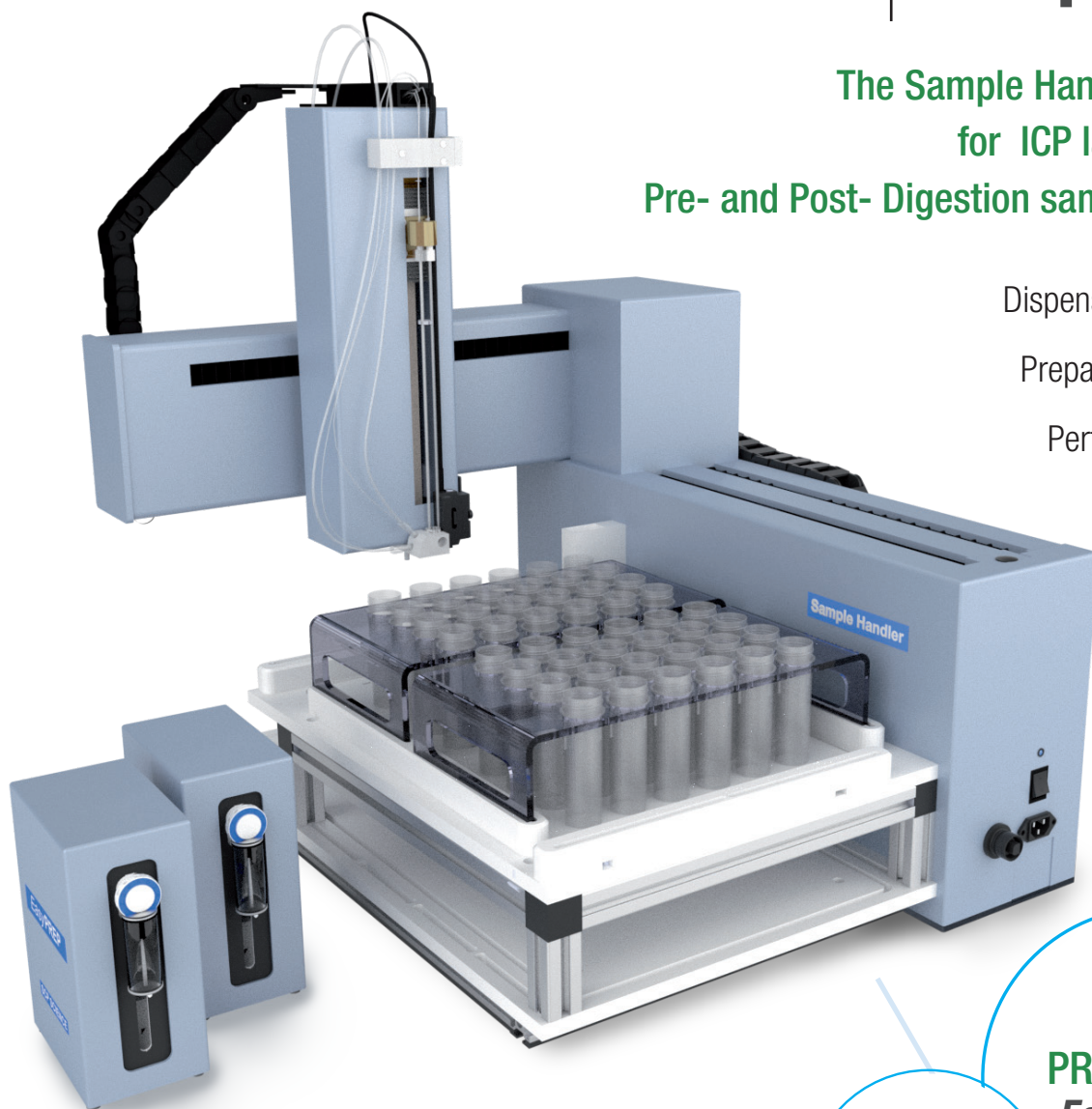




| **Sample Handler**

# Automate your processes Automate your lab Innovate with **EasyPREP** sample handler

The Sample Handler is designed  
for ICP labs to automate  
Pre- and Post- Digestion sample preparation



Dispense up to 7 Reagents

Prepare Calibration Curve

Perform Serial Dilutions

Normalize Samples

Transfer Samples

Aliquot Samples

Dilute Samples

**SAMPLE  
PREP made  
Easy/PREP**

**AUTOMATED  
Sample  
Preparation**

**Level  
Sensing**



The Sample Handler is designed for ICP labs to automate Pre and Post digestion sample preparation. It also provides ICP labs with the capability to perform other tedious liquid handling operations. The instrument is built to work in corrosive environments and handle the strongest acids, such as concentrated hydrofluoric acid.

## Overview

Improve productivity by assigning your personnel to value added tasks.

Ensure that the lab complies to your accuracy and precision requirements.

Ensure Repeatability of sample to sample with manual tasks.

Quick reference and tracking of result records.

### FOR ICP/ICP-MS LABS

- The Sample Handler provides ICPlabs with the capability to perform other tedious liquid handling operations specific to your labs' workflow applications.

### AUTOMATE SAMPLE NORMALIZATION

- Automated sample normalization saves time, improves precision and eliminates human errors.
- Ultrasonic Level Sensing performs Normalization to a wide range of volumes based on customer requirements.
- The **AccuNORM**\* executes Normalization with Class A Accuracy.

### USES LABS' EXISTING DIGESTION AND ICP AUTOSAMPLER RACKS RACKS

- Compatible with most digestion system racks. Designed to adapt to most digestion and ICP autosampler racks and vessels.
- Provides all the necessary flexibility to seamlessly automate lab method.
- Samples can be batched and transferred to, or from, the Sample Handler, using the labs' existing digestion and ICP racks.

### CORROSION RESISTANT

- Built to operate in a corrosive environment.
- The Sample Handler can handle the most corrosive including Hydrofluoric Acid.

\*Optional Accessory

## Software Features

- Intuitive method development allows: Addition of up to 7 reagents, aliquoting and sample dilution, standard addition, reagent dispensing, and sample transfers. Normalization and non-fixed ratio serial dilution functions can also be programed.
- Automated calibration curve preparation for ICP instruments.
- Insert breaks in the method to allow offline manipulation such as digestion.
- Save common methods for fast setup of routine operations.
- Customizable rack configuration to accommodate most rack vessels and capacity requirements.
- Create your own rack configurations and visualize them on the screen
- Preconfigured to accommodate transfer of **DigTUBE** content to **NovaWave** racks.
- The Inert Gas Bubble Stirrer Accessory provides sample homogenization with controlled duration and speed at any point during the process.
- Visualization of run status in real-time.
- Advanced functions allow software controlled dispensing and transfer parameters based on speed, viscosity, density, etc.
- Load sample ID lists via optional Bar Code Reader.

# Dispensing volume accuracy and precision

System calibration of dispensing accuracy conforms to ISO 8655-5 and compliant with ISO 17025. ISO 8655-4 tolerance limits are:

Syringe Volume ml	Accuracy		Precision	
	± %	± µl <sup>a</sup>	± % <sup>b</sup>	± µl <sup>c</sup>
1	0.6	6.0	0.2	2.0
5	0.6	30.0	0.2	10.0
10	0.6	60.0	0.2	20.0
25	0.6	150.0	0.2	50.0
50	0.6	300.0	0.2	100

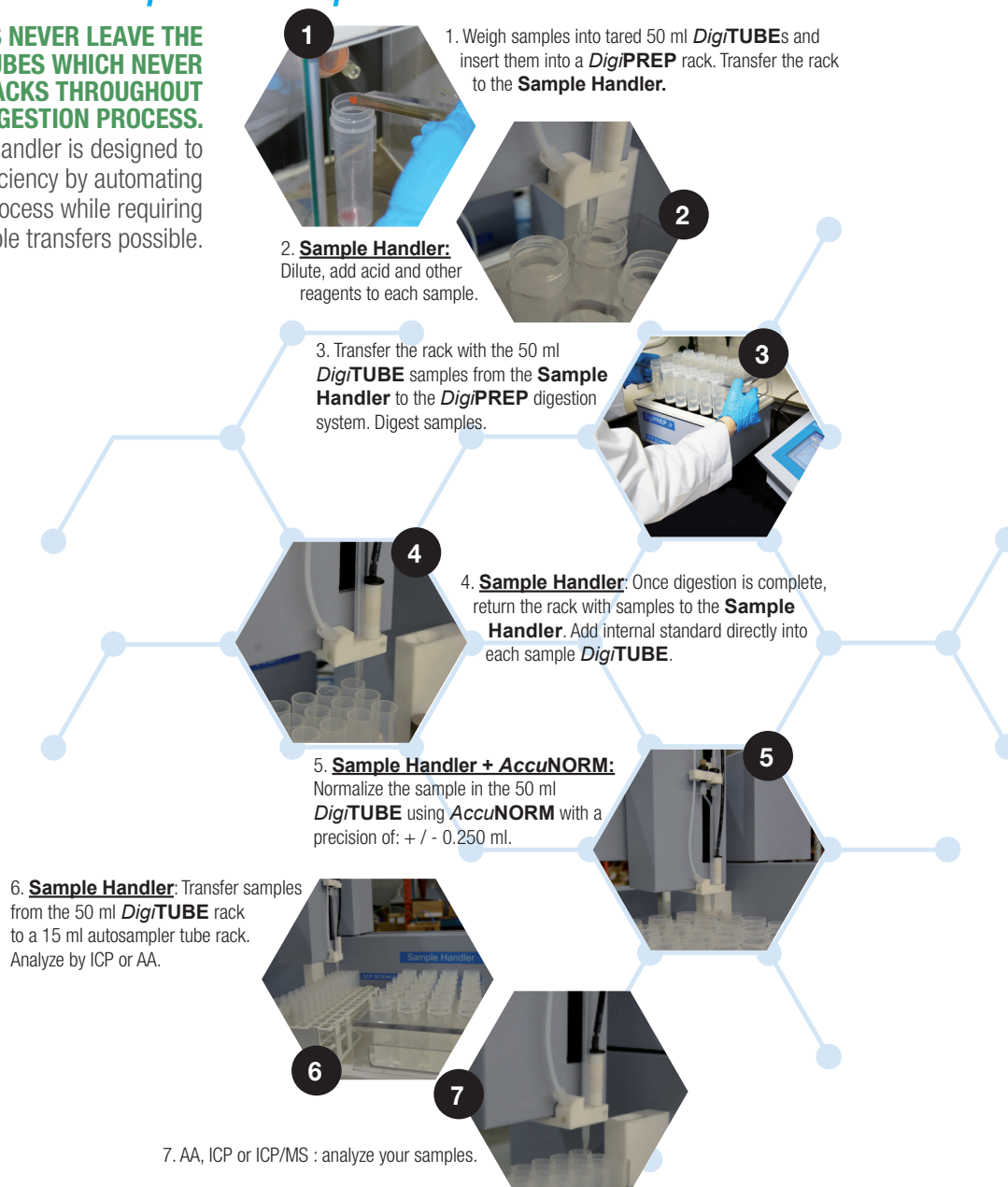
## NOTES:

- Calculated as deviation from the mean for 10 replicate measurements.
- Calculated as the coefficient of variation for 10 replicate measurements.
- Calculated as the standard deviation for 10 replicate measurements.

## Typical Sample Preparation Procedure

**SAMPLES NEVER LEAVE THE SAMPLE TUBES WHICH NEVER LEAVE THE RACKS THROUGHOUT THE DIGESTION PROCESS.**

The Sample Handler is designed to maximize efficiency by automating the Digestion Process while requiring the least sample transfers possible.



# Sample Handler Ordering Information

## STEP 1 - ORDER INSTRUMENT

Description	Catalog #
<b>EasyPREP</b> Sample Handler (110V/230V), with software	010-400-001

## ITEMS INCLUDED IN THE BASIC CONFIGURATION

Description	Catalog #
Full tray, for Sample Handler	---
Dispensing tip	---
<b>EasyPREP</b> 8ML Dispensing Tubing, (pk/4)	---

## STEP 2 - SELECT SYRINGE PUMP

Description	Catalog #
Syringe Pump, 1 ml, 5 ml, 10 ml, 25 ml	010-400-018
Syringe Pump, 50 ml	010-400-019
Syringe Pump for HF, 5 ml	010-400-009

**ISO 17025  
and  
ISO 8655-5  
COMPLIANT**

### Request Instrument Certification

SYSTEM CALIBRATION OF DISPENSING  
ACCURACY CERTIFICATION  
Catalog # 010-400-050

## STEP 3 - SELECT SYRINGE

Description	Catalog #
Syringe, 1 ml	010-400-102
Syringe, 5 ml	010-400-104
Syringe for HF, 5 ml	010-400-106
Syringe, 10 ml	010-400-108
Syringe, 25 ml	010-400-110
Syringe, 50 ml	010-400-112

## STEP 4 - SELECT RACK

Description	Catalog #
Rack, 54 positions, <b>DigiPREP</b> MS, 15ml	010-515-027
Rack, 40 positions, <b>DigiPREP</b> Jr, 15ml	010-515-023
Rack, 12 positions, for CETAC Autosampler, 50 ml tubes	010-510-050
Rack, 18 positions, for Hotblock, 50 ml tubes	010-500-025
Rack, 40 positions, 16 mm tubes	130-012-102
Rack, 24 positions, for <b>DigiPREP</b> Jr, 50 ml <b>DigiTUBE</b> s	010-505-021
Rack, 24 positions, for <b>DigiPREP</b> , MS/LS 50 ml <b>DigiTUBE</b> s	010-500-021
Rack, custom	PLEASE CONTACT US
Rack, <b>NovaWAVE</b> Transport Rack, 12 positions, 50/75 ml vessels	010-400-044

## ACCESSORIES

Description	Catalog #
Half tray, for use with <b>NovaWAVE</b> Transport Rack	010-400-098
Barcode reader, for rapid loading of sample identification	010-600-034
<b>AccuNORM</b> , required to normalize sample volumes	010-400-090
Bubble Stirrer, with inert gas feature	010-400-092
7 ml loop, for larger sample volumes, prevents sample from entering the syringe	010-400-048
Dispensing tip replacement	010-400-093
Piercing Needle 1.2 x 0.4 L=150 w/fitting	010-400-026
Pipetting Needles Nickel-plated hub; 18 gauge; 6 in. length	010-400-022
Dispensing Tip, PEEK	010-400-024
Fume Hood, protects samples from environmental contamination and vice versa when using Sample Handler, Inside dimensions: D 37.2 x W 31 x H 31.7, Outside dimensions: D 43 x W 32.7 x H 35.7	010-400-094
PC with Windows OS	010-400-008

### TO LEARN MORE

Please contact one of our sales representatives at [sales@scpscience.com](mailto:sales@scpscience.com) or visit our website [www.scpscience.com](http://www.scpscience.com) or contact one of our regional offices below

### COMPUTER SYSTEM REQUIREMENTS

PC Processor:	1GHz or superior
RAM memory:	1 GB RAM
Disk minimum space:	1 GB free
Ports:	1 USB port available
Operating System:	Windows 8, Windows 7, Windows XP

### INSTRUMENT DIMENSIONS

Length	27.56"
Depth	25.98"
Height	24.41"

To learn more, please contact one of our Sales Representatives online, or at one of our regional offices below.

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