

HIDEX

Hidex Q-ARE 100





Don't spend
the whole day
staring at columns.
Free up your time
by automating
your radionuclide
extractions.

In order to characterize the radioactivity from environmental and decommissioning samples, three stages are essential: sample pretreatment, chemical separation and analysis. For the analysis of alpha and beta radionuclides, the extraction chromatography is the representative separation method. Historically gravity was used for the process. Currently vacuum boxes have been used to increase the speed.

Hidex Q-ARE 100 introduces increased process time and complete walkaway automation.



Food

Soil

Water

Pre-treatment →



- or -



- Takes long time
- Labor intensive
- Lower efficiency
- Poor reproducibility
- Not safe from strong-acid

Quick and Automated
Radionuclide Extraction System
Q-ARE 100 can help you



Automated Radionuclide Extraction System

The most advanced automatic extraction chromatography system dedicated to radionuclide separation function. Quick and easy-to-use unattended radionuclide extraction system. User friendly, intuitive, hassle-free

Automatic

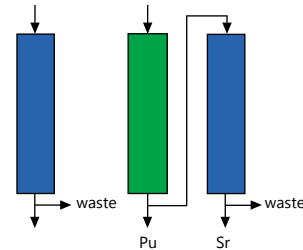
- Manual operation is not required so no one needs to watch or care it.
- Flow rate can be automatically controlled following user's need.
- Ultimately, it will reduce preparation time.

Compact

- Safety oriented compact design with acrylic doors keeps you safe and enable space utilize.
- With this clean & compact look, your desk will have much more space.

Convenient

- With one sample, up to 5 targeted radionuclides can be extracted.
- Application



- + Automatically controlled washing, equilibrium and elution steps
- + Fume-free safety oriented design
- + Live displayed process



Purify your target radionuclides easily. Simple, convenient, intuitive and prompt!

Simply choose a column tailored for your needs and select the preprogrammed protocol for the column. All common purification techniques such as extraction and ion-exchange are supported with perfect combination of four operation mode.

Single or Tandem Column Mode

Both Single and Tandem mode have the same operation so it is very easy to use. You can simply choose Single or Tandem mode according to the sample. By programming column, valve, pump, flow rate and reagent for each step, up to eight samples can be simultaneously automatically separated / purified.

HIDEX

Sample Zone

Sample zone is located in the box on the top of the equipment providing clean look.

Reagent Zone

Reagent zone is located in the box on the top of the equipment providing clean look.

Valves

Every column valve, flow selection valve and switching valve are automatically controlled.



Pump

Using THOMAS* Peristaltic pump, each column's flow rate can be individually controlled.

With these pumps and columns, it provides with diverse separation methods.

Columns

Each column's flow rate can be individually controlled.

Simply choose a column, fill the column with Triskem* & Eichrom* resin, select the protocol for your need.

Specifications Q-ARE 100

Pump	THOMAS* Peristaltic pump	Acceptable Columns	2~20ml column(PP or glass) compatible with columns of Triskem*& Eichrom*
No. of Pump	8	Target Radionuclides	Am, Cm, Pu, U, Th, Sr, Pb, Po, Ra-226, Ra-228, etc.
Speed	0.4 ~ 300 rpm	Number of Inlet	
Flow rate(typically)	0.1~55ml/min.	Solvent delivery	8
Operating flow rate	0.1~10ml/min.	Washing	8
Motor	Stepper motor, bipolar, stepping angle 1.8°	Number of Outlet	
Material of the hose clip	PVDF	Sample fractionation	8
Nominal voltage	24V/DC	Waste	8
Max. suction height	8 m H2O	Max. No. of operating columns	
Max. pressure height	10 m H2O	No. of reagent port	12
Max. ambient temperature	40°C	No. of sample collection	Max. 40
Media temperature	50°C (short time 90°C)	Acceptable sample	10, 50ml Tube and 20ml collec tion bottle scintillation Vial
Solenoid valve function	DC 24V, CoolCube-R (Bio-Chem*) applied Provides Hit and Hold function Reduces power consumption at holding state	Large volume sample (more than 50ml) port	8
Flow Selection Valves	Bio-Chem* flow selection valve	Operating Temperature	+4°C to 40°C
No. of port	2, 4, 6-port	Output	USB port
Orifice size	0.062"	Operating system(OS)	Windows 10
Body	PEEK	Power	110-240V AC, 50/60Hz
Diaphragm	PTFE	Dimensions(WxDxH)	88x56x65cm
Internal volume	2-port: 27/15 (Com. Port / Inlet Port) 4-port: 117/35 (Com. Port / Inlet Port) 6-port: 207/35 (Com. Port / Inlet Port)	Weight	45kg
Tube/Fitting material	PTFE, PEEK, ETFE		



Hidex is a family owned high technology company which develops and manufactures high performance analysis equipment for life science research, radiation measurement and nuclear medicine. Our products utilize modern technology and excellent tradition of workmanship. With strong links to the scientific community we continue to innovate and develop to improve scientific research and safety of everyday life.

Today more than 3000 Hidex precision instruments are at service in leading laboratories worldwide as well as in some of the hardest conditions on the planet. Jungles and deserts, oil platforms and ocean going vessels – even submarines are no challenge for Hidex instruments.

Contact Hidex

Call us
Tel. +358 10 843 5570

Address
Lemminkäisenkatu 62
FIN-20520 Turku
Finland

E-mail
info@hidex.com
firstname.lastname@hidex.com

www.hidex.com