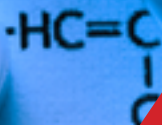
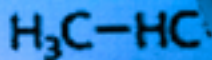
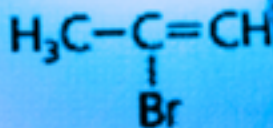




Laboratory instruments for your

CHEMISTRY



M



Beun · De Ronde

Foreword

As an exclusive distributor of high-end lab equipment, we focus on the chemistry market where our suppliers play the leading role.



Radleys provides innovative chemistry equipment for safer, cleaner, greener and more productive chemical research.



Astell UK is the leading autoclave manufacturer, offering a range of Sterilizers and Autoclaves from 33-2000 Litres.



ThalesNano is widely recognized for its expertise in transforming chemical processes to microscale continuous-flow operations.



CEM is the leading provider of microwave instrumentation for analytical and synthetic chemistry applications.

2 |



Teledyne ISCO offers a large range of pumps including syringe and reciprocating pumps for a wide range of challenges. They also propose instruments and accessories for flash and preparative liquid chromatography.



Syrris is a world leader in flow chemistry and chemical scale-up solutions.



Lauda is the world's leading provider of high-precision temperature control with liquids.

All their products are designed to ensure your chemistry. We can deliver ready-made or custom made packages from synthesis to purification.

Who are we?

Support and Product Xperts

As Support and Product Xperts, we help laboratories with their research and analysis.

We introduce new technologies and developments of existing technologies to our customer to help them reach their goals.



Through our experience, versatility and organizational strength, our organization distinguishes itself as a company where every employee maximizes customer satisfaction, personal results, teamwork and communication skills. These principles help us establish a long-term relationship with our customers.

Beun-De Ronde Service

Our Support Engineers and Product Specialists support the whole process from advising, demonstrating developing the application, installing and maintaining your laboratory equipment.

1. Tailor-made installations of new equipment & training
2. Upgrades of existing equipment
3. Preventive maintenances with or without service contract
4. Technical support (hardware & software)
5. IQPQOQ + reporting
6. Validation & Calibration services
7. Omnium service contracts
8. Demo lab
9. Remote & application support



The range of benchtop and hotplate lab equipment has a whole host of benefits including high safety standards, productivity and cost effectiveness.

You'll find lab equipment that's suitable for the following applications:

- Refluxing
- Stirring
- Condensing
- Heating
- Cooling
- Distillation
- Parallel synthesis
- Inerting



Findenser Air Condenser™
Award-winning alternative to water-cooled condensers



Heat-On™ Block System - Safer alternative to oil baths.



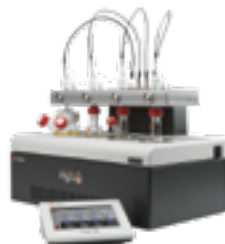
Cool-It™ Insulated Bowls -
Safer and more efficient way of cooling.



StarFish™ Work Station - Space saving multi-tasker that increases productivity and cuts costs.

Mya 4 Reaction Station - Safer, cleaner, greener, more productive

- 4 different zones, each with heating and active cooling
- Use one compact system for a range of experiments
- Precise temperature control
- Magnetic or optional overhead stirring
- Accepts a wide range of vessel sizes and styles
- Control your experiments and log results automatically
- Use Mya 4 with or without a chiller



The parallel reaction stations help you increase your productivity, save space and keep costs down, among many other benefits.

Radleys has parallel reaction stations for applications such as heating, cooling, condensing, work up, evaporation, inerting, filtration, heating, parallel synthesis, polymer research, process development, refluxing and stirring.

Carousel 12 Plus Reaction Station™ - Simultaneous heating, stirring and reflux of multiple samples.

- Up to 12 tubes, in sizes ranging from 1 to 20 ml.
- Removable Fluoropolymer insulation plate, saving up to 36% energy and preventing burn.
- Integrated gas/vacuum manifold in the head to enable working under an inert atmosphere.
- Integrated reflux head replaces the need for multiple condensers so refluxing in multiple positions is easy.



Carousel 6 Plus Reaction Stations™ - Simultaneous heating, stirring and reflux of multiple samples.

- Powerful, even stirring in all positions
- Can use up to six vessels simultaneously: 5 to 250 ml.
- Round bottom flasks fit straight onto a Rotary evaporator to evaporate your samples directly.
- Option for overhead stirring for viscous materials



5

Tornado™ Overhead Stirring System™ - Stirring productivity increased by up to 600%.

- Integrates with Carousel 6 Plus to enable overhead mechanical stirring in all positions using a single overhead stirrer motor.
- Compatible with all leading brands of overhead stirrer.



Reactor-Ready™ Lab Reactor

100 ml to 5 litres

Swap reaction vessels in minutes!

Reactor-Ready is designed as a universal reactor work station with a range of easily interchangeable vessels from 100 ml to 5 litres which can be configured to suit the chemistry and scale needed for each project.

Easy to use, this one unique framework can replace many, saving money and fumehood space.



6 |

Reactor-Ready™ Pilot Lab Reactor

5 to 20 litres

Replace multiple reactor set-ups with a single, universal pilot scale system with interchangeable vessels that can be swapped in minutes



33 - 63 Litre benchtop autoclaves

- 316 stainless steel electropolished chamber
- A choice of 33, 43 and 63 litre models
- FDA 21 CFR part 11 software option available
- Holdwarm / Delayed Start feature
- No mains water supply or drain necessary
- Ecofill units: Optimised for low water and power consumption
- Over Temperature Protection
- Pressure Gauge
- Temperature range of 100°C to 138°C (0.2 – 2.4 Bar)



95-135 Litre top loading autoclaves

The 95 – 135 litre toploading autoclave range offers increased chamber sizes compared to the 'Compact' units, as well as featuring advanced options not available on smaller sized autoclaves, including:

- Heated Jackets,
- Integral Steam Generators,
- Simple/Advanced Vacuum and
- Cooling options.



7

These options enable a top loading sterilizer to be tailored to the needs of the customer by speeding up cooling, dealing with liquids, porous-type loads and allowing a wider range of items to be efficiently processed.

125 - 735 litre square autoclaves

- Easily customizable and with a range of different chamber sizes
- Capable of sterilizing almost anything (additional options may be required)

Astell offers a range of additional options which include Simple or Advanced Vacuum, Heated Jackets and a choice of Cooling options.

Available with automatic or manual door operation, this range can also form the basis of a double door or pass-through autoclave if required.



H-Cube MINI Plus

Safe and affordable hydrogenation for academia

- Hydrogenation without cylinders
- Fast catalysed reactions
- Easy to use
- Academia budget compatible



H-Cube PRO®

Continuous-flow Benchtop Hydrogenation Reactor

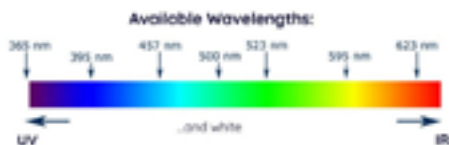
- Flow rate: 0.1-3 mL/min
- New heater/cooler control from 10°C to 150°C
- Pressure: 1-100 bar
- 2 hydrogen cells for hydrogen production: 0-60 mL/min
- Auto Inlet/Outlet valve control
- New software



PhotoCube

Batch and flow reactions in one reactor with several wavelengths

- Batch, flow, stop-flow and CSTR reactions in the same platform
- 7+1 wavelengths in one instrument



Phoenix Flow Reactor

Multifunctional Module compatible with H-cube Pro™

- Fast: reactions in seconds
- Simple: 2 buttons and automated touchscreen
- Innovative: performs chemistry till 450°C not possible in standard lab reactors
- Versatile: perform reactions in a loop homogeneously or use a range of different catalysed cartridges



H-Genie

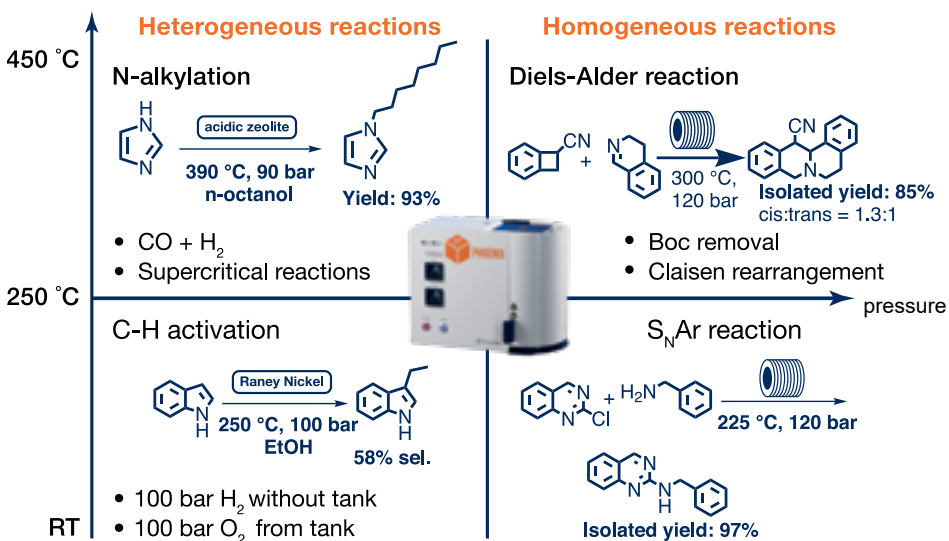
Safe and powerful hydrogen generator specifically for chemists!

- Expand chemistry in batch and flow with up to 100 Bar H₂, generated from water
- Accurately log how much hydrogen is used in your reaction
- Up to 1 L/min
- Simple and safe: click & go



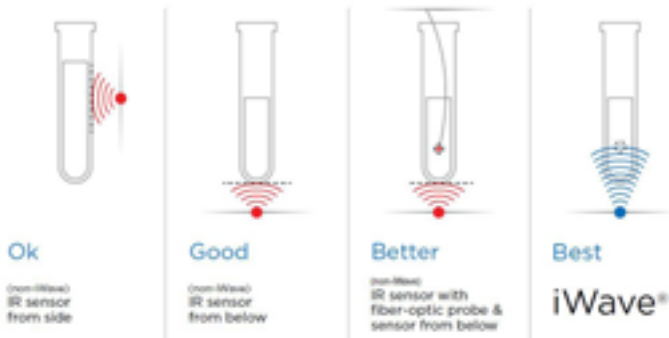
The H-Genie® combined with the Phoenix Flow Reactor™ from ThalesNano is an **all-in-one flow chemistry setup** for catalyst testing, synthesis, optimization, and scale-up that is useable in any fume hood in any lab.

This combination offers you a wide temperature and pressure range in addition to high pressure hydrogen generated safely without cylinders for your reactions, granting you the capability of synthesizing from milligrams to kilograms of product on the same system without the need to spend on expensive infrastructure or equipment.



Mars 6 Multimode Microwave

- Suitable for running from a single vessel up to 40 in parallel
- Fully customizable: can be dedicated for synthesis or serve as an all-in-one microwave reactor for a variety of applications
- Dual magnetrons provide ample power (1800 W) for high-throughput synthesis
- Strategically designed waveguides disperse microwave energy uniformly throughout the cavity, providing even heating
- Standard temperature control, cooling and stirring



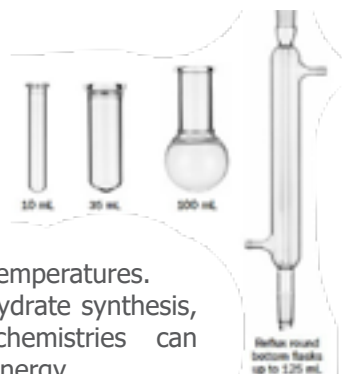
Liberty Blue: Automatic Peptide Synthesis

- 4 minutes cycle time
- 90% waste reduction (HE-SPPS)
- Flex-add™ critical reagent delivery system (patented)
- True Internal fiber-optic temperature control
- 0.005 - 5 mmol scale range



Discover 2.0: The absolute best approach for Chemical Synthesis

- Widest pressurized vessel sizes for a single-mode microwave - 10mL, 35mL, 100mL
- IR Temperature Sensor that sees through glass and Teflon® (iWave®)
- Vent and reseal technology for safe handling of over-pressurization (ActiVent)
- Variable speed magnetic stirring and rapid compressed air cooling
- Integrated camera to observe your reaction
- Upgrade options: Autosamplers - 12/48 positions; Gaseous Addition, Sub-ambient temperature, Flow cells



CoolMate Low temperature option



Performs reactions at sub-ambient temperatures. Reactions such as lithiation, carbohydrate synthesis, and other temperature-sensitive chemistries can benefit from the use of microwave energy.

Use the power of microwave energy to accelerate reactions even at temperatures as low as -80°C .

11

Gas Addition Kit



Specially designed for reactions involving gaseous reagents. Perform hydrogenations, carbonylations, or other reactions with gaseous reagents or use the vessel to ensure an inert atmosphere during microwave irradiation.

Allows you to purge the reaction vessel and back-fill with a gas.

During the reaction, the gas source is completely shut off from the microwave, ensuring your safety at all times.

CombiFlash® NEXTGEN 300+

RFID technology ensures the automated detection of your columns and racks, adjusting the flow rates to provide the best results everytime.

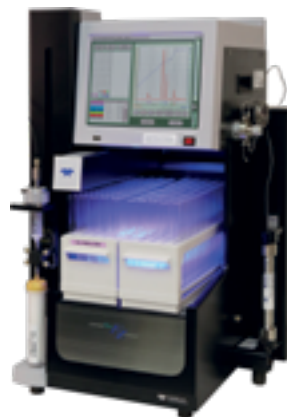
- Active solvent and waste level monitoring is standard
- Flow rates from 1 to 300 mL/min
- Operating pressure up to 300 psi (20 bar)
- UV, UV-VIS, ELSD and MS detection options available
- Designed to take up minimal lab space
- New default methods speed up the flow without sacrificing performance
- Greener: Conserve solvent with optimized gradients



CombiFlash® EZ Prep

Streamline Flash and Preparative HPLC

- Up to 3500 psi (240 bar) and 200 mL/min
- Run Prep HPLC columns up to 50 mm in diameter
- Flash purification for 10 mg to 33 g
- UV, UV-VIS, ELSD and MS detection options available
- Switch between normal and reverse phase solvents automatically, without user interaction



CombiFlash® Rf+ PurIon

- Enhance your detection capabilities with the PurIon Mass Spectrometer
- 50 - 1200 Dalton (2000 Dalton as option)
- 1 Dalton Resolution
- ESI or APCI Positive or Negative Ionization Mode



Purification : Flash & Prep chromatography

ACCQprep HP 150 Preparative HPLC

- Up to 6000 psi (413 bar) and from 1 to 150mL/min
- UV, UV-VIS, ELSD and MS detection options available
- Compatible with automation modules: auto injector, autosampler and column selector module
- Switch between normal and reversed phase solvents automatic, without user interaction

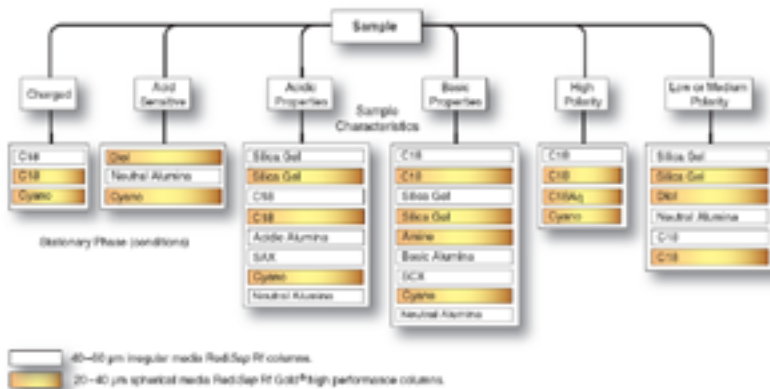


REDISEP FLASH Chromatography Columns

Are designed to consistently produce high purity compounds.
Easy purification and scale-up from milligram to kilogram.



- Patented packing technique providing reliable and reproducible columns
- Extra thick walls for safe and robust columns
- Easy to use luer lock fittings
- A broad versatility on column phases for each type of purification



Single Head



M1 CLASS

3 MODELS: 10mL/min - 40mL/min - 100mL/min
Up to 2.000 psi (10mL/min)
Fluid path: Stainless steel



MX CLASS

3 MODELS: 10mL/min - 40mL/min - 200mL/min
Up to 5.000 psi (10mL/min)
Fluid path: Stainless steel



LS CLASS

3 MODELS: 10mL/min - 40mL/min - 100mL/min
Up to 6.000 psi
Fluid path: Stainless steel or Hastelloy

14

Dual Head



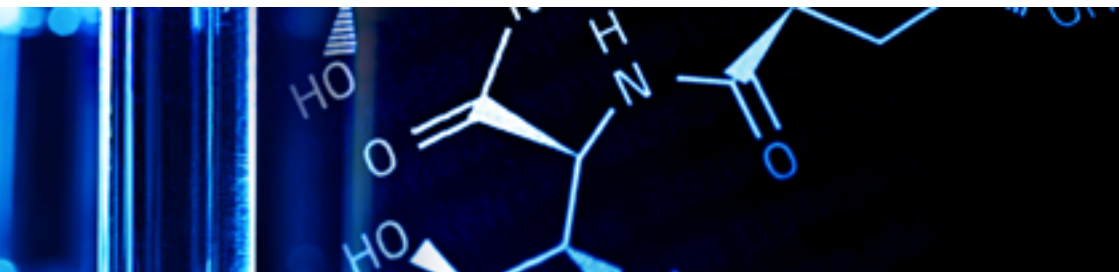
LD CLASS

3 MODELS: 12mL/min - 36mL/min - 100mL/min
Up to 6.000 psi
Fluid path: Stainless steel or Hastelloy



PR CLASS

2 MODELS: 100mL/min - 300mL/min
Up to 4.000 psi
Fluid path: Stainless steel



SyriXus Syringe Pumps

When reliability & accuracy are critical

Teledyne ISCO SyriXus precision syringe pumps give you flow and pressure control throughout a broad operating range. SyriXus syringe pumps can be metered with great accuracy and do not exhibit pulsation or flow anomalies typically associated with other pump types.

- Flow and pressure control throughout a broad operating range
- No pulsation or flow anomalies typically associated with other pump types

They can handle a wide variety of fluids including:

- Aqueous and organic liquids
- Viscous fluids
- Corrosive solutions
- Slurries and pastes
- Heated fluids
- Precision fluid delivery
- Liquefied gases
- Continuous flow mode is possible



65x



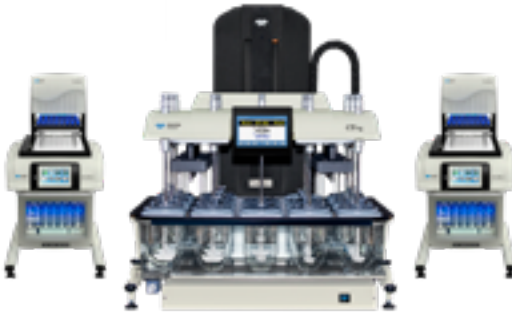
500xv

	Capacity	Flow* Range (mL/hr)	Flow** Accuracy	Pressure Range (psi, bar)	Standard Pressure Accuracy	Standard Plumbing Ports	Dimensions	Continuous Flow Range (mL/hr)	Higher Viscosity Materials
1000x	1015 mL	0.01–438	0.5% of Setpoint	18–2,000 0.7–137.9	0.5% FS	1/4" NPT	40.3x10.2x18.4 in 102x27x47 cm	0.01–265	
500x	507 mL	0.001–204	0.5% of Setpoint	10–500 0.7–34.5	0.5% FS	1/8" NPT	40.3x10.2x18.4 in 102x27x47 cm	0.001–132	
500xv	507 mL	0.001–204	0.5% of Setpoint	10–500 0.7–34.5	0.5% FS	3/16" NPT	40.3x10.2x18.4 in 102x27x47 cm	0.001–132	X
200x	266 mL	0.001–107	0.5% of Setpoint	18–8,500 0.7–655	0.5% FS	1/8" Valve	39.8x10.2x18.4 in 101x27x47 cm	0.001–70	
65x	66 mL	0.0001–25	0.2% of Setpoint	10–24,000 0.7–1,655	0.5% FS	1/4" F250C	39.8x10.2x18.4 in 101x27x47 cm	0.0001–16	

Dissolution testers

Choose between 6 or 8 vessels. The dissolution testers are versatile performance machines, built with the highest quality components and engineering for manual and automated dissolution testing.

The CD14 Comparative Dissolution with 14 vessels allows testing of two different drugs at once. Teledyne Hanson's Super Precision Vessel™ with its closer conformance to an ideal vessel shape provides more consistent vessel-to-vessel dissolution test results in USP Apparatus 2



16

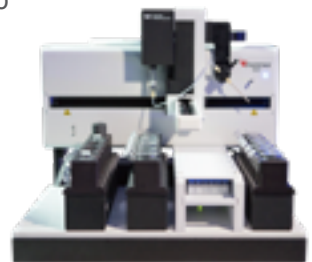
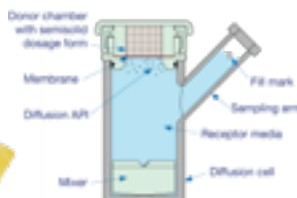
Manual Diffusion testers

The patented Phoenix™ range of dry-heat systems makes diffusion-cell testing faster, easier, and more economical. The Phoenix DB-6 manual sampling system offers six-cell manual sampling in a compact footprint with an advanced touch screen display.



Automated Diffusion testers

The Phoenix RDS Robotic Diffusion Station delivers fully automated sampling, collection, and media replace with the ability to run up to 24 cells at once from a single computer workstation.



Flow synthesis From Labscale to Production Scale

ASIA Modular Flow Chemistry

- Reactor temperature: -15°C to +250°C
- Liquid phase reactor volumes: 62.5µl, 250µl, 1ml, 4ml, 16ml
- Solid phase reactor volumes: 0.7ml, 2.4ml, 5.6ml, 12ml
- Pressure: 0 – 20bar (300psi)
- Flow rate: 1µl/min – 10ml/min per pump
- Residence times: 1 second to several hours
- Rapid diffusional mixing
- Production volumes: mg to kg

Asia is a modular system. All modules can be acquired separately and arranged in any fashion to add new functionalities on an existing system. Your system evolves with your needs.



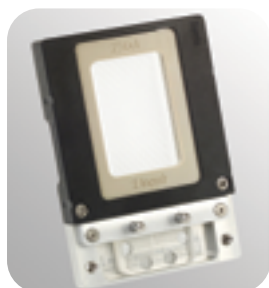
Asia Photochemistry reactor

Access a host of novel continuous photochemistry applications with Asia Photochemistry Reactor.

- Increase the light intensity (up to 108W) to reduce reaction times and increases production rates
- No external cooling required
- Select from a wide range of wavelengths
- Process parameters are monitored



Glass Microreactors



Tube Reactors



Solid Phase Reactors



PRO Circulation Thermostats

Compact circulation thermostats for professional temperature control thermostating from -90 to 250 °C

- Thermostating from -90 to 250°C @ ± 0.05 C
- Small liquid volumes for quick temperature changes.
- Hybrid cooling permits cooling using ambient air or cooling water.



Hot



Variocool

Versatile for dissipating process heat in laboratories, mini plants and production facilities.

- 1,2 kW to 10kW circulation chillers
- Used between -20 and 80°C @ $\pm 0.05^\circ$ C
- Space-saving construction
- Versatile: wide variety of options
- Simple and convenient: color TFT display
- Standard USB interface and alarm contact
- Standard heating and sound insulation



Cold



Integral XT

High-performance process thermostats

- From 1.5 to 18 kW for temperature control thermostating
- Broad temperature range from -90 to 320°C @ $\pm 0.05^\circ$ C
- Operate according to the flow principle with a cold oil blanket that allows the utilization of the entire temperature range through the use of a heat transfer medium.
- Electronically controlled, magnetic coupled pump can alter the pressure to adapt the flow rate to the relevant batch process requirements.



Constant Temperature equipment



ECO Cooling thermostats

From -50 to 200 °C: Cooling thermostats for economic temperature control in the lab

- Available in standard silver (LCD display) or gold (color TFT display)
- The circulation pump can be adjusted to six levels.
- Cooling capacities of 180 to 700 watts and minimum temperatures of -15 to -50 °C.
- Energy-saving LAUDA SmartCool system.



LAUDA Ultracool: The next stage of Energy-Efficient Temperature control

Process circulation chiller with cooling capacity of up to 10 kW or 265 kW from -5 to 25°C for industrial applications.

- Suitable for setup outdoors.
- Ready-to-operate "Plug & Operate".
- Incl. cold water container, centrifugal pump and internal bypass.
- Standard-issue temperature sensing prevents freezing of the heat exchanger.
- Integrated pressure switches to protect the circuit against pressure that is too high or too low.
- Chiller casing made of galvanized steel panels coated with epoxy resin protected against corrosion even in aggressive production environments.



19



ARE YOU LOOKING FOR A SYNTHESIS AND PURIFICATION BUNDLE?



CEM
DISCOVER 2.0

THE ABSOLUTE BEST APPROACH
FOR CHEMICAL SYNTHESIS



TELEDYNE ISCO
COMBIFLASH NEXTGEN

SETTING A NEW BAR IN FLASH
CHROMATOGRAPHY

FLEXIBLE
300 ML/MIN 300 PSI (20BAR)

CEM



TELEDYNE ISCO
Everywhere you look[®]

YOU MIGHT WANT TO KNOW MORE.

In that case, don't hesitate to contact us to make an appointment for a meeting, a product presentation, or any other question.

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