

# **Mya 4 Reaction Station**

One reaction station with limitless possibilities

4 independent zones

Magnetic and overhead stirring

• -30 °C to +180 °C

• 2 ml to 400 ml

Software control



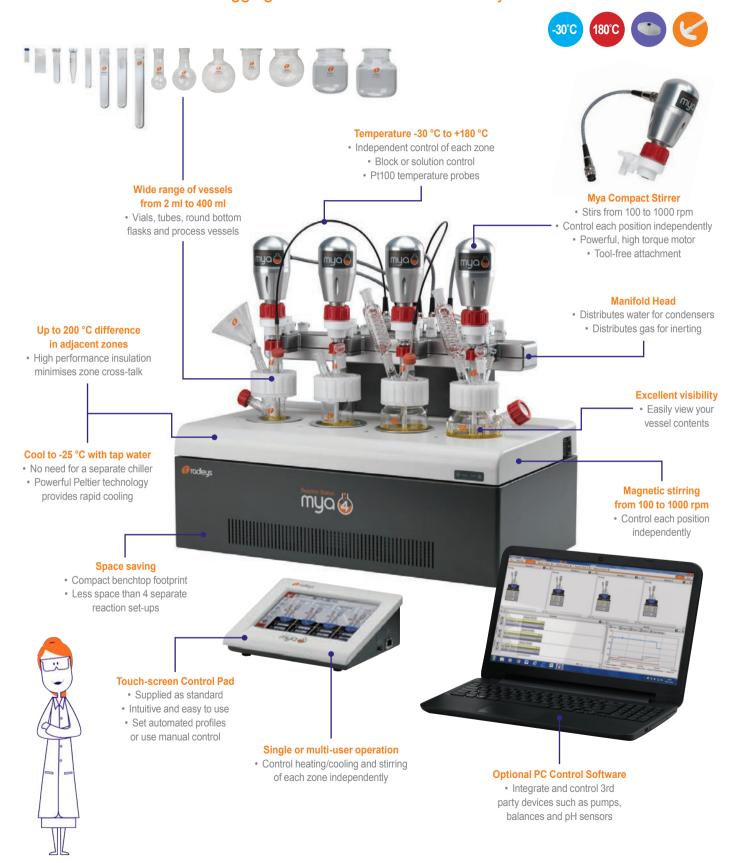
**Reaction Station** 

Let Daisy introduce our Mya 4 Video



## Mya 4 - Key Features

A 4-zone reaction station offering safe and precise heating, active cooling, software control and data-logging for 24/7 unattended chemistry



## Mya 4 - Overview

A flexible process development tool for design of experiment, scale up, reaction optimisation, and crystallisation studies



#### Flexible and versatile

- · 4 different temperature zones, each with heating and active cooling
- Use one compact system for a range of experiments
- · Accepts a wide range of vessel sizes and styles
- Control your experiments and log results automatically

#### Safer, cleaner, greener and more productive

- · Replace inefficient, messy and unsafe oil and ice baths
- · Save space compared with separate reaction set-ups
- Software control improves safety, reduces manual errors, and allows 24/7 unattended chemistry, for improved productivity
- Create, repeat and share experiments and results with ease and accuracy
- Easily manage complex multi-step and multi-device experiments
- Integrate 3rd party devices such as pumps, balances and pH sensors etc.

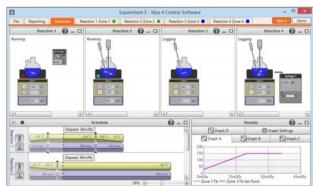




#### **Applications**

- ✓ Single or parallel synthesis
- ✓ Design of Experiment (DoE)
- ✓ Process development
- ✓ Scale up
- ✓ Route scouting
- ✓ Crystallisation studies
- ✓ Polymorph screening
- ✓ Lead optimisation
- ✓ Reaction optimisation
- ✓ Reagent, catalyst and solvent screening





### Mya 4 - Details

One flexible reaction station to meet all of your needs. Choose from a wide selection of vials, tubes, round bottom flasks and process vessels, from 2 ml to 400 ml













#### 4 reaction zones









- Use 1, 2, 3 or 4 zones
- · Operate zones in parallel or individually by multiple users
- · Removable anodised aluminium inserts for different size vessels

#### Wide selection of vessel styles and volumes

- Vials and tubes from 2 ml to 50 ml:
  - 12 mm, 16 mm, 17 mm, 17 mm tapered, 24 mm, 1 inch and 28 mm diameters
  - Radleys Carousel 12 Plus reaction tubes
- Round bottom flasks from the Carousel 6 Plus range:
  - 25 ml, 50 ml, 100 ml and 250 ml
  - One or two side arm options
  - Standard and wide neck options
  - Baffled vessel options
- · Process reaction vessels:
  - With straight sides and dished base to mimic jacketed reactors
  - 50 ml, 100 ml, 150 ml, 250 ml and 400 ml
  - Side arm option
  - Baffled vessel options
- Multi-neck glass lids 3 or 5-neck
  - For wide neck round bottom flasks and process vessels
- Accessory glassware
  - Condensers, dropping funnels, solid addition funnels, stoppers etc.

#### **Precise temperature control**

- Temperature range from -30 °C to +180 °C
- Up to 200 °C difference between adjacent positions
- Control the temperature of each zone independently
- Choose to control by block or solution temperature
- Pt100 temperature probes available in stainless steel or PTFE coated

#### Use Mya 4 with or without a chiller

- Mya 4 uses powerful Peltier technology to provide rapid cooling to -30 °C
- · Peltier cells require tap or chilled water to dissipate heat

Peltier cooling source	Tap water at 15 °C	Chilled water at 5 °C
Minimum block temperature	-25 °C	-30 °C
Minimum solution temperature	-20 °C	-25 °C

#### Magnetic or optional overhead stirring

- Integrated magnetic stirring from 100 to 1000 rpm
- Optional overhead stirring from 100 to 1000 rpm
- Control the stirring speed of each position independently
- Use magnetic or overhead stirring in adjacent zones

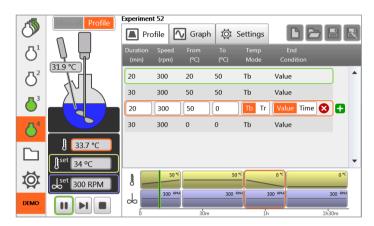


## **Mya 4 - Control Options**

Take control of your chemistry with 24/7 unattended software control for improved productivity, safety and reduced manual errors

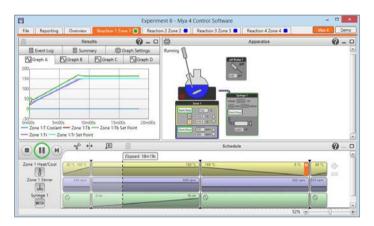
#### **Touch-screen Control Pad**

- Supplied as standard with Mva 4
- · Intuitive and easy to use
- Compact footprint
- · Set automated profiles or use manual control



#### **PC Control Software - optional**

- · Integrate and control 3rd party devices
- Create complex experiments with any number of steps
- Report Wizard creates reports in rich text format or export results in CSV



#### **Control Options**

Features	Touch-screen Control Pad	PC Control Software
Touch-screen Control Pad is supplied as standard with Mya 4	Included	Optional
Intuitive and easy to use touch-screen control	V	×
Compact footprint - fumehood compatible	V	×
Maximum 10 steps of 16 hours each	V	×
Multi-user - independently run experiment in 4 zones	V	×
Control and log the temperature and stirring of each zone independently	V	V
Set safety limits	V	V
Export experimental profiles and results in CSV via USB memory stick	V	V
Adjust parameters manually - using manual/direct mode	V	V
Create multi-step recipes - using profile/schedule mode	V	V
Flexibility to make and track on-the-fly adjustments to your experiment	V	V
Automatically log all data	V	V
Share experimental results and recipes with other users	V	V
View real-time graphs	V	V
Control and log up to 16 x 3rd party devices on one screen	X	V
Create complex experiments with any number of steps	×	V
Interlink devices and set feedback/control loops and end point conditions	×	V
Report Wizard creates detailed reports in RTF or export results in CSV	×	V
Log comments	×	V
Runs on a Windows laptop	×	<b>v</b>

#### **Control 3rd party devices**

PC Control Software will control and log the following 3rd party devices:

- Syringe Pumps
- pH Sensors
- Peristaltic Pumps
- Balances
- Vacuum Pumps
- Gas Flow Controllers
- Pressure Sensors
- Conductivity Sensors



## How to order a Mya 4 Process Package

1. Select manifold head



2. Select vessel style



3. Select a multi-neck lid & condenser







4. Select inserts



5. Select accessories



6. Select overhead stirrer and paddle



7. Optional - Select PC control software





## Mya 4 - Process Package

Choose the manifold head for use with glass condensers, overhead stirrers and process vessels; ideal for mimicking jacketed reactors

#### **Process Package for:**

- ✓ Process development
- ✓ Design of Experiment (DoE)
- ✓ Polymorph screening
- ✓ Crystallisation studies
- ✓ Route scouting





## Mya 4 - Discovery Package

Choose the reflux head for integrated reflux cooling; combines well with magnetic stirring; ideal

for use with round bottom flasks

#### **Discovery Package for:**

- ✓ Lead optimisation
- ✓ Single or parallel synthesis
- ✓ Reaction optimisation
- ✓ Reagent, catalyst & solvent screening
- ✓ Crystallisation studies



## How to order a Mya 4 Discovery Package

1. Select reflux head



2. Select vessel style



3. Select standard or wide neck reflux tubes and Easy-On caps



4. Select inserts



5. Select accessories



6. Select magnetic stirring bars



7. Optional - Select PC control software





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