

Coflore[®]

ACR Catalogue



AM Technology
Engineering Chemistry

www.amtechuk.com

Company Overview

AM Technology is a chemical engineering company based in Cheshire, England.

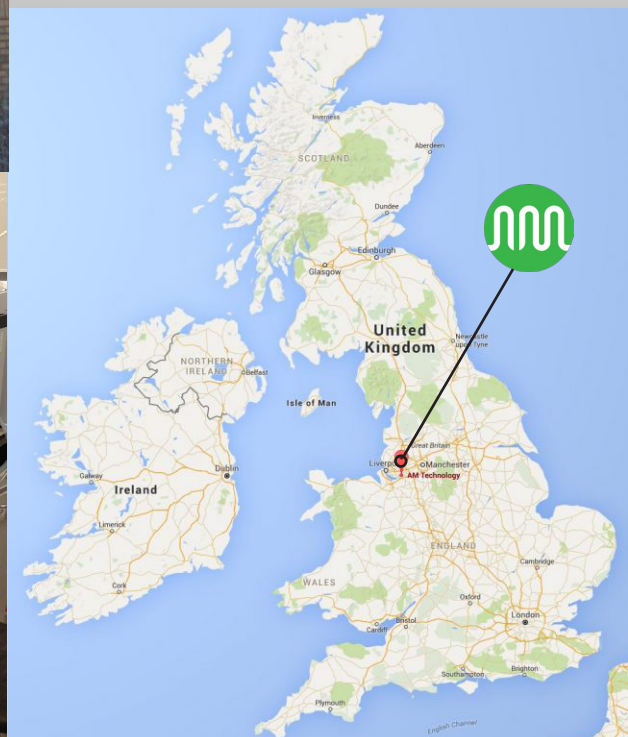
The company was founded in 2000 and specialises in flow chemistry. We are global leaders in multi stage actively mixed flow reactors. These offer a unique scope of capabilities in terms of residence time and materials handling. Our reactors are used for a wide range of applications in flow including chemical synthesis, polymerisation and extraction.

The company's products are marketed under the Coflore® brand and we build machines of various sizes to suit the customers' needs. Coflore® reactors are all based on AMT's patented mixing technology, which eliminates the need for drive shafts and seals.

We also offer development services in our well-equipped labs to carry out feasibility and scale up studies.



Certificate No: 12073
ISO 9001:2008



Introduction

Coflore® reactors are designed for flexibility and scalability. They can handle reaction times from under 30 seconds to many hours with difficult materials such as slurries, gas/liquid mixtures and immiscible fluids.



The Coflore® ACR is an actively mixed 10 stage system. This gives efficient mixing and a high degree of orderly flow irrespective of residence time.

The Coflore® ACR is a low volume reactor which delivers comparable performance to the larger Coflore® ATR reactors.



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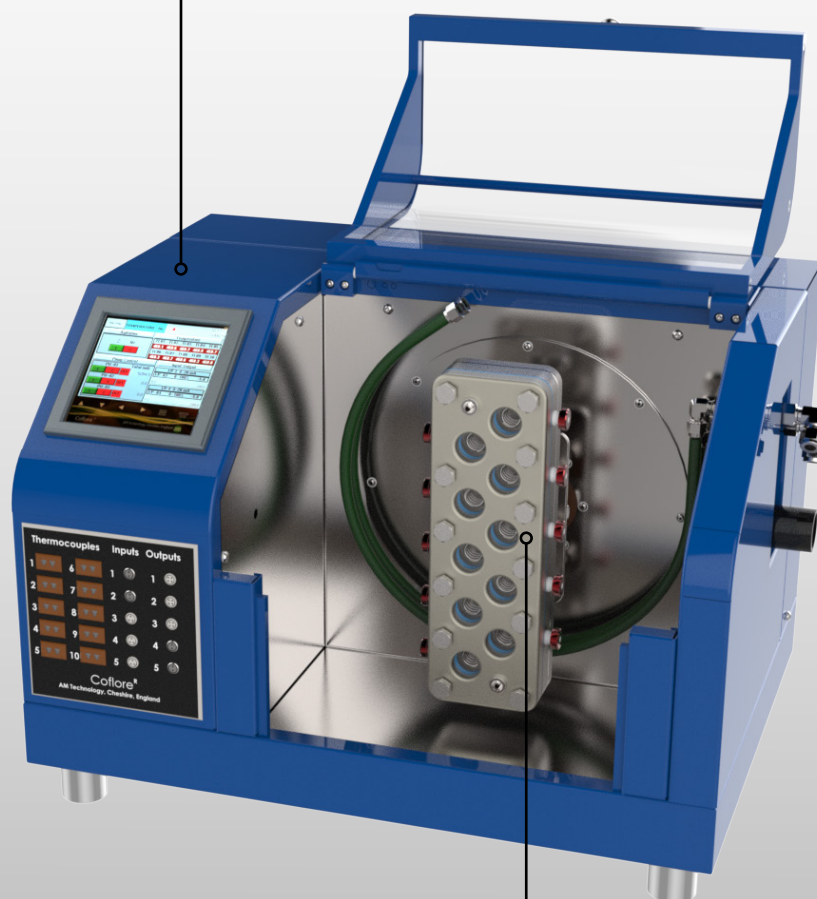
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E: sales@amtechuk.com

Coflore[®] ACR system

The Coflore[®] ACR system consists of an **Agitating Platform and Reactor Block Assembly**.

Agitating Platform

The agitating platform provides horizontal agitation to the reactor block to generate mechanical mixing.



ACR Reactor Block Assembly

The ACR reactor block assembly has 10 reaction cells for excellent plug flow. It can be fully dismantled for reconfiguration or cleaning. Sample points, addition points and temperature measurement can be added to any of the 10 reaction cells.



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ACR Reactor Block Assembly

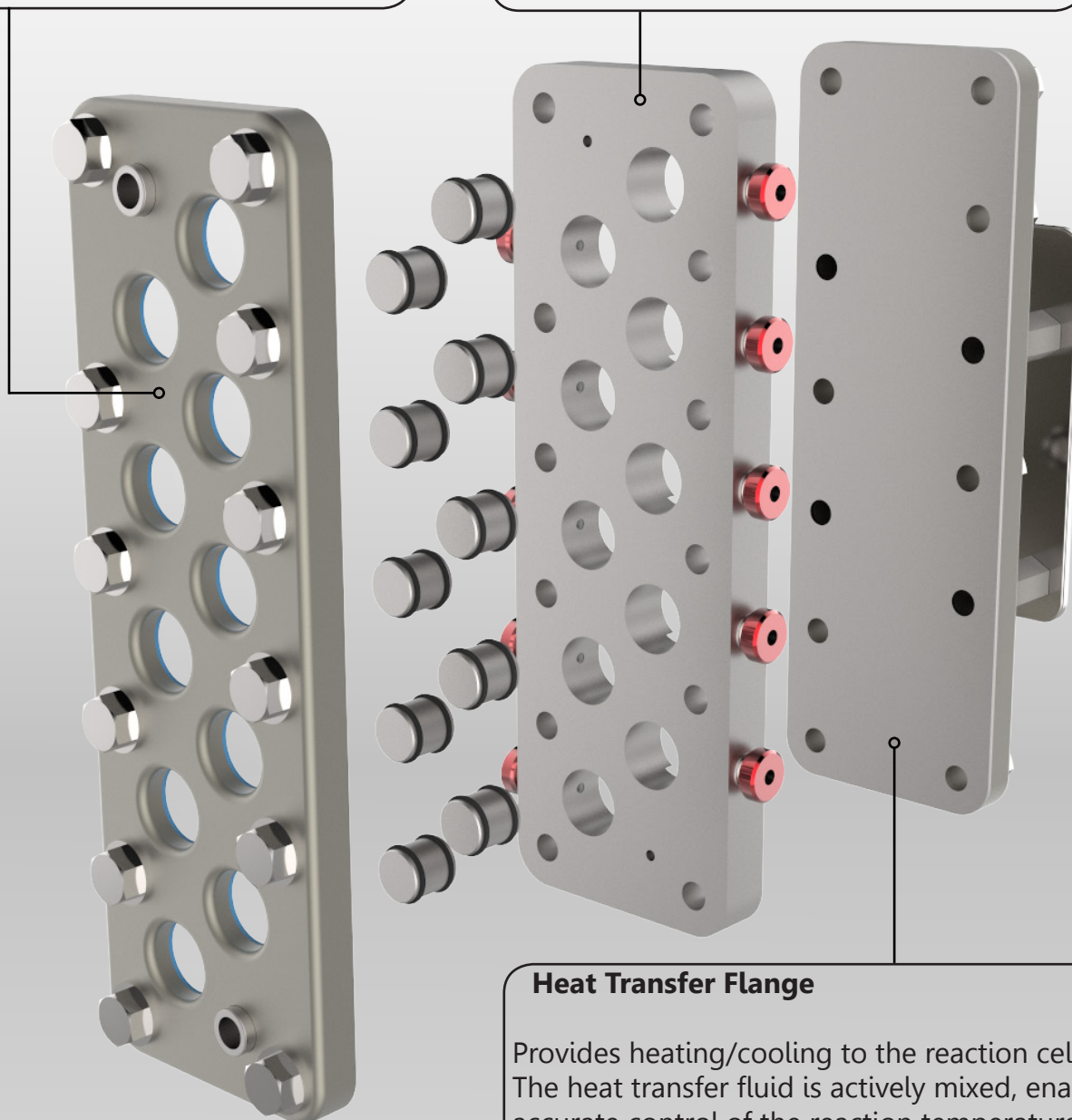
The reactor block assembly consists of a **Process Flange**, **ACR Cell Block** and **Heat Transfer Flange**.

Process Flange

The process flange incorporates the process connections, for the reactor inlet/outlet and glass windows for viewing inside.

ACR Cell Block

The ACR cell block has 10 reaction cells connected together via interstage channels. Cell blocks are interchangeable.



Heat Transfer Flange

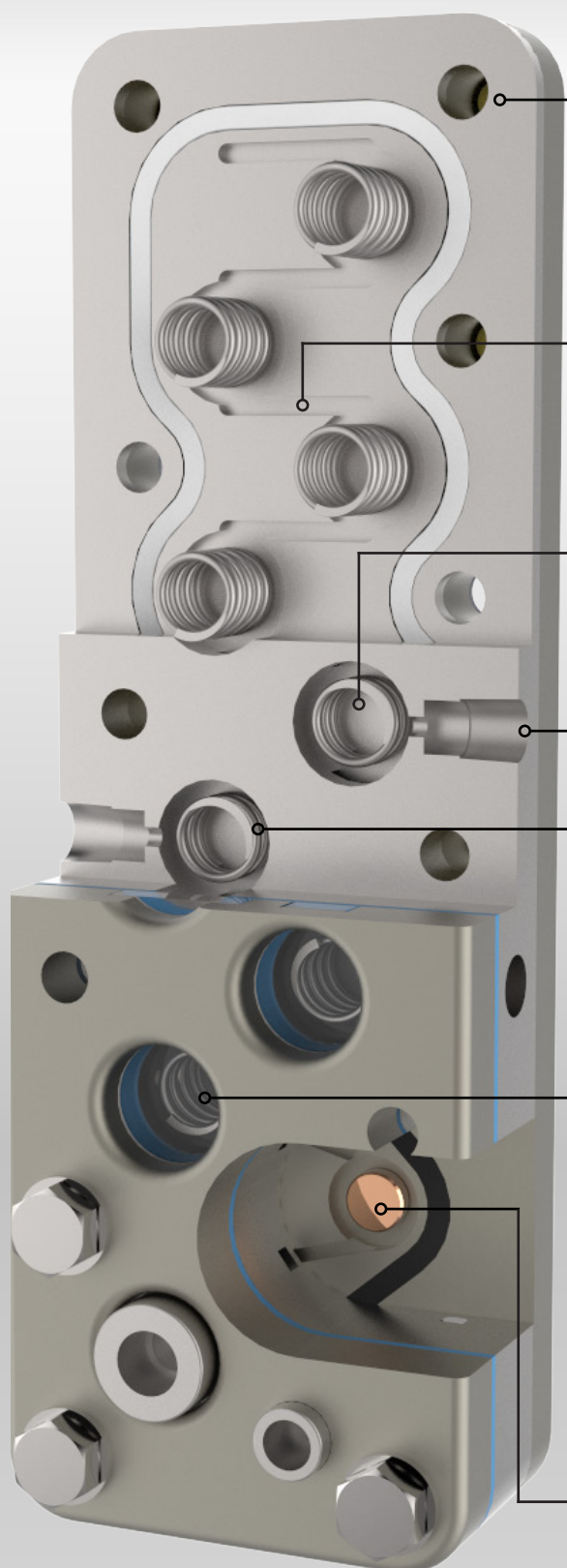
Provides heating/cooling to the reaction cells. The heat transfer fluid is actively mixed, enabling accurate control of the reaction temperature.



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ACR Reactor Block Assembly



ACR Cell Block

Operating range:
Pressure: up to 10 Bar
Temperature: -40 to +140°C
Cell blocks are interchangeable.

Interstage Channel

Interstage channels connect the cells together, giving the performance of 10 CSTR's

Reaction Cell

10ml volume per cell, working volume can be tailored using different agitator sizes.

Side Ports

The side ports in the reactor block can be used for inlet/sample points or temperature probes without dismantling the reactor block.

Agitators

Agitators generate active mixing inside the cell. Active mixing decouples mixing and plug flow from residence time. Agitators are interchangeable with different designs.

Glass Windows

Borosilicate glass windows enable viewing inside the reactor.

Heat Transfer

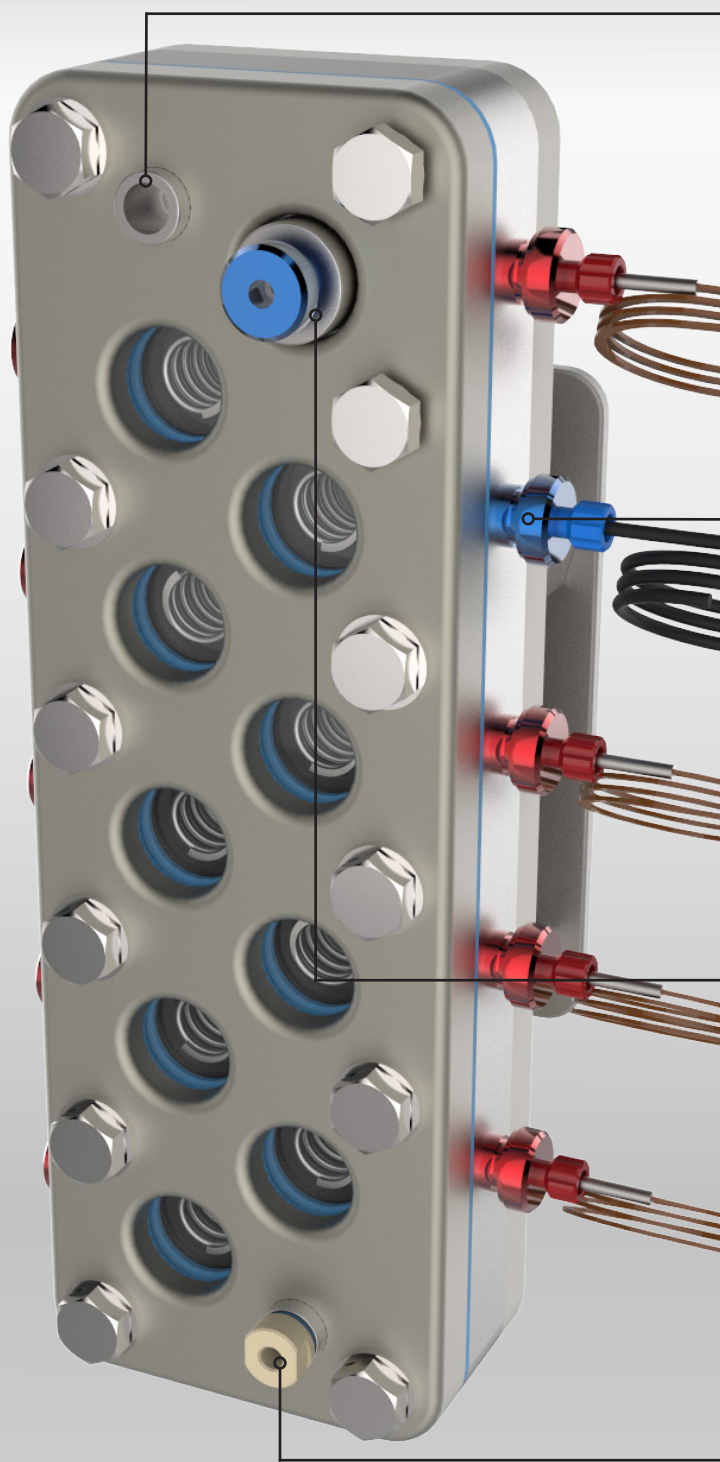
Agitators generate active mixing inside the heat transfer flange. Active mixing enables accurate control of the reaction temperature.



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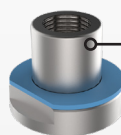
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ACR Inlet/Outlet Connectors



Process Connection

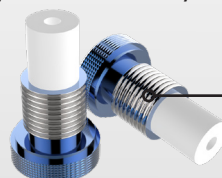
Process connections are the primary inlet/outlet connection.



1/8" BSPP
female thread

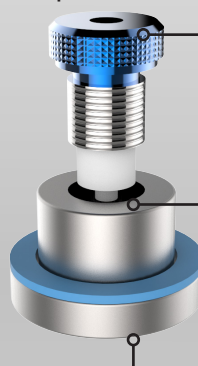
Injection Plug

Injection plugs can be used to provide extra injection points, adapts from 1/4" BSPP to 1/4 - 28 UNF thread.



Injection Nozzle Assembly

Injection nozzles can replace the glass windows and be used to provide extra addition points when the side port is occupied.



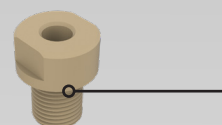
Injection plug

1/4" BSPP female thread

Hastelloy C276
injection nozzle

PEEK Adaptor

Adapts ACR process connection from 1/8" BSPP to 1/4 - 28 UNF thread.



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ACR Temperature Measurement

Temperature in the ACR is measured with a T type thermocouple through the side port.



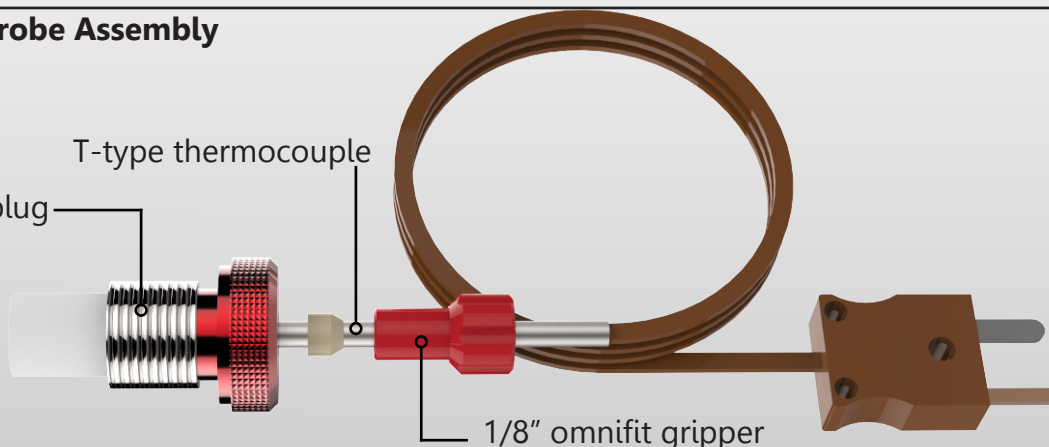
The thermocouple is held in place with the thermocouple plug which seals on the bottom of the side port for zero dead space.

The tip of the thermocouple is tangential with the wall of the cell, providing accurate temperature measurement without affecting agitator travel.

Temperature Probe Assembly

1/4" BSPP thermocouple plug

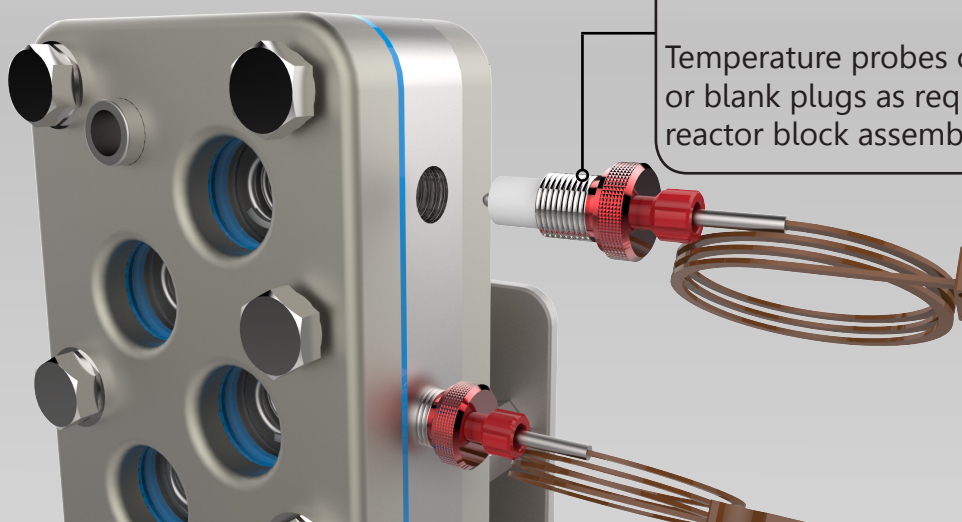
T-type thermocouple



1/8" omnifit gripper

Temperature can be measured in selected cells by using the thermocouple plugs where required.

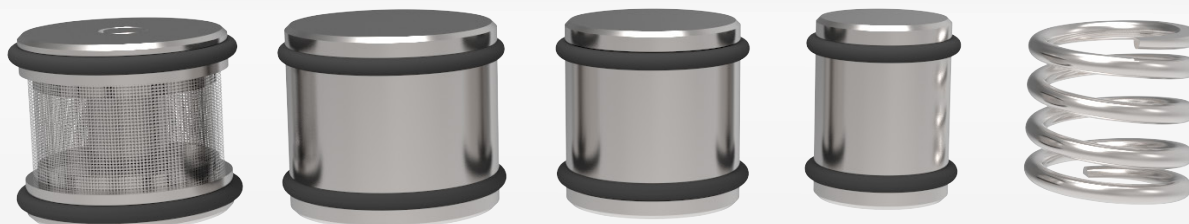
Temperature probes can be replaced with injection or blank plugs as required without dismantling the reactor block assembly.



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ACR Agitators

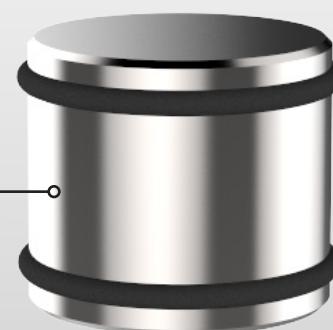


Different agitators can be used to suit different types of chemistry. Three basic types are available: **Variable volume, High shear and Catalyst Basket.**

Variable Volume

Variable volume agitators are available in 3 sizes; 30%, 50%, and 70%. These are selected according to the working volume required in the reaction cell.

Available in: **Hastelloy and Ceramic**



High Shear

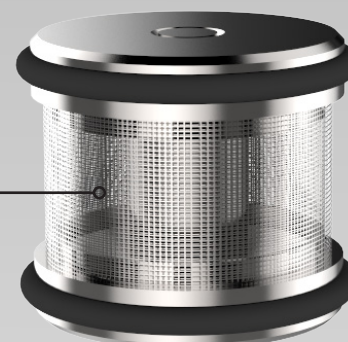
High shear agitators are used for processes that require intense shear mixing. Applications include gas/liquid, solid/liquid, liquid/liquid, and gas/liquid/solids.

Available in: **Hastelloy**

Catalyst Basket

Catalyst basket agitators are designed specifically for solid catalysed reactions. Catalyst particle sizes of between 0.4 mm and 2 mm can be loaded into the enclosed basket.

Available in: **Hastelloy**



ACR Cell Block

The Coflore® ACR cell block is available in two designs, **Reactor Cell Block** and **Extractor Cell Block**.

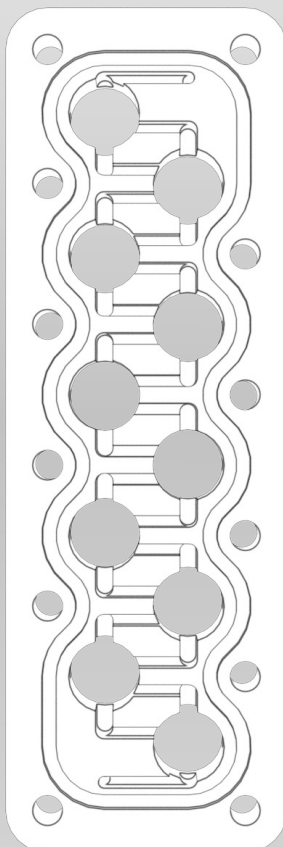
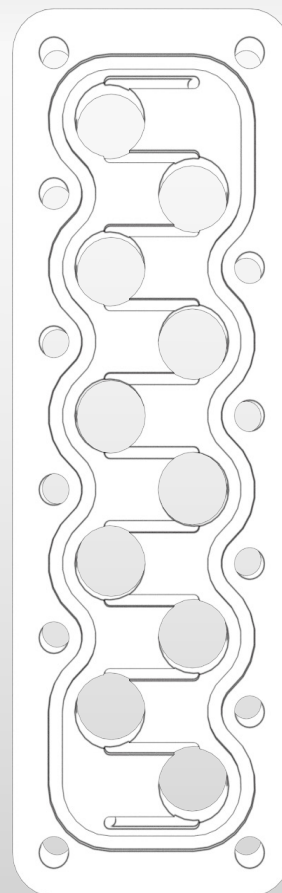
ACR

The ACR reactor cell block is the standard block used in the ACR.

It has a low pressure drop and can handle reaction times from under 30 seconds to many hours.

It is suitable for use with slurries, gas/liquid mixtures and immiscible fluids.

Available in: **Hastelloy and PTFE**



ACX

The ACX extractor cell block is used for developing counter current extractions or reactions.

It can handle multiphase materials flowing in opposite directions.

The ACX extractor cell block can replace the ACR reactor cell block to provide added flexibility to the ACR.

Continuous counter current extractors give higher extraction efficiency with lower solvent usage.

Available in: **PTFE**

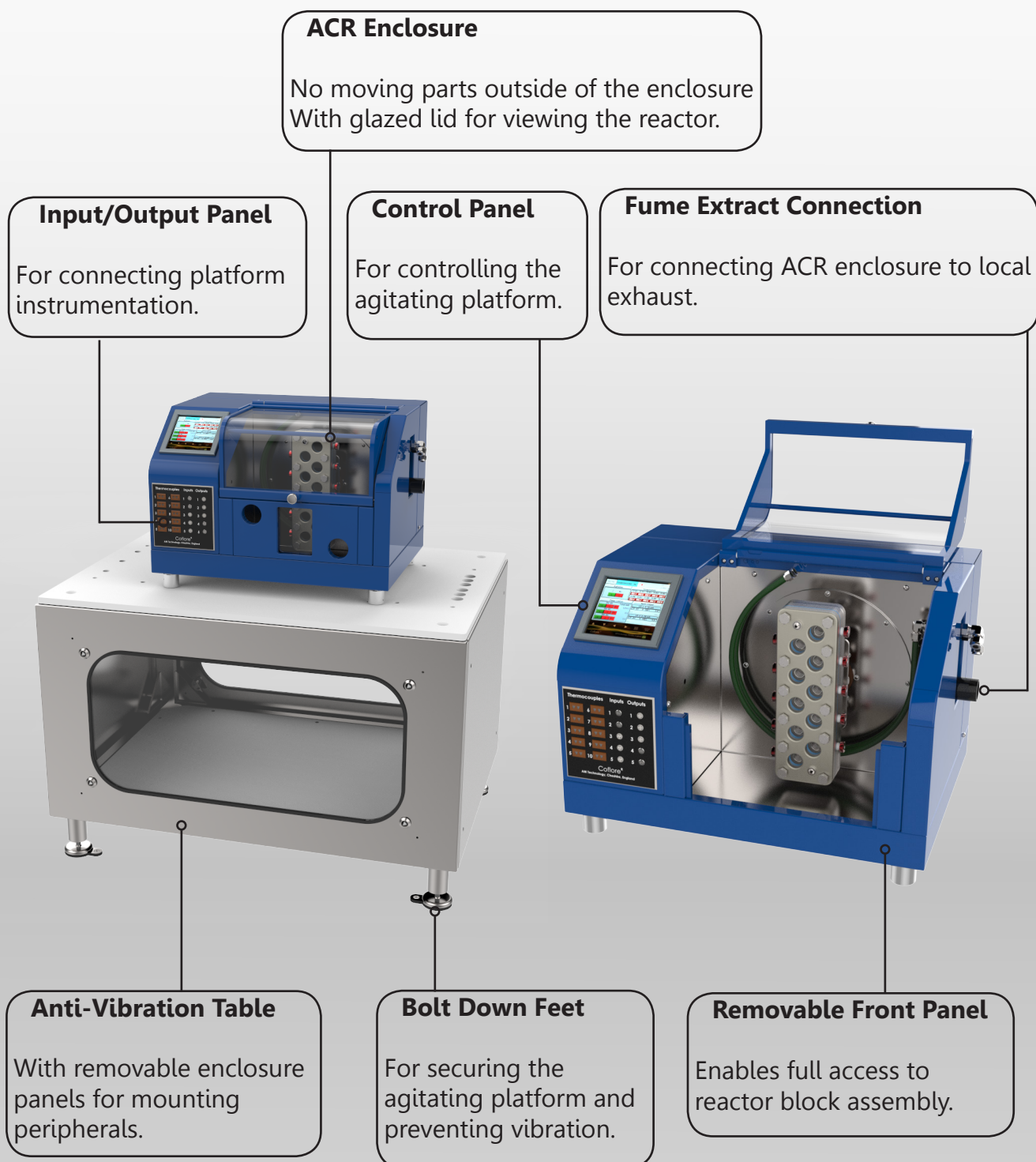


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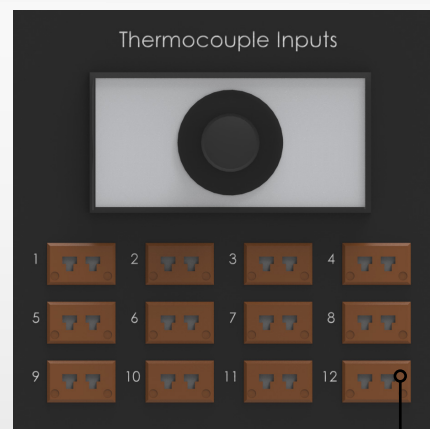
ACR Agitating Platform

The ACR agitating platform is mounted on an anti-vibration table.
The agitating platform is available with either **Analogue** or **Digital Control**.



Analogue ACR Control

Analogue ACR control incorporates the basic controls for operating the platform.



Analogue input/output panel

Agitation Start/Stop

Start/stop agitation with push button.



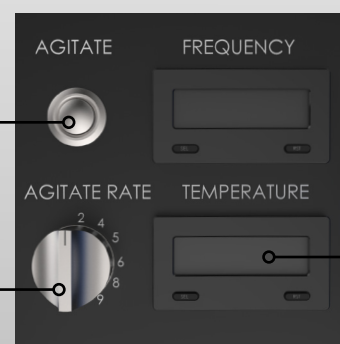
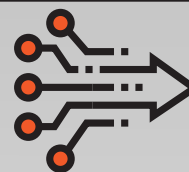
Agitate Rate

Select from 6 agitation frequencies with dial.
Frequencies 2,4,5,6,8,9 Hz



Temperature Display

Up to 12 thermocouple inputs with one temperature display.
Select display temperature with selector switch.



Analogue control panel

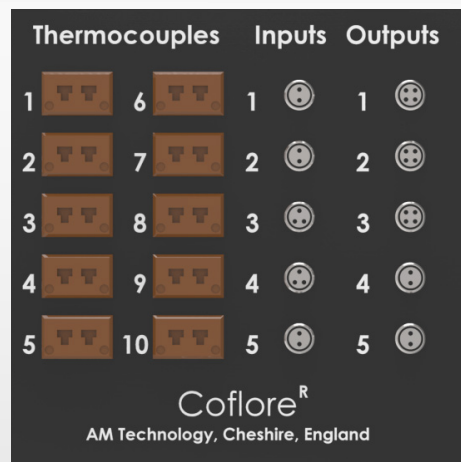


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Digital ACR Control

Digital ACR control has a 5.5" interactive touchscreen enabling the user to control the platform and peripherals.



Digital input/output panel

Agitation Start/Stop

Start/stop agitation.



Agitate Rate

Select from 8 agitation frequencies.
Frequencies 2,3,4,5,6,7,8,9 Hz



Temperature Display

Up to 10 thermocouple inputs with
10 temperature displays.



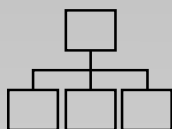
Programmable Alarm

Programmable alarm for
temperature high and low set points.



Ethernet Connection

Ethernet connection enabling
remote control via PC.



Data Logging

Data logging for process monitoring
and data export to MS Excel.



Pump Control

Control up to 3 pumps via 4-20mA signal.
Pump controls include;

- Start/stop
- Set point 0-100%
- Pump flow rate totaliser
- Automatic pump control



Actuated Valve Control

Control up to 2 actuated valves
Valve controls include;

- Open/close time
- Flow rate totaliser

4-20mA Input Monitoring

Up to 4 input signals
measuring 4-20mA 0-100%

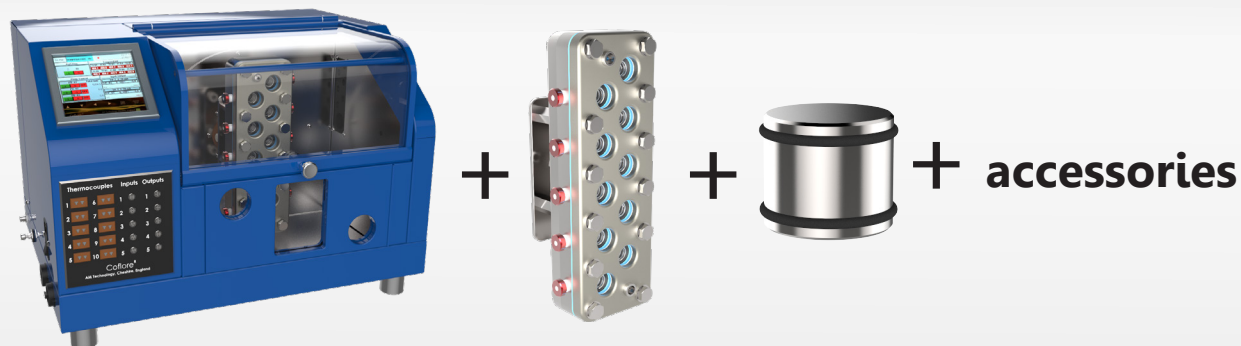


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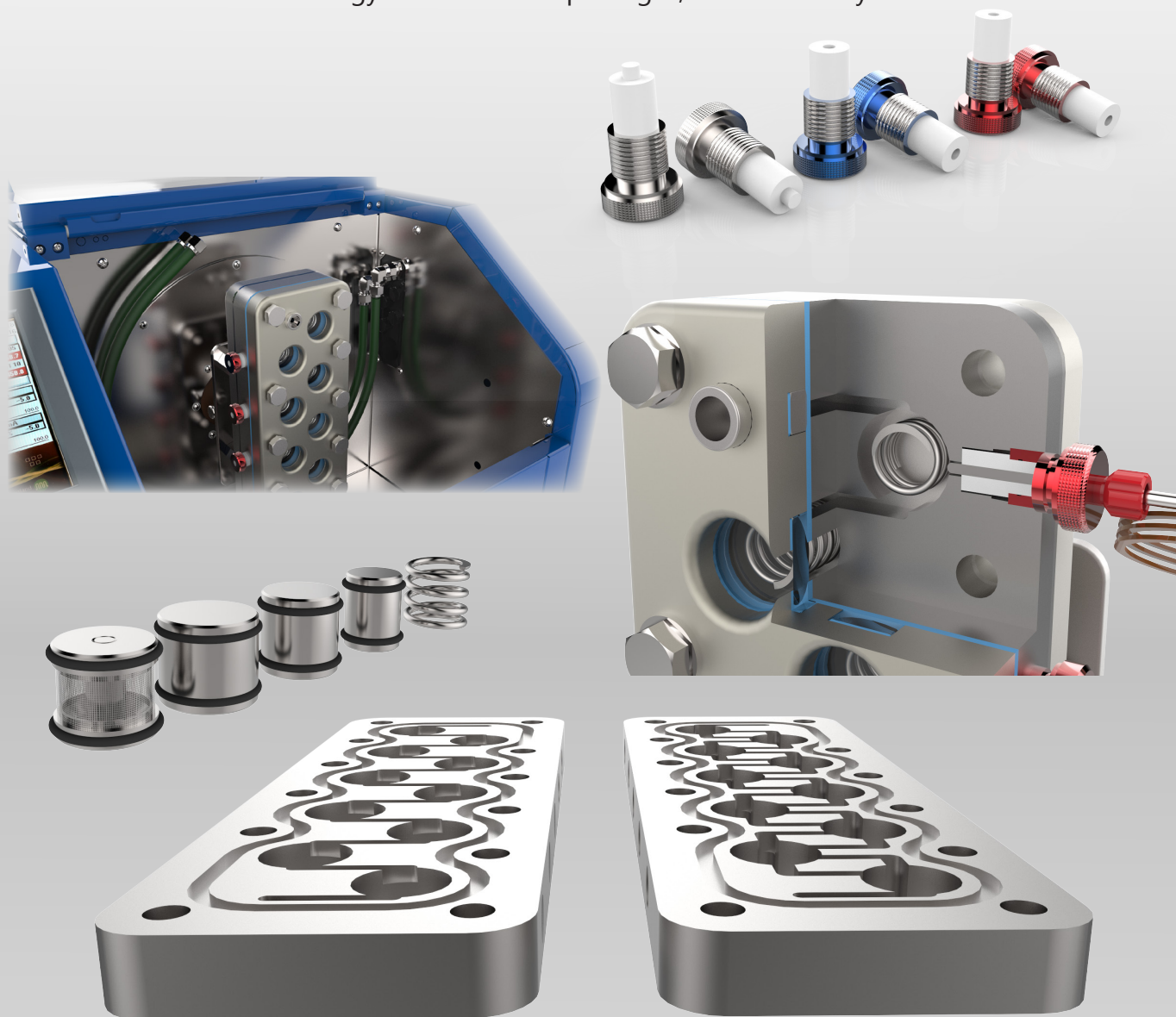
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Coflore® ACR Catalogue

An ACR system consists of an **Agitating Platform, Reactor Block Assembly, Agitators and Accessories.**



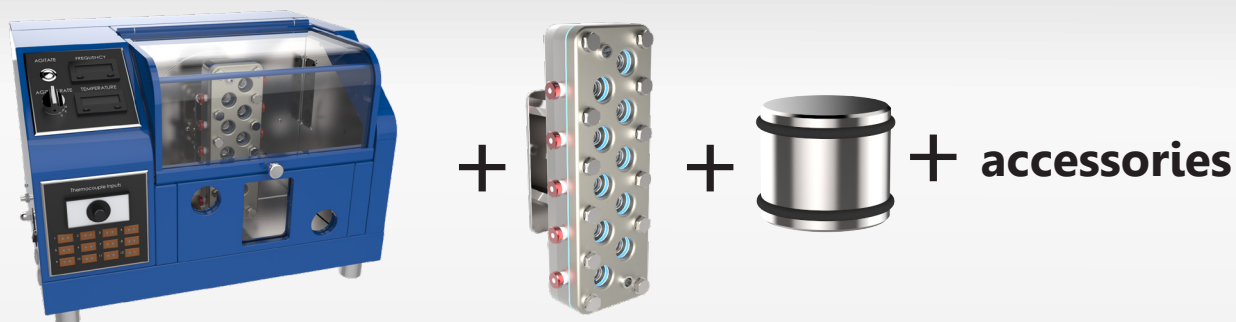
AM Technology offer standard packages, or customise your own.



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ACR System Package ACR-131



ACR System Package ACR-131

**Analogue ACR
Agitating Platform
ACR-P100**



**Hastelloy Reactor
Block Assembly
ACR-100-Ha**



**10 x 50% Volume Agitators
ACR-50%-Ha**



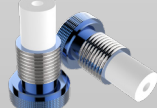
**10 x High Shear Agitators
ACR-HS-Ha**



**10x Blank Plug
ACR-PLUG-B**



**3x Injection Plug
ACR-PLUG-INJ**



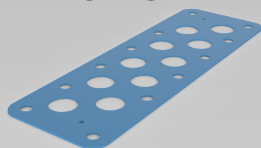
**2x Temperature Probe
Assembly ACR-TP-Ha**



**2x 1/4-28 UNF Adaptor
ACR-1-4-28-P**



**4x Process Gasket
ACR-PG**



**4x PTFE Window Gasket Set
ACR-WG**



**1x Process O-ring
ACR-OR FFKM**



**1x HTF O-ring
ACR-OR-HTF**



**1x Insulation Jacket
ACR-INS**



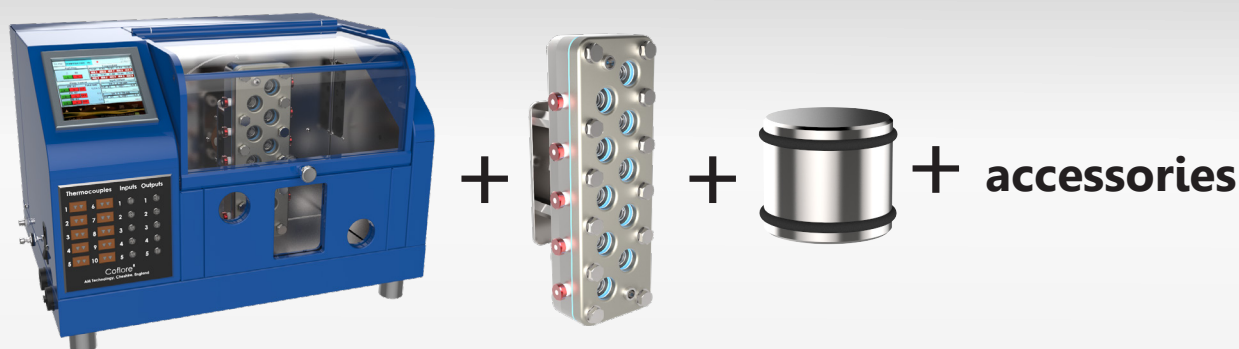
**1x Toolkit
ACR-Tool Kit**



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ACR System Package ACR-231



ACR System Package ACR-231

**Digital ACR
Agitating Platform
ACR-P200**



**Hastelloy Reactor
Block Assembly
ACR-100-Ha**



**10 x 50% Volume Agitators
ACR-50%-Ha**



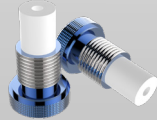
**10 x High Shear Agitators
ACR-HS-Ha**



**10x Blank Plug
ACR-PLUG-B**



**3x Injection Plug
ACR-PLUG-INJ**



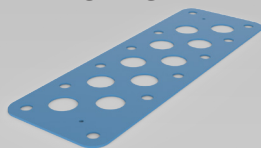
**10x Temperature Probe
Assembly ACR-TP-Ha**



**2x 1/4-28 UNF Adaptor
ACR-1-4-28-P**



**4x Process Gasket
ACR-PG**



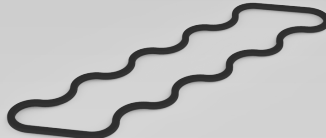
**4x PTFE Window Gasket Set
ACR-WG**



**1x Process O-ring
ACR-OR FFKM**



**1x HTF O-ring
ACR-OR-HTF**



**1x Insulation Jacket
ACR-INS**




**1x Toolkit
ACR-Tool Kit**




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Agitating Platform

ACR-P100	Description
<p data-bbox="210 544 734 585">Analogue Agitating Platform</p> 	<p data-bbox="887 544 1272 616">ACR Agitating Platform Analogue Control System</p> <p data-bbox="887 659 1381 772">Controls: Agitation: start/stop Agitate rate selection: 2,4,5,6,8,9Hz</p> <p data-bbox="887 816 1465 929">Temperature: 12 thermocouple input, one temperature display</p> <p data-bbox="887 972 1494 1110">Requirements: Power: 110-240 VAC 2A Compressed air: 3 Bar 3.2CFM oil free clean air</p> <p data-bbox="887 1158 1442 1302">Connections: Heat transfer fluid inlet/outlet: M16x1.0 Compressed air: 6mm Push Fit Power: IEC socket connector</p> <p data-bbox="887 1350 1421 1536">Components Include: ACR agitating platform with analogue control Anti-vibration table Power lead</p>

ACR-P200	Description
<p data-bbox="201 380 670 428">Digital Agitating Platform</p>  <p>The image shows the ACR-P200 Digital Agitating Platform. It consists of a blue control unit with a digital display and keypad, mounted on a silver anti-vibration table. The control unit has a transparent window showing internal components. The table has a large rectangular opening on the front and is supported by four legs with casters.</p>	<p data-bbox="873 380 1234 459">ACR Agitating Platform Digital Control System</p> <p data-bbox="873 500 1013 532">Controls: Agitation: start/stop Agitate Rate Selection: 2,3,4,5,6,7,8,9Hz</p> <p data-bbox="873 652 1222 683">Input/Output Controls: 10 thermocouple input, 10 temperature display 3 x Pump control output 2 x Actuated valve control output 4 x 4-20mA input 0-100% 1 x digital input Programmable alarm Data logging Export Data to MS Excel via USB Remote control via Ethernet</p> <p data-bbox="873 1117 1095 1148">Requirements: Power: 110-240 VAC 2A Compressed air: 3 Bar 3.2CFM oil free clean air</p> <p data-bbox="873 1309 1069 1341">Connections: Heat transfer fluid inlet/outlet: M16x1.0 Compressed air: 6mm push fit Power: IEC socket connector</p> <p data-bbox="873 1502 1194 1533">Components Include: ACR agitating platform with digital control Anti-vibration table Power lead</p>



ACR Reactor Block

ACR-100-Ha	Description
<p data-bbox="215 346 824 380">Reactor Block Assembly: Hastelloy</p> 	<p data-bbox="881 346 1281 409">ACR Reactor Block Assembly Hastelloy Cell Block</p> <p data-bbox="881 452 1229 549">Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C</p> <p data-bbox="881 592 1355 797">Wetted Material: Cell block: Hastelloy C276 Gasket: PTFE O-ring: FFKM Glass window: borosilicate Glass Heat exchange plate: Hastelloy C276</p> <p data-bbox="881 840 1413 1013">Dimensions: 300mm H x 100mm W x 55mm D Mass: 9Kg Cell diameter: 25mm Interstage channel: 4mm x 4mm x 30mm</p> <p data-bbox="881 1057 1086 1119">Capacity: 100ml Nominal</p> <p data-bbox="881 1163 1269 1259">Connections: Inlet/outlet: 1/8" BSPP female Side port: 1/4" BSPP female</p> <p data-bbox="881 1302 1286 1784">Components Include: 1 x process flange 1 x reactor cell block: Hastelloy 1 x HTF flange 1 x mounting plate 10 x glass window 10 x window gasket 1 x process gasket 2 x process connection gasket 2 x process connection 10 x 1/4" BSP blank plug 1 x process O-ring 1 x HTF O-ring 10 x HTF agitator</p>



ACR-100-PTFE**Reactor Block Assembly: PTFE****Description****ACR Reactor Block Assembly
PTFE Cell Block****Operating Range:**

Pressure: up to 4 Bar

Temperature: -40 - +140°C

Wetted Material:

Cell block: PTFE 25% GF

Gasket: PTFE

O-ring: FFKM

Window: borosilicate glass

Heat exchange plate: Hastelloy C276

Dimensions:

300mm H x 100mm W x 55mm D

Mass: 4Kg

Cell diameter: 25mm

Interstage channel: 4mm x 4mm x 30mm

Capacity:

100ml nominal

Connections:

Inlet/outlet: 1/8" BSPP female

Side port: 1/4" BSPP female

Components Include:

1 x process flange

1 x reactor cell Block: PTFE

1 x HTF flange

1 x mounting plate

10 x glass window

10 x window gasket

1 x process gasket

2 x process connection gasket

2 x process connection

10 x 1/4" BSP blank plug

1 x process O-ring

1 x HTF O-ring

10 x HTF agitator



ACR-100-ACX**Reactor Block Assembly: Extractor****Description****ACR Reactor Block Assembly
Extractor Cell Block****Operating Range:**

Pressure: up to 4 Bar

Temperature: -40 - +140°C

Wetted Material:

Cell block: PTFE 25% GF

Gasket: PTFE

O-ring: FFKM

Window: borosilicate glass

Heat exchange plate: Hastelloy C276

Dimensions:

300mm H x 100mm W x 55mm D

Mass: 4Kg

Cell diameter: 25mm

Interstage channel:

4mm x 4mm x 30mm

6mm x 15mm x 30mm

Capacity:

100ml nominal

Connections:

Inlet/outlet: 1/8" BSPP female

Side port: 1/4" BSPP female

Components Include:

1 x process flange

1 x reactor cell block: ACX

1 x HTF flange

1 x mounting plate

10 x glass window

10 x window gasket

1 x process gasket

2 x process connection gasket

2 x process connection

10 x 1/4" BSP blank plug

1 x process O-ring

1 x HTF O-ring

10 x HTF agitator

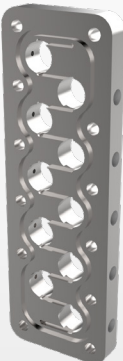
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ACR Cell Blocks


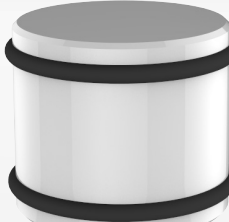




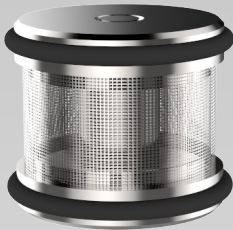

ACR-RB-Ha	Description
Reactor Cell Block: Hastelloy 	Reactor Cell Block: Hastelloy Material: Hastelloy C276 Dimensions: 300mm H x 100mm W x 20mm D Cell diameter: 25mm Interstage channel: 4mm x 4mm x 30mm Connections: Side port: 1/4" BSPP female

ACR-RB-PTFE	Description
Reactor Cell Block: PTFE 	Reactor Cell Block: PTFE Material: PTFE 25% GF Dimensions: 300mm H x 100mm W x 20mm D Cell diameter: 25mm Interstage channel: 4mm x 4mm x 30mm Connections: Side port: 1/4" BSPP female

ACR-RB-ACX	Description
Extractor Cell Block 	Extractor Cell Block Material: PTFE 25% GF Dimensions: 300mm H x 100mm W x 20mm D Cell diameter: 25mm Interstage channel: 4mm x 4mm x 30mm 6mm x 15mm x 30mm Connections: Side port: 1/4" BSPP female

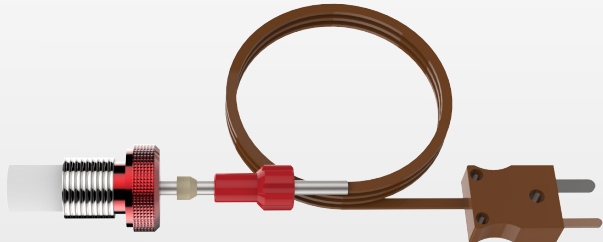
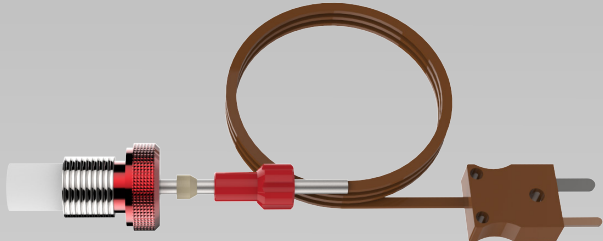


Agitators

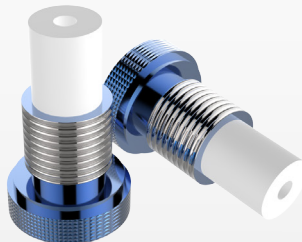

ACR-70%-Ha	Description	ACR-70%-C	Description
70% Volume Agitator: Hastelloy	70% Volume agitator: Hastelloy	70% Volume Agitator: Ceramic	70% Volume Agitator: Ceramic
	<p>Occupies 70% cell volume (7ml Approx.) Agitator Diameter: 22mm</p> <p>Material: Body: Hastelloy C276 O-ring: FFKM</p>		<p>Occupies 70% cell volume (7ml Approx.) Agitator diameter: 22mm</p> <p>Material: Body: Technox 2000 O-ring: FFKM</p>
ACR-50%-Ha	Description	ACR-50%-C	Description
50% Volume Agitator: Hastelloy	50% Volume Agitator: Hastelloy	50% Volume Agitator: Ceramic	50% Volume Agitator: Ceramic
	<p>Occupies 50% cell volume (5ml approx.) Agitator Diameter: 18.6mm</p> <p>Material: Body: Hastelloy C276 O-ring: FFKM</p>		<p>Occupies 50% cell volume (5ml Approx.) Agitator Diameter: 18.6mm</p> <p>Material: Body: Technox 2000 O-ring: FFKM</p>
ACR-30%-Ha	Description	ACR-30%-C	Description
30% Volume Agitator: Hastelloy	30% Volume agitator: Hastelloy	30% Volume Agitator: Ceramic	30% Volume Agitator: Ceramic
	<p>Occupies 30% Cell volume (3ml Approx.) Agitator diameter: 14.5mm</p> <p>Material: Body: Hastelloy C276 O-ring: FFKM</p>		<p>Occupies 30% cell volume (3ml Approx.) Agitator Diameter: 14.5mm</p> <p>Material: Body: Technox 2000 O-ring: FFKM</p>
ACR-CB-Ha	Description	ACR-HS-Ha	Description
Catalyst Basket Agitator	Catalyst Basket Agitator	High Shear Agitator	High Shear Agitator
	<p>Agitator Diameter: 21mm</p> <p>Material: Body: Hastelloy C276 O-ring: FFKM</p>		<p>Occupies 10% cell volume (1ml approx.) Agitator Diameter: 19mm</p> <p>Material: Body: Hastelloy C276 End Sleeve: PTFE</p>

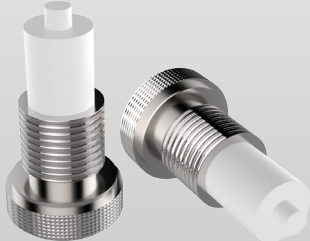
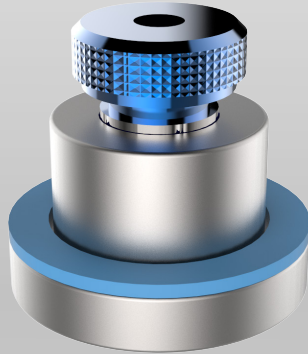



ACR Accessories

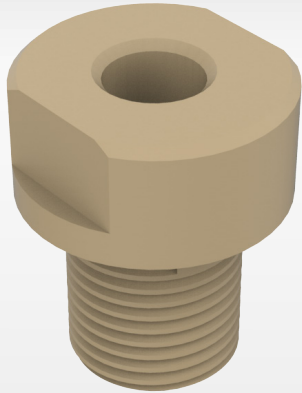
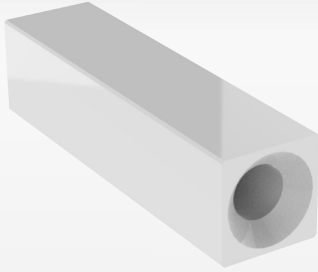


ACR-TP-Ha	Description
<p data-bbox="244 327 774 411">Temperature Probe Assembly: Hastelloy</p> 	<p data-bbox="880 327 1390 356">Temperature Probe Assembly: Hastelloy</p> <p data-bbox="880 387 1376 484">Measures process temperature at cell wall T-Type thermocouple Probe diameter: 1/8" OD</p> <p data-bbox="880 515 1199 611">Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C</p> <p data-bbox="880 642 1281 772">Wetted Material: Thermocouple: Hastelloy C276 Seal: PTFE Thermocouple gripper olive: PTFE</p> <p data-bbox="880 804 1321 934">Connections: Thermocouple plug: 1/4" BSPP male Thermocouple gripper: 1/4-28 UNF Thermocouple: IEC miniature TC plug</p> <p data-bbox="880 965 1269 1119">Components Include: 1 x T-Type thermocouple 1 x 1/4" BSP thermocouple plug 1 x 1/8" omnifit gripper</p>
<p data-bbox="244 1170 774 1302">ACR-TP-TaC Temperature Probe Assembly: Tantalum</p> 	<p data-bbox="880 1170 1390 1247">Temperature Probe Assembly: Tantalum</p> <p data-bbox="880 1278 1376 1374">Measures process temperature at cell wall T-Type thermocouple Probe diameter: 1/8" OD</p> <p data-bbox="880 1406 1199 1502">Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C</p> <p data-bbox="880 1533 1326 1663">Wetted Material: Thermocouple: tantalum coated SS 1/4" BSP thermocouple plug seal: PTFE thermocouple gripper olive: PTFE</p> <p data-bbox="880 1695 1321 1825">Connections: Thermocouple plug: 1/4" BSPP male Thermocouple gripper: 1/4-28 UNF Thermocouple: IEC miniature TC plug</p> <p data-bbox="880 1856 1269 1986">Components Include: 1 x T-Type thermocouple 1 x 1/4" BSP thermocouple plug 1 x 1/8" omnifit gripper</p>



ACR-PLUG-INJ	Description	ACR-PLUG-TC	Description
1/4" BSP Injection Plug	1/4" BSP Injection Plug	1/4" BSP Thermocouple Plug	1/4" BSP Thermocouple Plug
	For ACR side port injection, adapts to 1/4-28 UNF Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C Material: PTFE 316 stainless steel (non-wetted) Connections: 1/4" BSPP male 1/4-28 UNF female		For holding thermocouple in ACR side port, adapts to 1/4-28 UNF Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C Material: PTFE 316 stainless steel (non-wetted) Connections: 1/4" BSPP male 1/4-28 UNF female

ACR-PLUG-B	Description	ACR-WIN-Ha	Description
1/4" BSP Blank Plug	1/4" BSP Blank Plug	Injection Nozzle Assembly	Injection Nozzle Assembly: Hastelloy
	For blanking ACR side ports Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C Material: PTFE 316 stainless steel (non-wetted) Connections: 1/4" BSPP Male		Injection nozzle replaces glass window for extra addition point Operating Range: Pressure: up to 10 Bar Temperature: -40 - +140°C Wetted Material: Body: Hastelloy C276 1/4" BSP injection plug seal: PTFE Window gasket: PTFE Connections: Injection nozzle body: 1/4" BSP female 1/4" BSP injection plug: 1/4" BSPP male 1/4-28 UNF female Components Include: 1 x injection nozzle body 1 x 1/4" BSP injection plug 1 x window gasket
ACR-GW	Description		
Glass Window	Glass Window		
	Window for ACR Reactor Block assembly Material: Borosilicate Glass Dimensions: 34mm OD x 6.5mm		

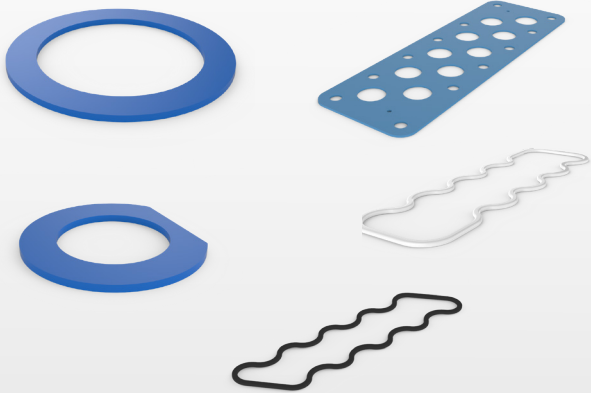


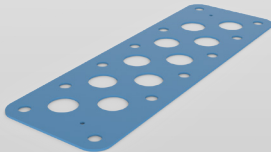
ACR-1/4-28-P	Description	ACR-CR	Description
1/4-28 UNF Adaptor	¼-28 UNF Adaptor	Channel Restrictor	Channel Restrictor
	<p>For adapting ACR inlet/outlet to ¼-28 UNF</p> <p>Material: Body: PEEK Gasket: PTFE</p> <p>Connections: 1/8" BSPP male ¼-28 UNF female</p> <p>Components Include: 1 x ¼-28 UNF adaptor 1 x 1/8" BSP PTFE gasket 1 x 5mm OD PTFE gasket</p>		<p>For adding restriction in ACR interstage channel.</p> <p>Material: PTFE</p> <p>Dimensions: 3.8mm x 3.8mm x 15mm through hole: 0.2mm, 1mm, 2mm</p> <p>Specified on order</p>
ACR-Tool Kit	Description	ACR-INS	Description
ACR-Tool Kit	Tool Kit for ACR and Agitating Platform	Insulation Jacket	Insulation Jacket
	<p>Components Include: 1 x tool Bag 1 x 3mm allenkey 1 x 5mm allenkey 1 x 8mm allenkey 2 x 17mm spanner 1 x 9/16" spanner 1x 1/2" Spanner 1 x pliers</p>		<p>For insulating the reactor block assembly</p> <p>Material: Insulation jacket: silicone sponge insulation O-rings: silicone</p> <p>Dimensions: 420mm x 220mm x 5mm</p> <p>Components Include: 1 x insulation jacket front 1 x insulation jacket back 1 x insulation jacket wrap 1 x large O-ring 3 x small O-ring</p>

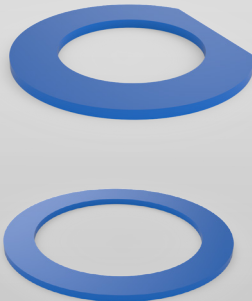


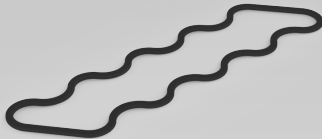
Gaskets and Seals


AM Technology recommend gaskets be replaced after each use the O-rings should also be inspected after each use and replaced intermittently.

ACR-SEAL KIT	Description
ACR Seal Kit 	Seal Kit for ACR Reactor block assembly 4 sets of gaskets & O-ring set for ACR reactor block assembly Material: Gaskets: PTFE Process O-ring: FFKM HTF O-ring: viton Components Include: 4 x process gasket ACR-PG 4 x window gasket set ACR-WG 1 x process O-ring ACR-OR-FFKM 1 x HTF O-ring ACR-OR-HTF

ACR-PG	Description
Process Gasket 	Process Gasket Gasket for ACR Reactor Block assembly Material: PTFE Dimensions: 300mm x 100mm x 1.5mm

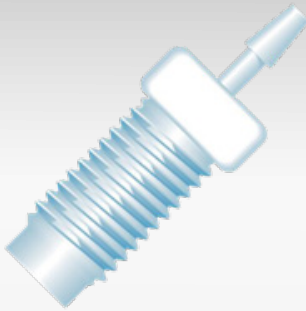
ACR-WG	Description
PTFE Window Gasket Set 	Window Gasket Set for ACR Reactor Block Assembly Material: PTFE Components Include: 10 x window Gasket 2 x process connection gasket

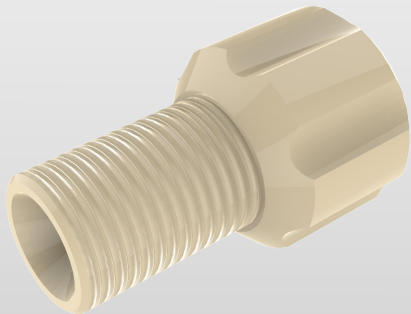
ACR-OR-HTF	Description
HTF O-ring 	HTF O-ring O-ring for ACR Reactor Block assembly Material: Viton

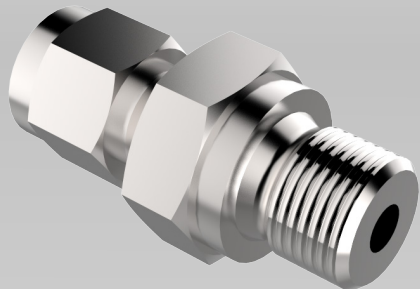
ACR-OR-FFKM	Description
Process O-ring 	Process O-ring O-ring for ACR reactor block assembly Material: FFKM



Tube Fittings

		Description	
		<p>Soft tubing connectors for use with peristaltic pump tubing and; 1/4" BSP injection plug ACR-PLUG-INJ 1/4-28 UNF adaptor ACR-1/4-28-P</p> <p>Material: ETFE</p> <p>Connection: 1/4 -28 UMF male</p>	
Master Flex Tubing size	Tubing ID (mm)	Barb Size (mm)	Part Number
L/S 13	0.8	1.6	P-646
L/S 14	1.6	1.6	P-646
L/S 16	3.1	3.2	P-647
L/S 25	4.8	4.8	P-648

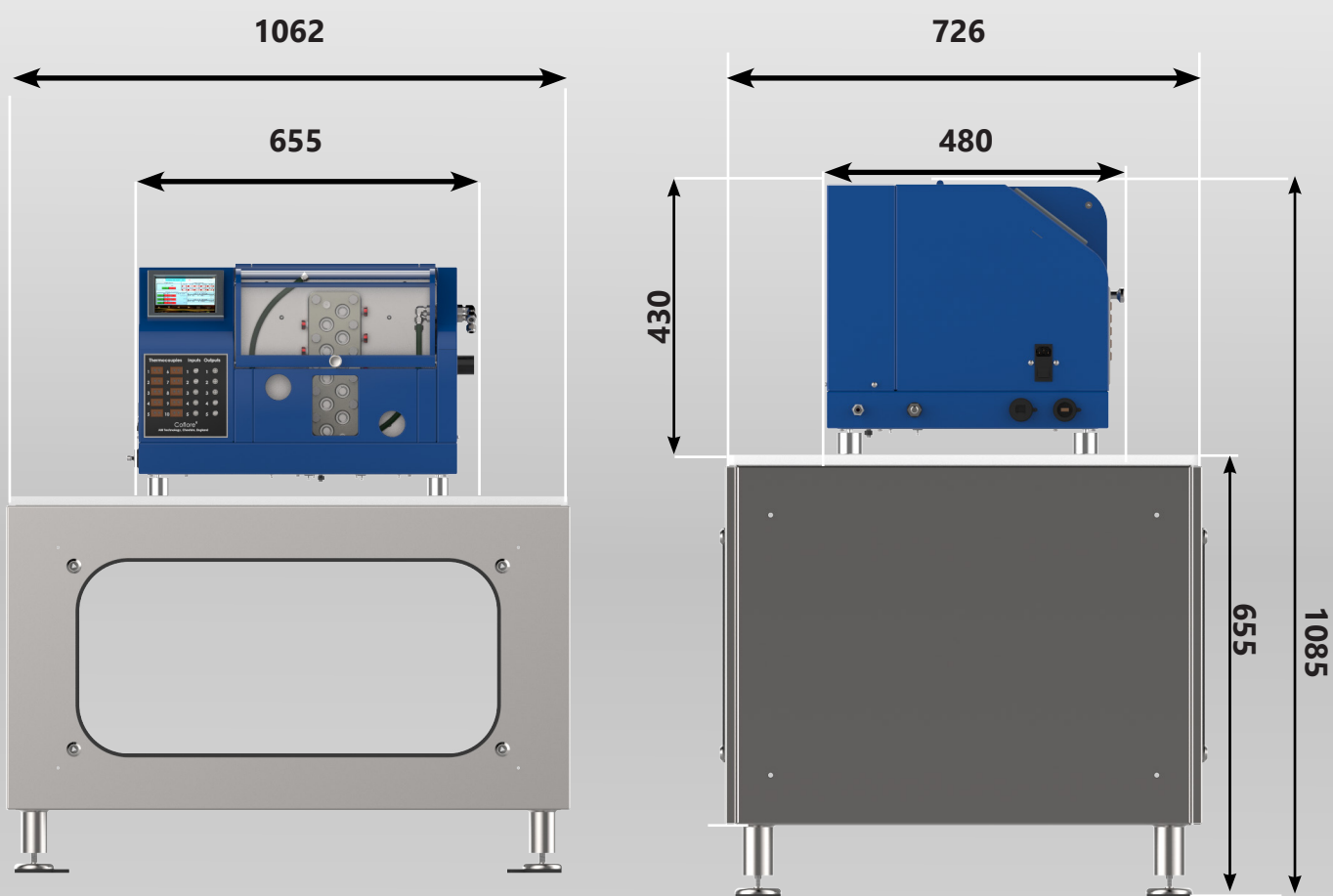
		Description	
		<p>Omifit tube connectors for use with PTFE tubing and; 1/4" BSP Injection plug ACR-PLUG-INJ 1/4-28 UNF adaptor ACR-1/4-28-P</p> <p>Material: Gripper body: PEEK Ferrule: PTFE</p> <p>Connections: 1/4-28 UNF male</p>	
Tubing Size (OD)		Part Number	
1/16"		XP-283	
1/8"		XP-335	

		Description	
		<p>Swagelok tube connectors for use with PTFE/stainless steel tubing.</p> <p>Material: Fitting: 316 stainless steel Washer: stainless steel , Viton</p> <p>Components Include: Compression fitting Bonded washer</p>	
	For use with: ACR process connection (1/8" BSP)	For use with: ACR side port (1/4" BSP)	
Tubing OD	Part Number	Part Number	
1/8"	SS-200-1-2RP	SS-200-1-4RP	
1/4"	SS-400-1-2RP	SS-400-1-4RP	



Technical Details

Maximum reactor mass	9 kg
Agitating platform mass	130 kg
Noise	< 70 dBA
Requirements;	
Compressed air	3 bar, 3.2 CFM oil free clean air
Maximum air pressure	6 bar
Power supply	100-240 vac, 50/60 Hz, 2A max
Compressed air connection	6 mm push fit
Heat transfer fluid connections	M16 x 1.0 Huber



Notes



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Contact

AM Technology is based in the United Kingdom and has distributors in Brasil, Germany, India, Israel and the USA.

We welcome enquiries from across the globe so if you require more information about our reactors or to find out whether our reactors are suitable for any applications you have in mind, we would be very interested in hearing from you.

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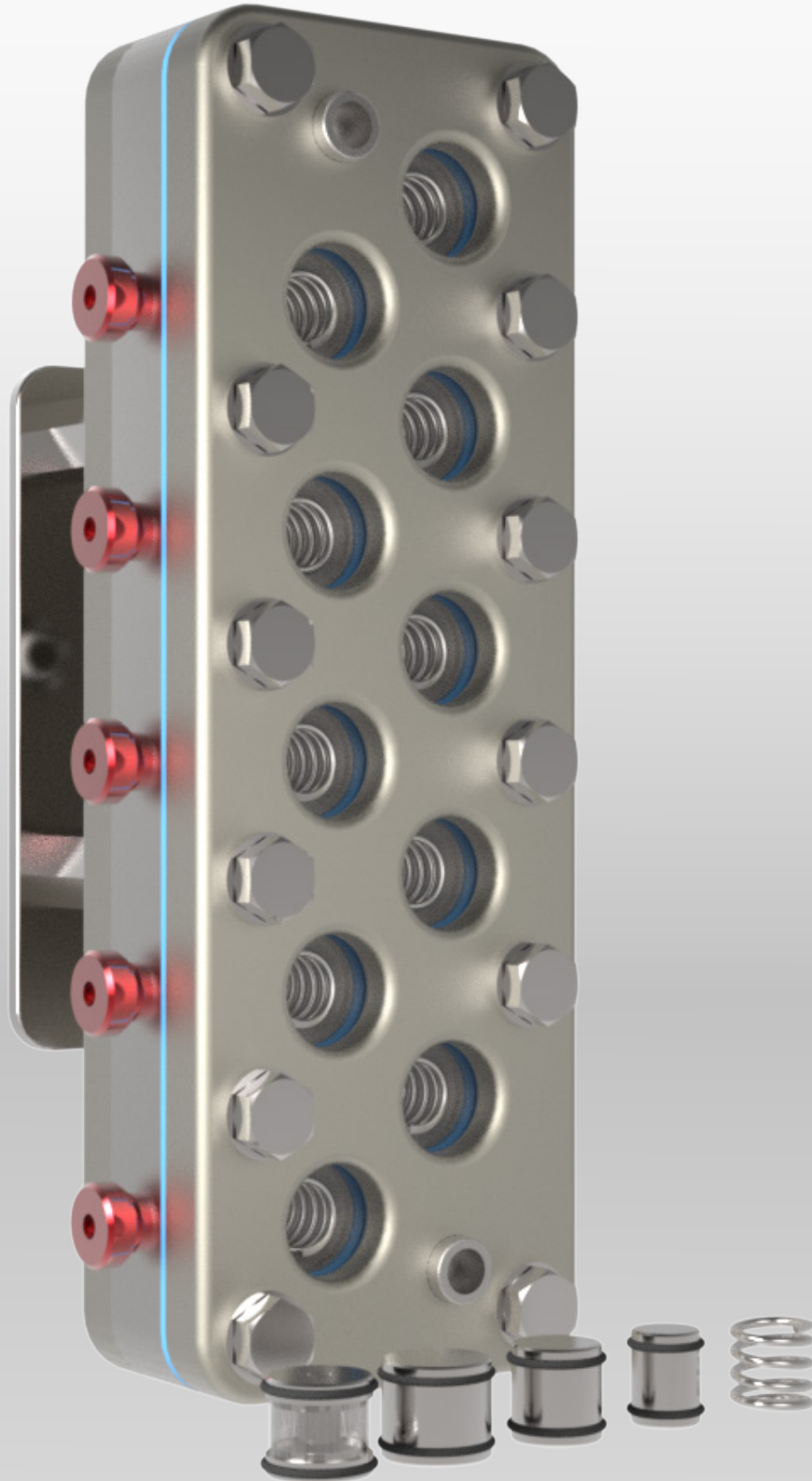


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