

## 1. System Description and Applications

### 1.1 Product Summary

MecFlow is a multilayer, halogen free PP-RCT piping system independently tested to EN13501 and achieving a fire classification of B-s1, d0. MecFlow products and prefabricated components are installed on site using Electrofusion, Butt and Socket fusion welding techniques or pre-designed BSP threaded connections.

### 1.2 System Description

The MecFlow system shall be as indicated on the drawings, manufactured in accordance with ISO 9001 and delivered with the agreed programme of works. The product shall be designed and delivered as a fabricated solution in accordance with site specific design criteria with elements of pretesting at the Polypipe Factory.

### 1.3 System Applications

The system shall be manufactured using multi-layer pipe technology made from reinforced Polypropylene, suitable for use in the following applications:

- Boosted Cold water
- LPHW/LTHW
- Chilled Water
- Heating

## 2. Approvals and Certification

### 2.1. WRAS 1907063- MecFlow

The MecFlow system has both WRAS material and WRAS product approval, for a copy of the certificates can be requested through our Polypipe Advantage team on:

Tel- 01622 795200 Email- [buildingservices.technical@polypipe.com](mailto:buildingservices.technical@polypipe.com)

### 2.2. Fire Classification

The MecFlow product shall be offered to meet fire classification level B-s1, d0 in accordance with EN13501. This is a low smoke, zero halogen product and the highest classification that material can obtain. A test certificate can be requested through our Polypipe Advantage team on:

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## 2.3. Fire Compartmentalisation

MecFlow has been 3rd party tested with Polypipe Firetrap Sleeves (passive fire protection products) to achieve a 2-hour insulation and integrity compartment rating. A test certificate can be requested through our Polypipe Advantage team on:

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## 2.4 Cradle to Cradle

Gold Certification 4965: Products Innovation Institute.

## 3. Jointing Methods

### 3.1 MecFlow Electrofusion Couplings

The Electrofusion fittings are available from 32mm to 160mm, the pipe should be cut square and scraped to de-oxidise the pipe surface. Using a clean cotton cloth wipe the internal surface and ends of the scraped de-oxidised pipes, pipes should be marked to register insertion depth and fully clamped prior to the electrofusion cycle.

### 3.2 Connection to other materials

Flanged connections are available in the MecFlow range with the following weld connections:

- Socket fusion welding – Ø32mm to Ø125mm
- Butt fusion welding – Ø160mm

Threaded Connections are available in BSPM and BSPF thread types:

- Socket fusion threaded connections – 32mm to 3/4" up to 110mm to 4"

## 4. Installation Guidance

MecFlow is available as a bespoke design specific to the project needs. For further information on this service please contact the Polypipe Advantage team on:

Tel- 01622 795200 Email- [buildingservices.technical@polypipe.com](mailto:buildingservices.technical@polypipe.com)

The MecFlow system will be supplied with electrofusion couplings for simple jointing on site. The premanufactured sections, bends, tees etc can be supplied with extended pipe tails for adaptability on site before electrofusion. Any offcuts can be returned via the supply chain for recycling. Sections can also be terminated in BSP thread, unions or flanges to connect to premanufactured manifolds, valves and pump sets.

The pipework should be insulated (by others) in accordance with the application of use and specification requirements.

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MecFlow products are supplied with minimal cardboard box and/or plastic packaging that can be recycled at the end of its use. The packaging is used to facilitate logistics and protect the product during transit.

For bracketry please refer to the MecFlow technical brochure for use of rubber lined Isophonic dual configured brackets to act as a guide or anchor. Alternatively contact our Polypipe Advantage team on:

Tel- 01622 795200 Email- [buildingservices.technical@polypipe.com](mailto:buildingservices.technical@polypipe.com)

## 5. Testing

### 5.1. Testing

The MecFlow product will be supplied with some elements of pre-tested joints for fabricated sections of pipework. Post-installation testing shall be carried out in line with the specification requirements to ensure all Electrofusion couplings have been fired correctly as per manufacturer guidelines.

## 6. Chlorine Dioxide

### 6.1. Chlorine Dioxide

The use of chlorine dioxide as a disinfectant is permitted however the level of constant dosing must be strictly controlled and shall not exceed 0.5mg/l. Guidance as to the use of this chemical as a disinfectant is provided in BS EN 806 and the addendum BS 8558:2015. Further guidance is provided in ACoP L8.

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