



Launched in 1975, the Colloid-a-tron is our flagship model, based on Fluid Dynamics' highly successful **catalytic water conditioning systems**. Designed for the **unique requirements of heavy industry**, it's been proven in industrial settings for over **48 years**, with **250,00+ installations** across more than 50 countries.

Benefits

- ✓ Prolongs the life of water using systems / applications
- ✓ Reduces energy consumption, energy bills and improves your environmental footprint
- ✓ Very versatile - built for heavy industrial settings
- ✓ 10 year pro-rata warranty
- ✓ Made with corrosion resistant stainless steel
- ✓ Reduced scale in systems & pumps
- ✓ Reduced bacteria growth e.g. Legionella
- ✓ Reduced carbon emissions & environmental footprints
- ✓ Reduced downtime

Materials of construction

- ✓ Stainless steel housing
- ✓ Non-sacrificial catalytic semi precious alloy (lead free)

Life expectancy

- ✓ Dependant on use, a minimum of 10 years service can be expected, however it is not uncommon for our conditioners to last between 15-25 years +

Applications

- ✓ Cooling towers
- ✓ Steam boiler systems
- ✓ Reverse osmosis pre-treatment
- ✓ Heat exchangers
- ✓ Mixing valves
- ✓ Recirculating systems
- ✓ **Much more!**

Regulatory

- ✓ WRAS Approval No: 1812309

CLIENTS





Green technology

No power
No electrical connections
No chemicals
No consumables
No waste water



Peace of mind

No maintenance
No servicing
No earthing or bonding required
No control box to mount

INSTALLATION GUIDE

Sizing

- ✓ Size matters - selecting the right conditioner is critical
- ✓ Selecting the wrong size conditioner - including using a larger diameter than needed - can compromise water delivery and affect treatment quality
- ✓ Conditioner size should be selected based on **flow rate**
- ✓ In general applications where the flow rate is known to be low or there is relatively heavy scale build-up inside the pipe already. In this instance, a conditioner 1 size smaller than the pipe diameter is recommended.

Fitting options

Fluid Dynamics has a wide range of connection options available - please ask.

COMMON THREADS

UK: BSPT CONNECTIONS (DN15 TO DN50)

½" to 2" BSPT (British Standard Pipe Tapered) threads
These conform to BSP (British Standard Tapered)

USA: NPT CONNECTIONS (DN15 TO DN50)

½" to 2" NPT (National Pipe Taper) Male & Female Threads
These conform to ANSI / ASME Standard B1.20.1

FLANGES - DN65 UPWARDS (2.5" +)

A wide range of flanges can be specified as the fitting option required

UK

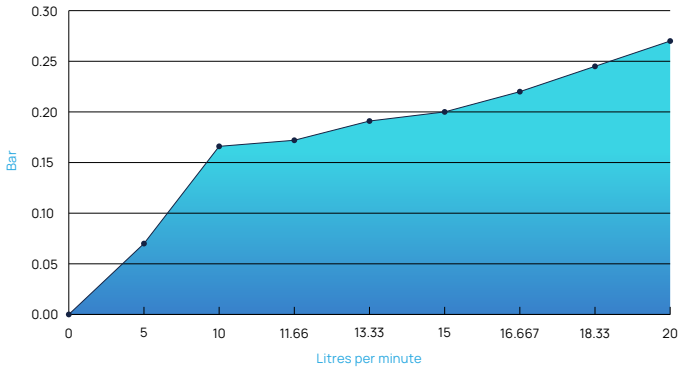
Standard fitting in the UK is the BS4504 PN16 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

USA

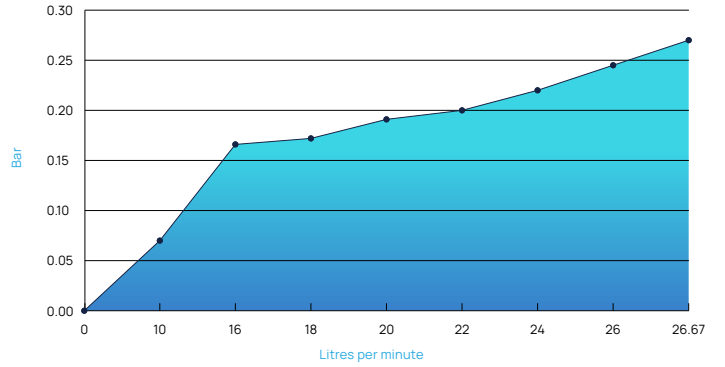
The standard flange fitting in the USA is ASA 150 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

PRESSURE LOSSES

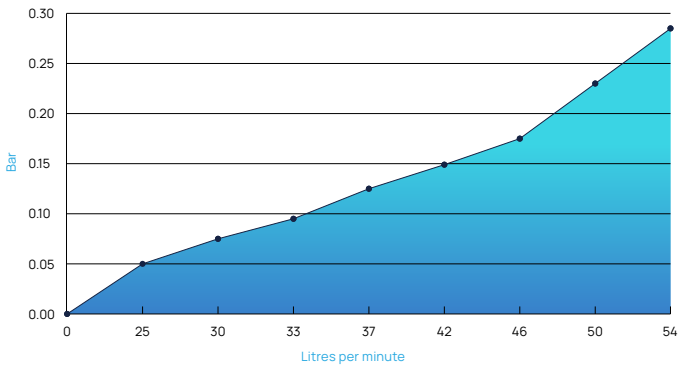
DN10 (3/8") PRESSURE DROP GRAPH



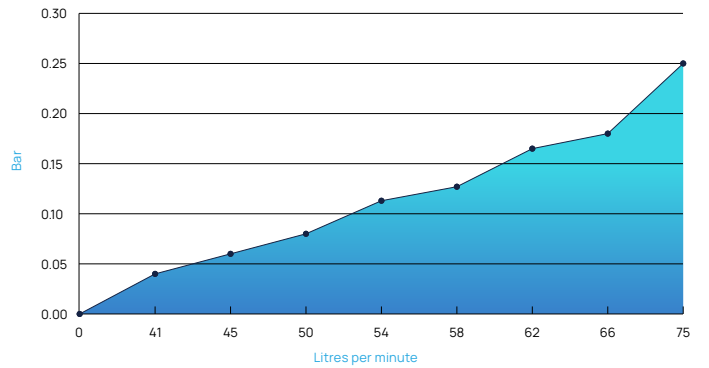
DN15 (1/2") PRESSURE DROP GRAPH



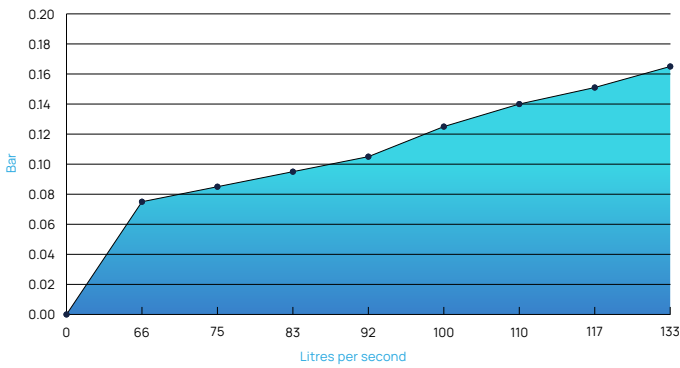
DN20 (3/4") PRESSURE DROP GRAPH



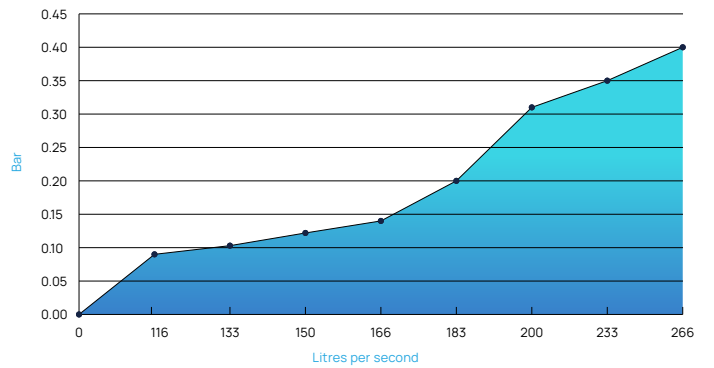
DN25 (1") PRESSURE DROP GRAPH



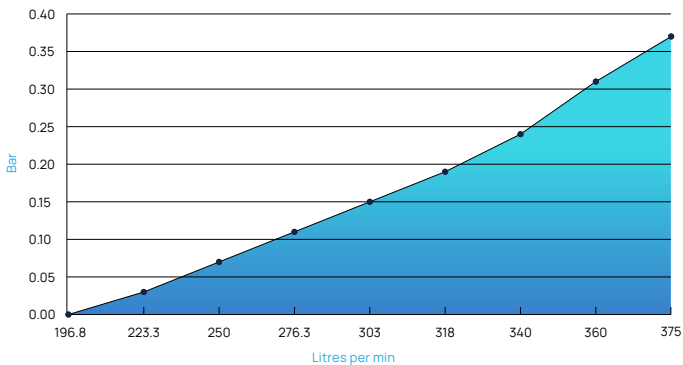
DN32 (1 1/4") PRESSURE DROP GRAPH



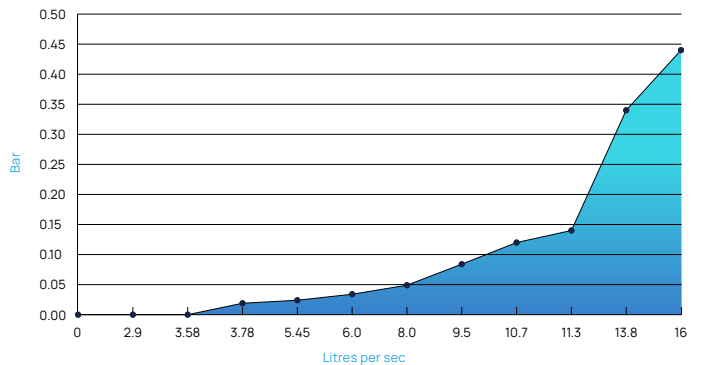
DN40 (1 1/2") PRESSURE DROP GRAPH



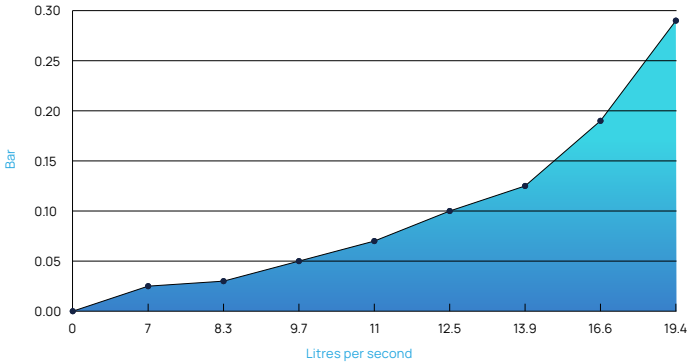
DN50 PRESSURE DROP GRAPH



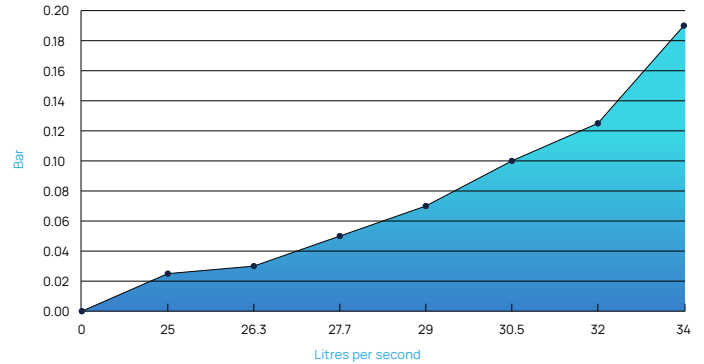
DN65 PRESSURE DROP GRAPH



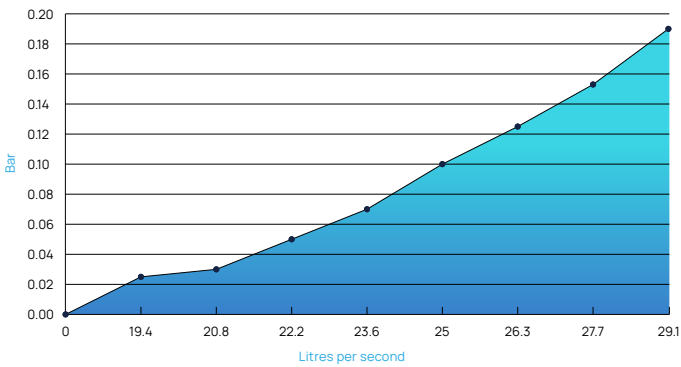
DN80 (3") PRESSURE DROP GRAPH



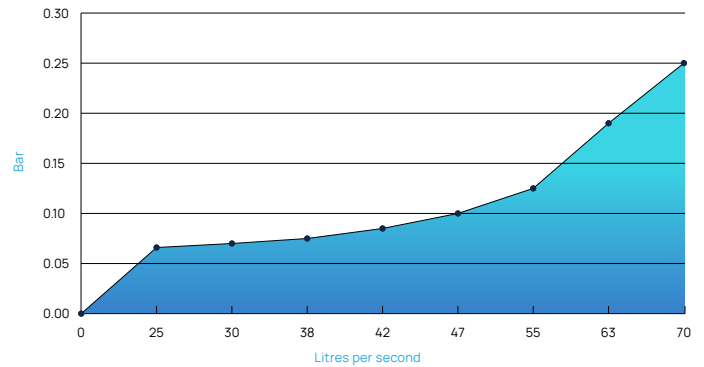
DN100 (4") PRESSURE DROP GRAPH



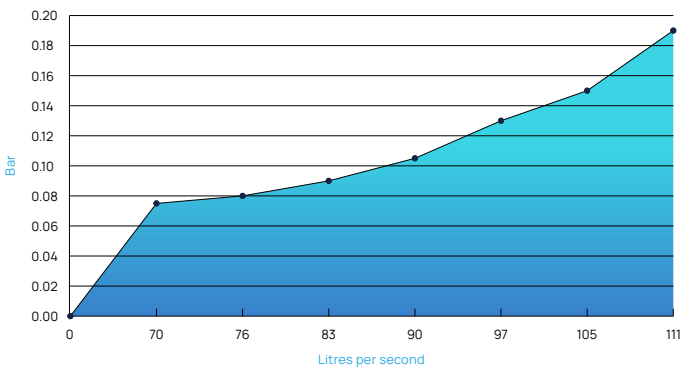
DN125 (5") PRESSURE DROP GRAPH



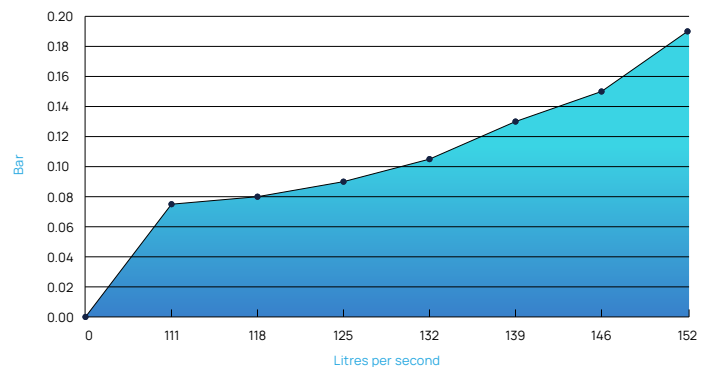
DN150 (6") PRESSURE DROP GRAPH



DN200 (8") PRESSURE DROP GRAPH



DN250 (10") PRESSURE DROP GRAPH



- All of our systems have internal components designed to minimise resistance as water passes through
- Correctly installed conditioners will have a negligible impact on pressure drop - to a maximum of 2%

CERTIFIED BY



PROVEN BY



| Product code | Description | Connection type | Suitable for pipe diameter | Max temp (°C) | Max pressure* (bar) | Optimal flow range (lpm) | Length (mm) | Weight (kg) | Housing materials |
|--------------|--------------------|------------------|----------------------------|---------------|---------------------|--------------------------|-------------|-------------|---|
| CAT10BS | Colloid-A-Tron 10 | ¾" BSPT | ¾" (DN10) ½" (DN15) | 100 | 16 | 1-12 | 215 | 0.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT15BS | Colloid-A-Tron 15 | ½" BSPT | ½" (DN15) ¾" (DN20) | 100 | 16 | 8-25 | 215 | 0.3 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT20BS | Colloid-A-Tron 20 | ¾" BSPT | ¾" (DN20) 1" (DN25) | 100 | 16 | 24-54 | 245 | 0.5 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT25BS | Colloid-A-Tron 25 | 1" BSPT | 1" (DN25) 1 ¼" (DN32) | 100 | 16 | 45-90 | 260 | 0.8 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT32BS | Colloid-A-Tron 32 | 1 ¼" BSPT | 1 ¼" (DN32) 1 ½" (DN40) | 100 | 16 | 85-120 | 550 | 2.4 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT40BS | Colloid-A-Tron 40 | 1 ½" BSPT | 1 ½" (DN40) 2" (DN50) | 100 | 16 | 110-210 | 550 | 2.8 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT50BS | Colloid-A-Tron 50 | 2" BSPT | 2" (DN50) 2 ½" (DN65) | 100 | 16 | 170-330 | 550 | 3.3 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT65PN | Colloid-A-Tron 65 | 2 ½" PN16 Flange | 2 ½" (DN65) 3" (DN80) | 100 | 16 | 310-675 | 913 | 13.4 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT80PN | Colloid-A-Tron 80 | 3" PN16 Flange | 3" (DN80) 4" (DN100) | 100 | 16 | 600-1175 | 913 | 19.0 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT100PN | Colloid-A-Tron 100 | 4" PN16 Flange | 4" (DN100) 5" (DN125) | 100 | 16 | 950-1750 | 913 | 25.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT125PN | Colloid-A-Tron 125 | 5" PN16 Flange | 5" (DN125) 6" (DN150) | 100 | 16 | 1500-2150 | 913 | 31.4 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT150PN | Colloid-A-Tron 150 | 6" PN16 Flange | 6" (DN150) 8" (DN200) | 100 | 16 | 2000-4150 | 913 | 38.1 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |

| Product code | Description | Connection type | Suitable for pipe diameter | Max temp (°C) | Max pressure* (bar) | Optimal flow range (lpm) | Length (mm) | Weight (kg) | Housing materials |
|--------------|--------------------|---------------------|----------------------------|---------------|---------------------|--------------------------|-------------|-------------|---|
| CAT200PN | Colloid-A-Tron 200 | 8" PN16 Flange | 8" (DN200) 10" (DN250) | 100 | 16 | 4000-6660 | 913 | 56.6 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT250PN | Colloid-A-Tron 250 | 10" PN16 Flange | 10" (DN250) 12" (DN300) | 100 | 16 | 6500-9960 | 913 | 84.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT300PN | Colloid-A-Tron 300 | 12" PN16 Flange | 12" (DN300) 14" (DN350) | 100 | 16 | 9500-11700 | 913 | 124.1 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT350PN | Colloid-A-Tron 350 | 14" PN16 Flange | 14" (DN350) 16" (DN400) | 100 | 16 | 11500-13200 | 913 | 171.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT400PN | Colloid-A-Tron 400 | 16" PN16 Flange | 16" (DN400) 18" (DN450) | 100 | 16 | 12500-14700 | 913 | 218.6 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT65US | Colloid-A-Tron 65 | 2 ½" ASA 150 Flange | 2 ½" (DN65) 3" (DN80) | 100 | 16 | 24-54 | 913 | 13.4 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT80US | Colloid-A-Tron 80 | 3" ASA 150 Flange | 3" (DN80) 4" (DN100) | 100 | 16 | 45-90 | 913 | 19.0 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT100US | Colloid-A-Tron 100 | 4" ASA 150 Flange | 4" (DN100) 5" (DN125) | 100 | 16 | 85-120 | 913 | 25.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT125US | Colloid-A-Tron 125 | 5" ASA 150 Flange | 5" (DN125) 6" (DN150) | 100 | 16 | 110-210 | 913 | 31.4 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT150US | Colloid-A-Tron 150 | 6" ASA 150 Flange | 6" (DN150) 8" (DN200) | 100 | 16 | 170-330 | 913 | 38.1 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT200US | Colloid-A-Tron 200 | 8" ASA 150 Flange | 8" (DN200) 10" (DN250) | 100 | 16 | 310-675 | 913 | 56.6 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT250US | Colloid-A-Tron 250 | 10" ASA 150 Flange | 10" (DN250) 12" (DN300) | 100 | 16 | 600-1175 | 913 | 84.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |

| Product code | Description | Connection type | Suitable for pipe diameter | Max temp (°C) | Max pressure* (bar) | Optimal flow range (lpm) | Length (mm) | Weight (kg) | Housing materials |
|-----------------|--------------------|--------------------|----------------------------|---------------|---------------------|--------------------------|-------------|-------------|---|
| CAT300US | Colloid-A-Tron 300 | 12" ASA 150 Flange | 12" (DN300) 14" (DN350) | 100 | 16 | 950-1750 | 913 | 124.1 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT350US | Colloid-A-Tron 350 | 14" ASA 150 Flange | 14" (DN350) 16" (DN400) | 100 | 16 | 1500-2150 | 913 | 171.2 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |
| CAT400US | Colloid-A-Tron 400 | 16" ASA 150 Flange | 16" (DN400) 18" (DN450) | 100 | 16 | 2000- | 913 | 218.6 | External: stainless steel housing & connections. Internal: FD catalytic galvanic alloy |

