



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: 240102702

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

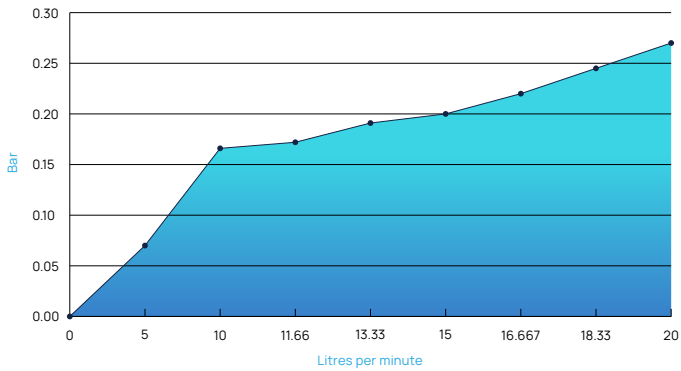
Standard fitting in the UK is the BS4504 PN16 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

USA

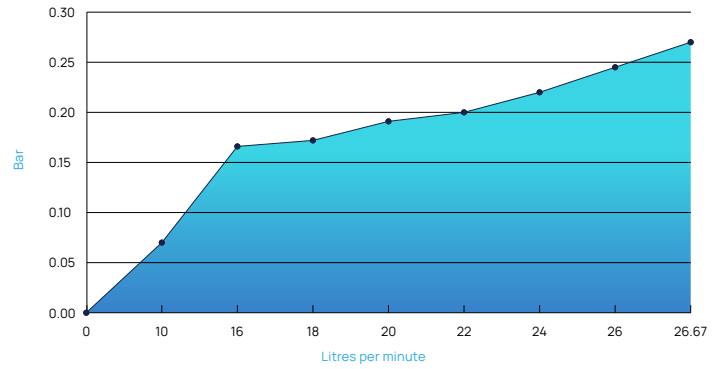
The standard flange fitting in the USA is ASA 150 stainless steel flanges
Higher pressure ratings are available upon request
Maximum operating temperature = 120 degree celsius

PRESSURE LOSSES

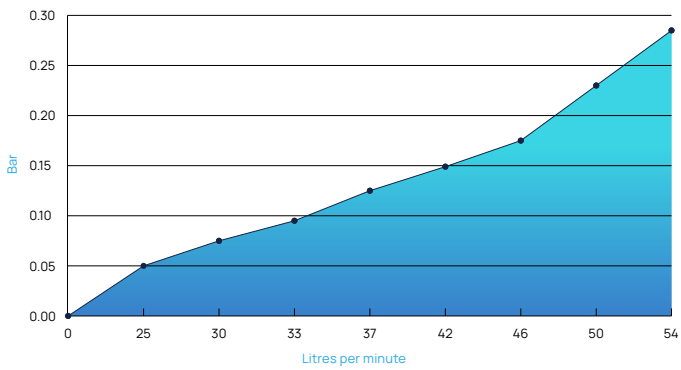
DN10 (3/8") PRESSURE DROP GRAPH



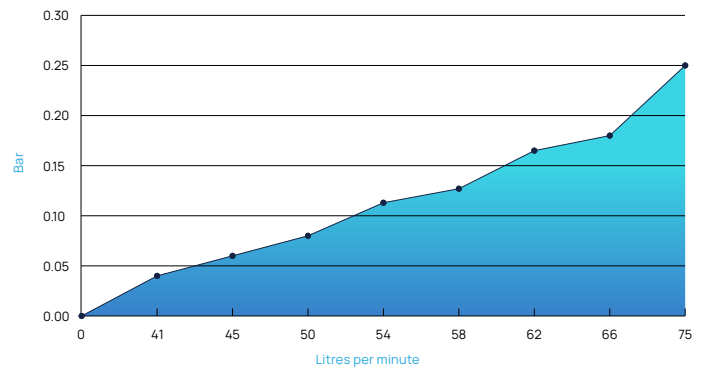
DN15 (1/2") PRESSURE DROP GRAPH



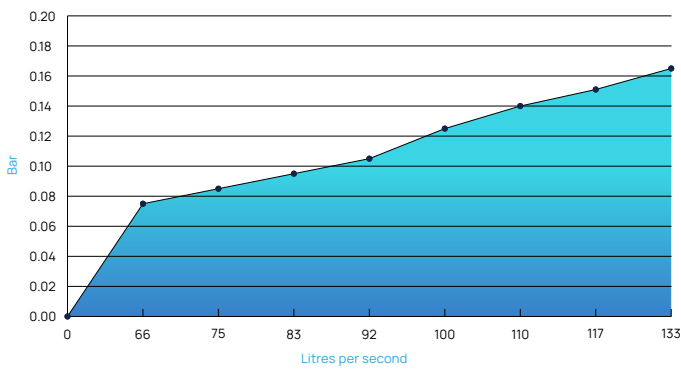
DN20 (3/4") PRESSURE DROP GRAPH



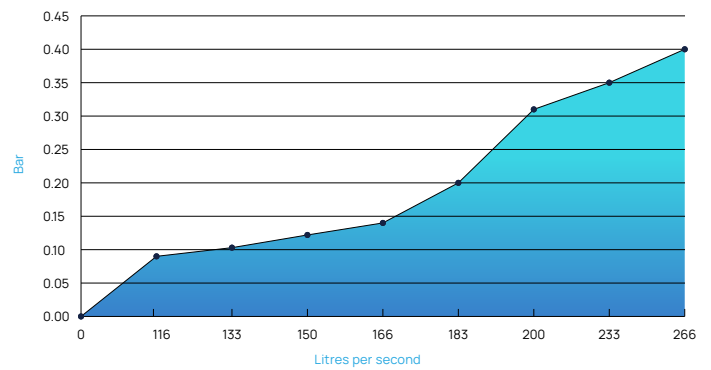
DN25 (1") PRESSURE DROP GRAPH



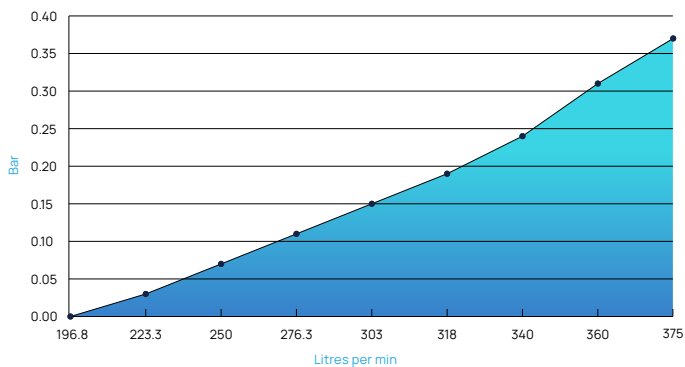
DN32 (1 1/4") PRESSURE DROP GRAPH



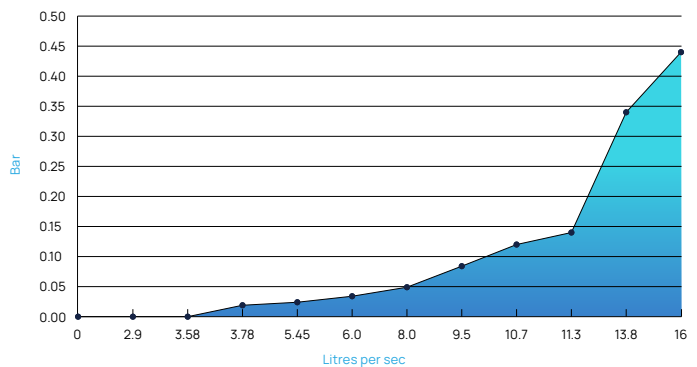
DN40 (1 1/2") PRESSURE DROP GRAPH



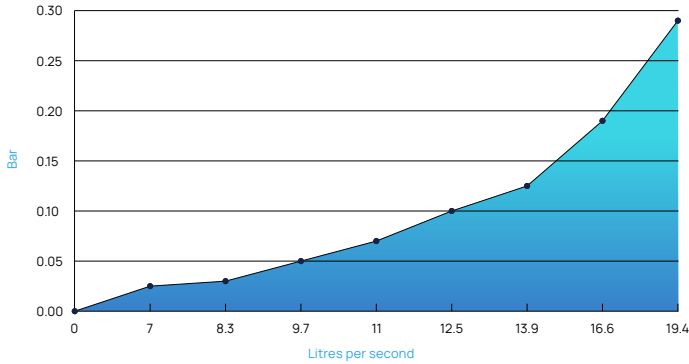
DN50 PRESSURE DROP GRAPH



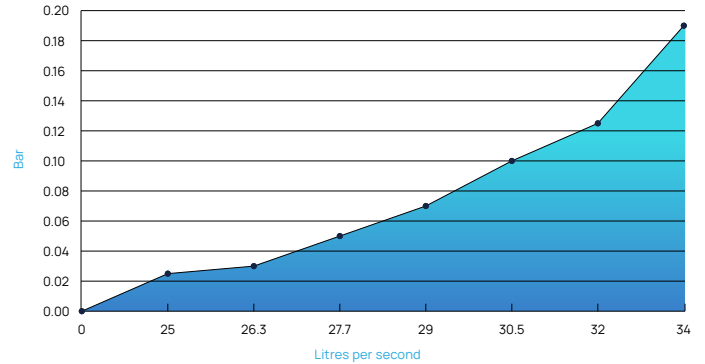
DN65 PRESSURE DROP GRAPH



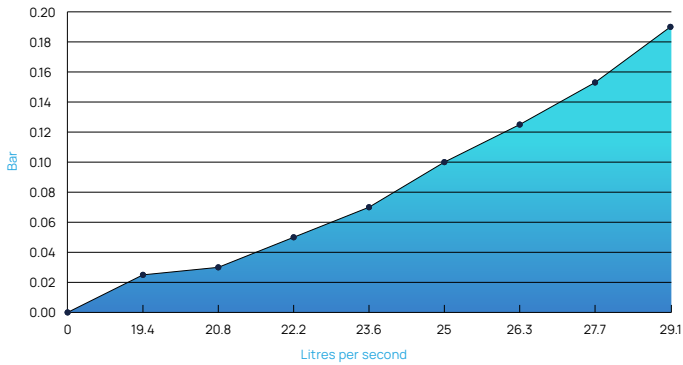
DN80 (3") PRESSURE DROP GRAPH



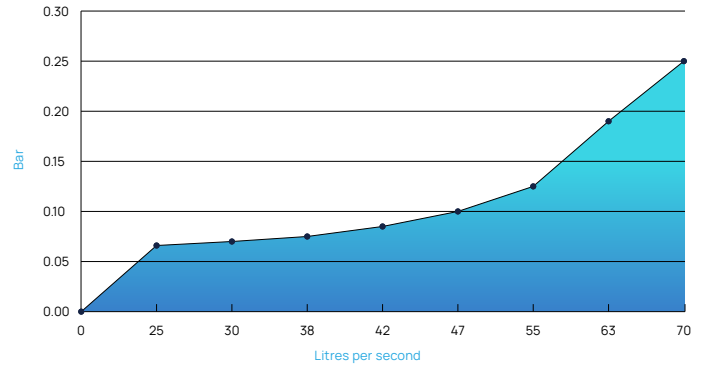
DN100 (4") PRESSURE DROP GRAPH



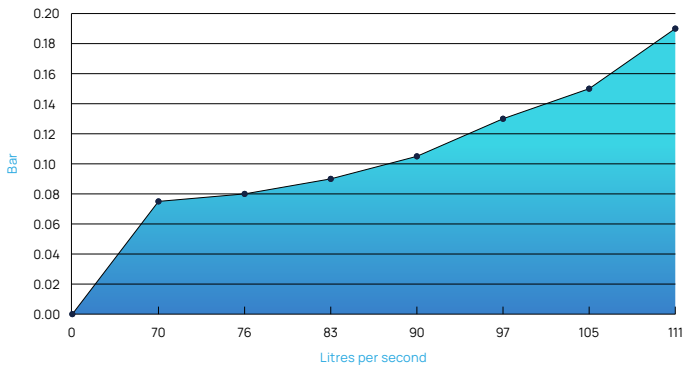
DN125 (5") PRESSURE DROP GRAPH



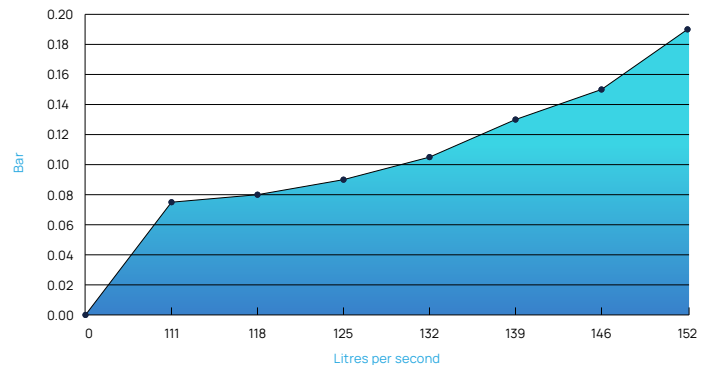
DN150 (6") PRESSURE DROP GRAPH



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

