

**Carbon Towers
BT Series
Product Description/Equipment Specifications**

General Description:

FLEXX™ offers a complete line of standard stainless steel carbon tower units designed for applications that require hot water sanitization or steam vapor stripping such as the Beverage and Biopharmaceutical industries. BT Carbon Towers are very efficient at controlling chlorine, organics, and taste in incoming feed waters. The BT Series designation refers to a line of carbon towers with stainless steel pressure vessels, face piping, and internal distributors. Design criteria of the BT Series Carbon Towers places emphasis on cost saving features of vessel fabrication for budget sensitive applications, as a result, vessels may have multiple vertical seams. All vessels and companion piping are offered in either 304L Stainless Steel or, for additional corrosion resistance, in 316L Stainless Steel. All units are available automated with Programmable Logic Controller (PLC) or, alternately, with fully manual operation. Carbon media and other optional equipment can be easily selected and ordered to address your specific requirements. Flow rates have been sized at 1 gpm / ft³ (134 lpm / m³) and 2 gpm / ft³ (268 lpm / m³) forward flow offering greater flexibility to the product line.

Product Overview:

Model Number	Nominal Service Flow Rate	
	@ 1.0 gpm/ft ³ (134 lpm/m ³) (Option 1)	@ 2.0 gpm/ft ³ (268 lpm/m ³) (Option 2)
BT005	5 gpm (18 lpm)	10 gpm (37 lpm)
BT008	8 gpm (30 lpm)	16 gpm (60 lpm)
BT012	12 gpm (45 lpm)	24 gpm (90 lpm)
BT018	18 gpm (68 lpm)	36 gpm (136 lpm)
BT024	24 gpm (90 lpm)	48 gpm (181 lpm)
BT032	32 gpm (121 lpm)	64 gpm (242 lpm)
BT040	40 gpm (151 lpm)	80 gpm (302 lpm)
BT050	50 gpm (189 lpm)	100 gpm (378 lpm)
BT075	75 gpm (283 lpm)	150 gpm (567 lpm)
BT100	100 gpm (378 lpm)	200 gpm (757 lpm)
BT150	150 gpm (567 lpm)	300 gpm (1135 lpm)
BT200	200 gpm (757 lpm)	400 gpm (1514 lpm)
BT250	250 gpm (946 lpm)	500 gpm (1892 lpm)
BT300	300 gpm (1,135 lpm)	600 gpm (2271 lpm)
BT350	350 gpm (1,324 lpm)	700 gpm (2649 lpm)
BT400	400 gpm (1514 lpm)	800 gpm (3028 lpm)
BT450	450 gpm (1703 lpm)	900 gpm (3406 lpm)
BT500	500 gpm (1892 lpm)	1000 gpm (3785 lpm)

Design Parameters:

Configuration	Down flow
Feed Water Temperature	40-100 °F (5-37 °C)
Bed expansion (backwash)	30-50% (50% minimum freeboard available)
Steaming operation	Introduced into either top or bottom of the vessel

General Specifications:

Vessel configuration	316L or 304L stainless steel, vertical configuration
Vessel pressure rating	65 or 100 psig (4.48 or 6.89 bar) ASME code
Vessel access	SST grade equivalent to vessel, access way in top head
	11" x 15" (28cm x 38cm): 20" – 36" (50cm – 92 cm) vessel diameter
	14" x 18" (36cm x 46cm): all other vessels
Vessel leg design	Contoured, 304 SST
Inlet distributor	Schedule 10, SST grade equivalent to vessel
Outlet distributor	Schedule 40 pipe, well screens, SST grade equivalent to vessel
Face Piping	Schedule 10, butt weld, SST grade equivalent to vessel
Process valves	Butterfly, coated cast iron body, SS disc and stem
Steam/vent valves	Ball, manual operation, SST grade equivalent to vessel
Sample valves	Ball, manual operation, threaded, SST grade equivalent to vessel
Pressure gauges	0-160 psig (0-11.0 bar), 316 SST, 2-1/2" (50.8mm) dial, threaded
Pneumatic tubing	Polyethylene tubing
Pneumatic fittings	Brass

Controls Specifications:

Controller Type	Siemens Programmable Logic Controller (PLC) (N/A for manual operation)
Enclosure type	Steel, NEMA 4, (N/A for manual operation)
Control voltage	Single phase, (N/A for manual operation)
Valve operation	Automatic, Pneumatic (N/A for manual operation)

Interface Communication Specifications:

Out-of-service	Single phase signal initiated while the unit is unavailable for service (backwash, rinse, steaming), (N/A for manual operation)
----------------	---

Operating Limits:

Minimum feed pressure	25 psig (1.7 bar)
Maximum feed pressure	Limit of ASME stamp: 65 or 100 psig (4.48 or 6.89 bar)
Minimum feed temperature	40 °F (5 °C)
Maximum feed temperature	100 °F (37 °C)
Steam pressure	15 psig (1.03 bar)

Factory Procedures:

Assembly	Fully assembled at the factory
Wiring	Fully wired at the factory
Testing	Hydrostatic pressure test, Electrical integrity test (where applicable), Factory simulated functional test
Shipping preparation	Valves and controls packed in-place. Carbon Vessels typically ship tarpred on flatbed truck (some components may be removed for protection prior to shipment) (See "Additional Options" at end of specification regarding shipping preparation for export)

***Regulations and Standards:**

Quality System	Factory procedures
Stainless Steel Vessel Welding	American Society of Mechanical Engineers (ASME) section VIII Div.1
Stainless Steel Vessel Finish	Interior: Mill Finish Exterior: Bead Blasted (Additional finishes available upon request)
Stainless Steel Pipe Weld	ASME Section IV
Stainless Steel Face Pipe Finish	Interior: Mill Finish Exterior: Mill Finish, passivated using "SURFOX" Passivation
Electrical and Controls	Underwriters' Laboratory (UL), National Electrical Code (NEC) (where applicable)
NEMA rating	NEMA 4 (N/A for manual operation)
Seismic rating	None (Specific zone calculations can be requested)

* Global specifications available upon request

Documentation Package (Included with standard Operation & Maintenance Manual):

Documents	Installation procedures, start-up procedures, operation procedures, functional description, spare parts list, technical service and support
Drawings	Process & Instrumentation Diagram (P&ID), Electrical Schematics (where applicable)
Software	Installed at factory prior to testing (where applicable)
Quality Documents	Quality Assurance data reports

Flow Rate Specifications @ 1.0 gpm/ft³ (134 lpm/m³) Forward Flow:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Process in / out: gpm (lpm)	5 (18)	8 (30)	12 (45)	18 (68)	24 (90)	32 (121)	40 (151)	50 (189)	75 (283)	100 (378)	150 (567)	200 (757)	250 (946)	300 (1135)	350 (1324)	400 (1514)	450 (1703)	500 (1892)
*Backwash: gpm (lpm)	22 (84)	31 (118)	31 (118)	49 (186)	49 (186)	71 (269)	71 (269)	96 (364)	96 (364)	126 (467)	196 (742)	283 (1072)	385 (1458)	385 (1458)	442 (1674)	503 (1905)	636 (2408)	636 (2408)
Rinse: gpm (lpm)	5 (18)	8 (30)	12 (45)	18 (68)	24 (90)	32 (121)	40 (151)	50 (189)	75 (283)	100 (378)	150 (567)	200 (757)	250 (946)	300 (1135)	350 (1324)	400 (1514)	450 (1703)	500 (1892)

* Requirements vary with carbon selection, water temperature, and desired bed expansion. Data based on a backwash flow rate of 10 gpm/ft² (407 lpm/m²).

Flow Rate Specifications @ 2.0 gpm/ft³ (268 lpm/m³) Forward Flow:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Process in / out: gpm (lpm)	10 (37)	16 (60)	24 (90)	36 (136)	48 (181)	64 (242)	80 (302)	100 (378)	150 (567)	200 (757)	300 (1135)	400 (1514)	500 (1892)	600 (2271)	700 (2649)	800 (3028)	900 (3406)	1000 (3785)
*Backwash: gpm (lpm)	22 (84)	31 (118)	31 (118)	49 (186)	49 (186)	71 (269)	71 (269)	96 (364)	96 (364)	126 (467)	196 (742)	283 (1072)	385 (1458)	385 (1458)	442 (1674)	503 (1905)	636 (2408)	636 (2408)
Rinse: gpm (lpm)	10 (36)	16 (60)	24 (90)	36 (136)	48 (181)	64 (242)	80 (302)	100 (378)	150 (567)	200 (757)	300 (1135)	400 (1514)	500 (1892)	600 (2271)	700 (2649)	800 (3028)	900 (3406)	1000 (3785)

* Requirements vary with carbon selection, water temperature, and desired bed expansion. Data based on a backwash flow rate of 10 gpm/ft² (407 lpm/m²).

Vessel Configuration Specifications:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Vessel diameter: in (cm)	20 (51)	24 (61)	24 (61)	30 (77)	30 (77)	36 (92)	36 (92)	42 (107)	42 (107)	48 (122)	60 (153)	72 (183)	84 (214)	84 (214)	90 (229)	96 (244)	108 (275)	108 (275)
Vessel straight side: in (cm)	48 (122)	48 (122)	72 (183)	60 (153)	84 (214)	78 (198)	96 (244)	84 (214)	132 (335)	132 (335)	126 (320)	114 (290)	96 (244)	120 (305)	120 (305)	120 (305)	102 (305)	120 (305)
*Media Volume: ft ³ (m ³)	6 (.17)	9 (.25)	14 (.39)	19 (.53)	25 (.70)	35 (.99)	42 (1.1)	51 (1.4)	77 (2.1)	101 (2.8)	155 (4.3)	208 (5.8)	251 (7.1)	302 (8.5)	354 (10.0)	406 (11.4)	460 (13.0)	524 (14.8)
*Designed Media Weight: lbs (kg)	174 (79)	261 (118)	406 (184)	551 (250)	725 (328)	1015 (460)	1218 (553)	1479 (671)	2233 (1013)	2929 (1329)	4495 (2039)	6032 (2736)	7279 (3302)	8758 (3973)	10266 (4657)	11774 (5341)	13340 (6051)	15196 (6893)

* Media is not included with the standard unit. Media weight calculations are based on 29 lbs/ft³ (464kg/m³)

Pipe Connection Specifications for 1.0 gpm/ft³ (134 lpm/m³) Forward Flow vessel configuration:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Process water inlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	4 (100)	4 (100)	4 (100)	6 (150)	6 (150)	6 (150)
Process water outlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	4 (100)	4 (100)	4 (100)	6 (150)	6 (150)	6 (150)
Backwash outlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	4 (100)	4 (100)	4 (100)	6 (150)	6 (150)	6 (150)
Process out to drain: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	4 (100)	4 (100)	4 (100)	6 (150)	6 (150)	6 (150)
Steam inlet: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Condensate out: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Pressure relief: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Vessel drain: threaded NPS/in (DN/mm)	3/4 (20)	1 (25)	1 (25)	1 (25)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Media sluice inlet: flange NPS/in (DN/mm)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Media sluice outlet: flange NPS/in (DN/mm)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Vent / Steam outlet: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)

Pipe Connection Specifications for 2.0 gpm/ft³ (268 lpm/m³) Forward Flow vessel configuration:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Process water inlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	6 (150)	6 (150)	6 (150)	6 (150)	8 (200)	8 (200)	8 (200)	8 (200)
Process water outlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	6 (150)	6 (150)	6 (150)	6 (150)	8 (200)	8 (200)	8 (200)	8 (200)
Backwash outlet: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	6 (150)	6 (150)	6 (150)	6 (150)	8 (200)	8 (200)	8 (200)	8 (200)
Process out to drain: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2-1/2 (65)	3 (80)	4 (100)	6 (150)	6 (150)	6 (150)	6 (150)	8 (200)	8 (200)	8 (200)	8 (200)
Steam inlet: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Condensate out: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Pressure relief: flange NPS/in (DN/mm)	1 (25)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Vessel drain: threaded NPS/in (DN/mm)	3/4 (20)	1 (25)	1 (25)	1 (25)	1 (25)	1-1/2 (40)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Media sluice inlet: flange NPS/in (DN/mm)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Media sluice outlet: flange NPS/in (DN/mm)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)
Vent / Steam outlet: threaded NPS/in (DN/mm)	1/2 (15)	3/4 (20)	3/4 (20)	3/4 (20)	3/4 (20)	1 (25)	1 (25)	1-1/2 (40)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)	2 (50)

Utility Requirements:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
*Waste Drain – Max. gpm (lpm)	22 (84)	31 (118)	31 (118)	49 (186)	49 (186)	71 (269)	71 (269)	96 (364)	96 (364)	126 (467)	196 (742)	283 (1072)	385 (1458)	385 (1458)	442 (1674)	503 (1905)	636 (2408)	636 (2408)
**Electrical Service	Single Phase																	
**Amperage draw	5																	
**Compressed Air	85 psig (5.86 bar) Min. / 150 psig (10.3 bar) Max																	
Floor Drain	A floor drain (in addition to waste drain) should be supplied for general maintenance purposes.																	
Steam	15 psi (1.03 bar) @ 1,000 lbs (454 kg) per hour																	

* Requirements vary with carbon selection, water temperature, and desired bed expansion. Data based on a backwash flow rate of 10 gpm/ft² (407 lpm/m²).

** Electrical and Air requirements are for units with automatic operation only.

Physical Dimension Specifications:

Vessel Designation	005	008	012	018	024	032	040	050	075	100	150	200	250	300	350	400	450	500
Length: in (cm)	40 (102)	44 (112)	44 (112)	50 (127)	50 (127)	56 (143)	56 (143)	62 (158)	62 (158)	68 (173)	80 (204)	92 (234)	104 (265)	104 (265)	110 (280)	116 (295)	128 (326)	128 (326)
Width: in (cm)	30 (77)	34 (87)	34 (87)	40 (102)	40 (102)	46 (117)	46 (117)	52 (133)	52 (133)	58 (148)	70 (178)	82 (209)	94 (239)	94 (239)	100 (254)	106 (270)	118 (300)	118 (300)
Height: in (cm)	84 (214)	84 (214)	108 (274)	100 (254)	124 (315)	120 (305)	140 (356)	132 (336)	180 (458)	182 (463)	180 (458)	172 (437)	158 (402)	182 (463)	184 (468)	186 (473)	172 (437)	190 (483)
65# units: Shipping wt lbs (kg)	204 (93)	306 (139)	476 (216)	646 (294)	850 (386)	1190 (540)	1428 (648)	1734 (787)	2310 (1048)	2828 (1283)	3720 (1688)	4160 (1887)	5020 (2277)	5738 (2602)	7434 (3372)	8526 (3868)	9660 (4382)	11004 (4992)
65# units: Operating wt with media: lbs (kg)	864 (392)	1258 (571)	1821 (826)	2408 (1093)	3222 (1462)	4430 (2010)	5336 (2421)	6444 (2923)	9424 (4275)	12580 (5707)	17873 (8108)	23006 (10436)	27256 (12364)	32875 (14912)	38780 (17591)	44456 (20165)	49740 (22562)	57046 (25876)
100# units: Shipping wt lbs (kg)	228 (104)	342 (155)	532 (241)	722 (328)	950 (431)	1330 (604)	912 (414)	1938 (880)	2618 (1188)	3232 (1466)	4340 (1969)	4992 (2265)	6024 (2733)	6946 (3151)	8850 (4015)	10150 (4604)	11500 (5217)	13100 (5943)
100# units: Operating wt with media: lbs (kg)	888 (403)	1294 (587)	1877 (852)	2484 (1127)	3322 (1507)	4570 (2073)	4820 (2187)	6648 (3016)	9732 (4415)	12984 (5890)	18493 (8839)	23838 (10813)	28260 (12819)	34083 (15460)	40196 (18233)	46080 (20902)	51580 (23397)	59142 (26827)
Vertical Clearance req'd above unit: in (cm)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)	48 (122)

BT Carbon Tower Selection Matrix

Select Select Select Select Select Select

EXAMPLE PART NUMBER

BT 050 A 6 A 2

FIELD 1	BT Series Carbon Tower:	
	Code	Code Description
	BT	BT Series Carbon Tower

FIELD 2	Vessel Designation: Enter the code for the appropriate vessel designation rating for your BT Series Carbon Tower.		
	Code	Code Description	
		Flow Rate @: 1 gpm/ft³ (134 lpm/m³)	Flow Rate @ 2 gpm/ft³ (268 lpm/m³)
	005	5 gpm (189 lpm)	10 gpm (37 lpm)
	008	8 gpm (30 lpm)	16 gpm (60 lpm)
	012	12 gpm (45 lpm)	24 gpm (90 lpm)
	018	18 gpm (68 lpm)	36 gpm (136 lpm)
	024	24 gpm (90 lpm)	48 gpm (181 lpm)
	032	32 gpm (121 lpm)	64 gpm (242 lpm)
	040	40 gpm (151 lpm)	80 gpm (302 lpm)
	050	50 gpm (189 lpm)	100 gpm (378 lpm)
	075	75 gpm (283 lpm)	150 gpm (567 lpm)
	100	100 gpm (378 lpm)	200 gpm (757 lpm)
	150	150 gpm (567 lpm)	300 gpm (1135 lpm)
	200	200 gpm (757 lpm)	400 gpm (1514 lpm)
	250	250 gpm (946 lpm)	500 gpm (1892 lpm)
300	300 gpm (1135 lpm)	600 gpm (2271 lpm)	
350	350 gpm (1324 lpm)	700 gpm (2649 lpm)	
400	400 gpm (1514 lpm)	800 gpm (3028 lpm)	
450	450 gpm (1703 lpm)	900 gpm (3406 lpm)	
500	500 gpm (1892 lpm)	1000 gpm (3785 lpm)	

FIELD 3	Vessel Pressure Rating: Enter the code for the desired pressure rating for your BT Series Carbon Tower.	
	Code	Code Description
	A	100 psig ASME Code
	B	65 psig ASME Code

FIELD 4	Vessel and Piping Material: Enter the code for the desired vessel and piping material for your BT Series Carbon Tower.	
	Code	Code Description
	6	316L Stainless Steel
	4	304L Stainless Steel

FIELD 5	Unit Operation: Enter the code for the desired operation of your BT Series Carbon Tower.	
	Code	Code Description
	A	Automatic Operation: PLC (Fixed I/O)
	M	Manual Operation

FIELD 6	Forward Flow Rate Option: Enter the code for the desired forward flow of your BT Series Carbon Tower.	
	Code	Code Description
	1	1.0 gpm / ft ³ (134 lpm / m ³)
	2	2.0 gpm / ft ³ (268 lpm / m ³)

Optional Media and Accessories Ordering Information:

***Carbon Media:**

12x40 mesh, 0.9-1.1mm Mean particle diameter, Acid washed, Iodine number 1000 min., 0.1% maximum water soluble ash, 8% total ash, 3% maximum moisture as packed, 6.5-8.0 contact pH

* Carbon media listed above is recommended for general applications; many other media choices are available for specific applications or concerns. Please consult your FLEXX™ Sales Engineer or Applications specialist for selecting the media that best suits your needs.

Pressure Relief Valve:

Pressure relief valve to be supplied by FLEXX™ Partner
--

Additional Options:

Steam Trap	May be required if steaming in a bottom to top direction; field installation may be required.
Vacuum protection	May be required to protect vessel during post sanitization cooling periods; field installation may be required.
Manual isolation valves	May be required during some maintenance procedures; field installation may be required.
Export Crating	An Export Crating option is available and must be requested at time of quote.
Exterior Finish	Alternate exterior finishes are available. Alternate finish required must be requested at time of quote.
Forward Flow Rates	Alternate forward flow rates of 0.5 gpm/ft ³ and 3.0 gpm/ft ³ are available and must be requested at time of quote.

Note: All system flow control and monitoring is presumed to be outside of FLEXX™ equipment boundaries. However, for your convenience, limit stop adjustments have been included on the Process Outlet, Rinse Outlet, and Backwash Outlet valves. The procedure for the adjustment of these stops can be found in the Manufacturer’s Literature of the Operation & Maintenance Manual.