Product/Model: **Tetra Therm® Aseptic Flex**
Issued by: **Henry Tsui**
Rev:
Description of rev:

Serial number: **T5844156065**
Issue date: **6/9/2011**
Date of rev:

Company name: **TPPSA**
Approval by: **JTK**
Approval of rev:

x=Selected option
o=Selected from HMI
p=Selected by product

					1) o	1) o	1) o	1) o	o		2) o	o	o	o	o	p	o	o	o	o	o	
Recipe No.	Product	Product data	Temp. program °F	Capacity gph	HC 4 sec	HC 4 sec	HC 30 sec	HC X sec	Stab. HC X sec	Non aseptic Homog.	Aseptic Homog.	Timing Pump	Tetra Alrox	Cooler THE	Cooler PHE	Back flush	Heating area THE sect. 11	Heating area THE sect. 10	Heating area THE sect. 9	AFM	Tetra Alsafe	Notes
1.	Broth	#4960	60-285-85	4227	x					x				x			x				x	
2.																						**1) Only possible to select one holding tube at the same time**
3.																						**2) If aseptic and/or non aseptic homogeniser**
4.																						
5.																						**Note: Holding cell time corresponds to max capacities**
6.																						
7.																						
8.																						
9.																						
10.																						

Pressure vessel code: TPQC

Media Supply

	Temperature [°F]
Ice water, IW	35
Tower water, TW	90
Cold water, CW	

HC Proximity switches (GS)	GS31 GS32	GS31	GS31 GS32 GS33		GS30

HC volume [l]	X	X	X		X
THE section number [X,X,...,]					

	Temperature [°F]
Ice water, IWR	See CD5844156065
Tower water, TWR	See CD5844156065
Cold water, CWR	

Tetra Pak

Tetra Pak Processing Systems Americas Inc

6/6/2011

Our ref. **HE1_S5844156065**

Your ref.

Tetra Spiraflo®

Technical specification **CIP Case**

Recommended min. CIP flow:	**56240 lb/h**
CIP pressure drop:	**148 psi**

Section	Flow lb/h	Tube side Shell side	Temp.prog. °F	v ft/s	Press.drop psi	Tube type Number of tubes
1	56240	CIP	158	4.92	25	CM 129/19x20C-6 8
2	56240	CIP	158	4.92	19	CM 129/19x20C-6 6
5	56240	CIP	158	8.13	35	CM 108/19x16S-6 10
11	56240	CIP	158	8.13	14	CM 108/19x16S-6 4
12	56240	CIP	158	8.13	28	CM 108/19x16S-6 8
14	56240	CIP	158	4.92	9	CM 129/19x20S-6 8
15	56240	CIP	158	4.92	7	CM 129/19x20S-6 6
16	56240	CIP	158	4.92	5	CM 129/19x20S-6 4
17	56240	CIP	158	4.92	3	CM 129/19x20S-6 2
20	56240	CIP	158	8.33	1	CD 108/1x64S-6 1
18	56240	CIP	158	8.13	4	CM 108/19x16S-6 1
19	56240	CIP	158	7.69	4	CM 108/19x16S-6 1

Technical specification **Case 1**

Section	Flow lb/h	Tube side Shell side	Temp.prog. °F	Press.drop psi	Tube type Number of tubes	Tube material Shell material
1	36380 37480	Broth Circ. water	60 → 150 81 ← 163	16 6	CM 129/19x20C-6 8	1.4404/316L 1.4307/304L
2	36380 37480	Broth Circ. water	151 → 204 164 ← 212	12 4	CM 129/19x20C-6 6	1.4404/316L 1.4307/304L
5	36380 37480	Broth Circ. water	204 → 254 213 ← 258	24 11	CM 108/19x16S-6 10	1.4547/SMO 1.4307/304L
11	36380 77160	Broth Circ. HW	253 → 288 275 ← 290	9 13	CM 108/19x16S-6 4	1.4547/SMO 1.4307/304L
12	36380 37480	Broth Circ. water	288 → 153 258 ← 135	20 9	CM 108/19x16S-6 8	1.4547/SMO 1.4307/304L
14	36380 37480	Broth Circ. water	153 → 94 134 ← 81	7 5	CM 129/19x20S-6 8	1.4404/316L 1.4307/304L
15	36380 66140	Broth Tower Water (up to 28C)	93 → 84 87 ← 82	6 10	CM 129/19x20S-6 6	1.4404/316L 1.4307/304L
16	36380	Broth IW	93 → 93 ←	4	CM 129/19x20S-6 4	1.4404/316L 1.4307/304L
17	36380 6140	Broth IW (if TW is > 28C)	93 → 84 85 ← 34	2 1	CM 129/19x20S-6 2	1.4404/316L 1.4307/304L
20	80 37480	Tower Water Circ. water	85 → 173 200 ← 200	0 1	CD 108/1x64S-6 1	1.4404/316L 1.4307/304L
18	35270 40510	Sterile Water Tower Water	284 → 185 170 ← 82	2 2	CM 108/19x16S-6 1	1.4547/SMO 1.4307/304L
19		Steam Circ. water	→ ←		CM 108/19x16S-6 1	1.4404/316L 1.4307/304L

Technical specification **Case 2**

Tetra Pak Processing Systems Americas Inc
200 South Park Boulevard
Greenwood
Indianna
USA

Henry Tsui
Phone : 403-208-0830

Tetra Pak

Our ref. **HE1_S5844156065**

Tetra Pak Processing Systems Americas Inc

Your ref.

6/6/2011

Tetra Spiraflo®

Technical specification **Case 2**

Section	Flow lb/h	Tube side / Shell side	Temp.prog. °F	Press.drop psi	Tube type / Number of tubes	Tube material / Shell material
1	36600 55120	PFO Butternut Soup Circ. Water	68 → 138 141 ← 187	**61** 10	CM 129/19x20C-6 8	1.4404/316L 1.4307/304L
2	36600 55120	PFO Butternut Soup Circ. Water	138 → 176 187 ← 213	**32** 7	CM 129/19x20C-6 6	1.4404/316L 1.4307/304L
5			→ ←		CM 108/19x16S-6 10	1.4547/SMO 1.4307/304L
11			→ ←		CM 108/19x16S-6 4	1.4547/SMO 1.4307/304L
12			→ ←		CM 108/19x16S-6 8	1.4547/SMO 1.4307/304L
14	36600 55120	PFO Butternut Soup Circ. Water	183 → 159 157 ← 141	**39** 8	CM 129/19x20S-6 8	1.4404/316L 1.4307/304L
15	36600 66140	PFO Butternut Soup Tower Water	159 → 123 105 ← 85	**39** 10	CM 129/19x20S-6 6	1.4404/316L 1.4307/304L
16	36600 66140	PFO Butternut Soup IW	123 → 91 53 ← 36	**33** 9	CM 129/19x20S-6 4	1.4404/316L 1.4307/304L
17	36600 66140	PFO Butternut Soup IW	90 → 82 57 ← 53	**18** 4	CM 129/19x20S-6 2	1.4404/316L 1.4307/304L
20			→ ←		CD 108/1x64S-6 1	1.4404/316L 1.4307/304L
18	35270 40510	Sterile Water Tower Water	284 → 185 170 ← 82	2 2	CM 108/19x16S-6 1	1.4547/SMO 1.4307/304L
19		Steam Circ. Water	→ ←		CM 108/19x16S-6 1	1.4404/316L 1.4307/304L

Technical specification **Case 3**

Section	Flow lb/h	Tube side / Shell side	Temp.prog. °F	Press.drop psi	Tube type / Number of tubes	Tube material / Shell material
1	36600 55120	Butternut Squash Circ. water	40 → 129 134 ← 190	67 10	CM 129/19x20C-6 8	1.4404/316L 1.4307/304L
2	36600 55120	Butternut Squash Circ. water	129 → 176 190 ← 219	32 7	CM 129/19x20C-6 6	1.4404/316L 1.4307/304L
5			→ ←		CM 108/19x16S-6 10	1.4547/SMO 1.4307/304L
11			→ ←		CM 108/19x16S-6 4	1.4547/SMO 1.4307/304L
12			→ ←		CM 108/19x16S-6 8	1.4547/SMO 1.4307/304L
14	36600 55120	Butternut Squash Circ. water	183 → 154 152 ← 134	40 8	CM 129/19x20S-6 8	1.4404/316L 1.4307/304L
15	36600 66140	Butternut Squash Tower Water	154 → 120 104 ← 86	39 10	CM 129/19x20S-6 6	1.4404/316L 1.4307/304L
16	36600 66140	Butternut Squash ICe Water	120 → 89 52 ← 36	33 9	CM 129/19x20S-6 4	1.4404/316L 1.4307/304L
17	36600 66140	Butternut Squash ICe Water	89 → 81 56 ← 52	18 4	CM 129/19x20S-6 2	1.4404/316L 1.4307/304L
20			→ ←		CD 108/1x64S-6 1	1.4404/316L 1.4307/304L
18			→ ←		CM 108/19x16S-6 1	1.4547/SMO 1.4307/304L
19	4190 55120	Steam Circ. water	329 → 276 219 ← 152	1 2	CM 108/19x16S-6 1	1.4404/316L 1.4307/304L

Tetra Pak Processing Systems Americas Inc
200 South Park Boulevard
Greenwood
Indianna
USA

Henry Tsui
Phone : 403-208-0830

Tetra Pak

Our ref. **HE1_S5844156065**

Tetra Pak Processing Systems Americas Inc

Your ref.

6/6/2011

Tetra Spiraflo®

Technical specification **Case 4**

Section	Flow lb/h	Tube side / Shell side	Temp.prog. °F	Press.drop psi	Tube type / Number of tubes	Tube material / Shell material
1	36600 55120	Organic Tomates Circ. water	68 → 135 142 ← 183	31 10	CM 129/19x20C-6 8	1.4404/316L 1.4307/304L
2	36600 55120	Organic Tomates Circ. water	135 → 176 183 ← 208	19 7	CM 129/19x20C-6 6	1.4404/316L 1.4307/304L
5			→ ←		CM 108/19x16S-6 10	1.4547/SMO 1.4307/304L
11			→ ←		CM 108/19x16S-6 4	1.4547/SMO 1.4307/304L
12			→ ←		CM 108/19x16S-6 8	1.4547/SMO 1.4307/304L
14	36600 55120	Organic Tomates Circ. water	183 → 160 156 ← 142	18 8	CM 129/19x20S-6 8	1.4404/316L 1.4307/304L
15	36600 88180	Organic Tomates Tower Water	160 → 123 100 ← 86	17 16	CM 129/19x20S-6 6	1.4404/316L 1.4307/304L
16	36600 22050	Organic Tomates ICe Water	123 → 97 74 ← 36	14 2	CM 129/19x20S-6 4	1.4404/316L 1.4307/304L
17	36600 22050	ICe Water ICe Water	97 → 88 90 ← 74	2 1	CM 129/19x20S-6 2	1.4404/316L 1.4307/304L
20		Water	→ ←		CD 108/1x64S-6 1	1.4404/316L 1.4307/304L
18			→ ←		CM 108/19x16S-6 1	1.4547/SMO 1.4307/304L
19			→ ←		CM 108/19x16S-6 1	1.4404/316L 1.4307/304L

Technical specification **Case 6**

Section	Flow lb/h	Tube side / Shell side	Temp.prog. °F	Press.drop psi	Tube type / Number of tubes	Tube material / Shell material
1	36600 36600	Chocolate Milk Circ. water	40 → 126 62 ← 138	16 6	CM 129/19x20C-6 8	1.4404/316L 1.4307/304L
2	36600 36600	Chocolate Milk Circ. water	126 → 176 139 ← 184	12 4	CM 129/19x20C-6 6	1.4404/316L 1.4307/304L
5			→ ←		CM 108/19x16S-6 10	1.4547/SMO 1.4307/304L
11			→ ←		CM 108/19x16S-6 4	1.4547/SMO 1.4307/304L
12			→ ←		CM 108/19x16S-6 8	1.4547/SMO 1.4307/304L
14	36600 36600	Chocolate Milk Circ. water	183 → 82 154 ← 62	7 5	CM 129/19x20S-6 8	1.4404/316L 1.4307/304L
15	36600	Chocolate Milk Tower Water	→ ←		CM 129/19x20S-6 6	1.4404/316L 1.4307/304L
16	36600 13810	Chocolate Milk ICe Water	82 → 65 76 ← 36	4 1	CM 129/19x20S-6 4	1.4404/316L 1.4307/304L
17		Chocolate Milk ICe Water	→ ←		CM 129/19x20S-6 2	1.4404/316L 1.4307/304L
20		Water	→ ←		CD 108/1x64S-6 1	1.4404/316L 1.4307/304L
18			→ ←		CM 108/19x16S-6 1	1.4547/SMO 1.4307/304L
19			→ ←		CM 108/19x16S-6 1	1.4404/316L 1.4307/304L

Tetra Pak Processing Systems Americas Inc
200 South Park Boulevard
Greenwood
Indianna
USA

Henry Tsui
Phone : 403-208-0830