

# SX SERIES ULTRA-LOW CHARGE CHILLERS

## FOR REFRIGERATED SEA WATER (RSW) AND BRINE COOLING

Once again latest patented revolutionary concept from the leaders. The chiller works under the up-feed direct expansion concept, so no pumps are required as in a conventional falling film spray chiller. The key to the technology is the patented refrigerant distribution system that develops a uniform but very thin liquid-vapor film for maximum heat transfer. The shell itself is literally devoid of liquid refrigerant which helps in freeze protection.

The chiller works with electronically controlled pulse valve.



- Mechanical Integrity of a Shell-and-Tube
- Superior Heat Transfer
- No pumps or moving parts
- 5-10 times less Refrigerant Charge per TR compared to Pumped Spray Chiller
- Titanium Tubes and Titanium Clad Tubesheets
- Corrosion Resistant Titanium Heads with no requirement for Galvanic Protection
- Simple Oil Management
- Design per ASME with "U" stamp
- Canadian Registration (CRN), PED (CE Marking), DNV, RS (Russian) or Australian 1210 can be provided

ASME

CRN

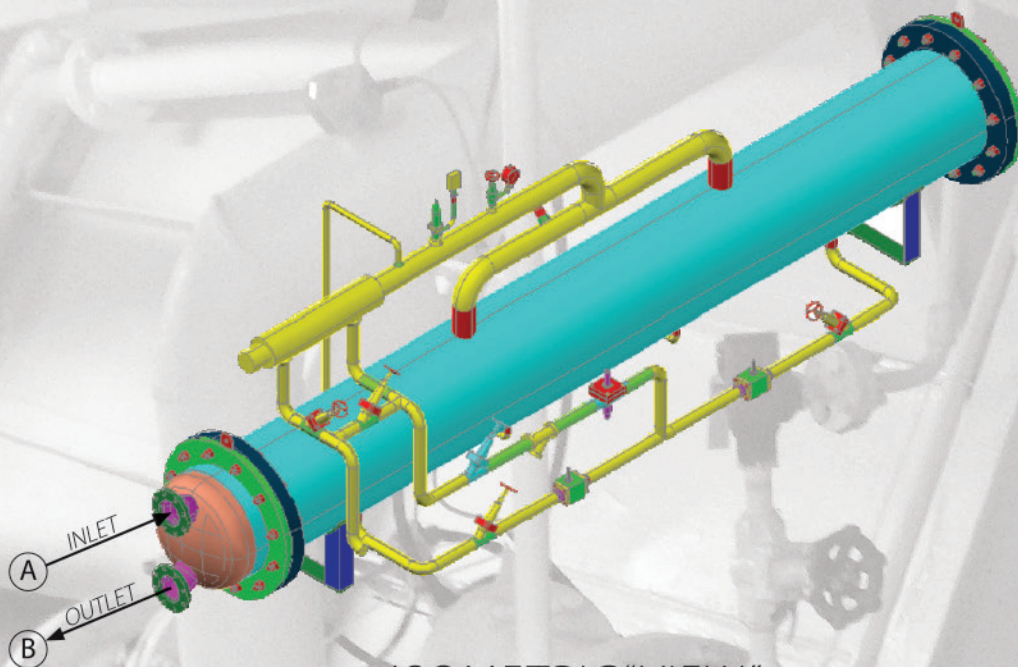


CE

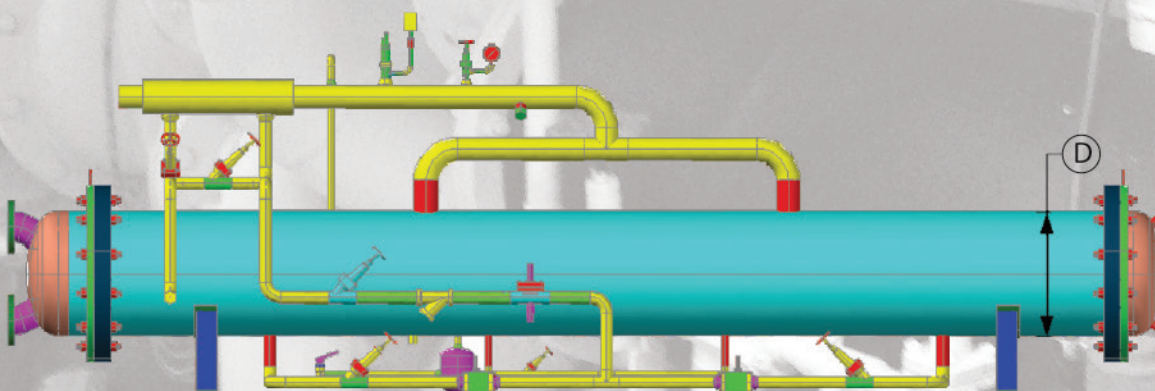
RS



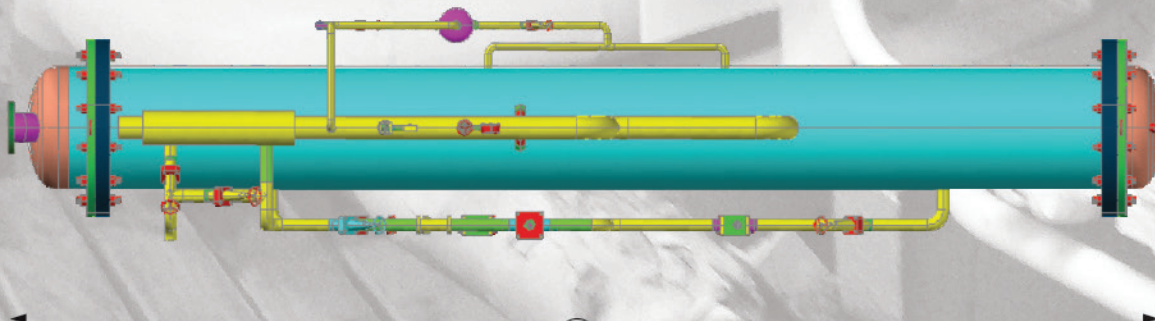




ISOMETRIC "VIEW"



ELEVATION "VIEW"



PLAN "VIEW"

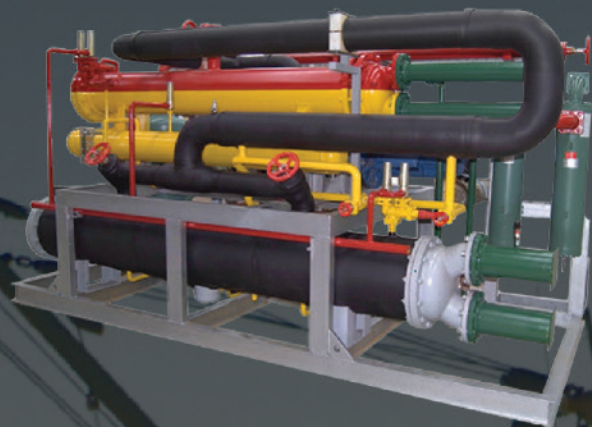


## Chiller Selection

Model	Capacity (TR)	Flow (gpm)	$\Delta p$ (psi)	A, B (in)	D (in)	L (in)	Wt. (lb)
SX -1206D	25	300	2.5	4	12.75	84	630
SX -1208D	35	420	6.0	4	12.75	108	765
SX -1210D	45	500	9.8	4	12.75	132	900
SX -1410D	55	650	8.7	5	14	132	1080
SX -1412D	65	700	11.9	5	14	156	1150
SX -1608D	75	925	9.3	6	16	110	1170
SX -1610D	85	1000	10.0	6	16	134	1350
SX -1612D	100	1100	14.8	6	16	158	1440
SX -1810D	110	1200	8.2	6	18	136	1485
SX -1812D	125	1350	12.0	6	18	160	1620
SX -2010D	150	1650	9.6	8	20	138	1750
SX -2012D	175	1750	12.6	8	20	162	2025
SX -2210D	200	2000	8.3	8	22	142	2075
SX -2212D	225	2300	12.7	8	22	166	2295
SX -2410D	250	2750	11.2	8	24	144	2375
SX -2412D	275	3000	15.4	8	24	168	2790
SX -2610D	300	3300	11.6	10	26	146	3150
SX -2612D	350	3800	17.3	10	26	170	3600
SX -2812D	375	4200	15.9	10	28	172	4150
SX -3010D	400	4400	10.3	10	30	150	4190
SX -3012D	450	4900	14.9	12	30	174	4700
SX -3212D	500	5250	13.4	12	32	176	5500
SX -3412D	550	5800	13.4	12	34	178	6100
SX -3612D	600	6150	12.2	12	36	180	6800

- Rating is for Ammonia @ 23°F (-5°C). Sea Water outlet 32°F (0°C)
- For R22 use Capacity Adjustment Factor = 0.85; For R507a use Capacity Adjustment Factor = 0.80
- For 23% Brine (Salt Water) use Capacity Adjustment Factor = 0.65
- For Capacity higher than 65 TR use 2-valve Master/Slave Controls





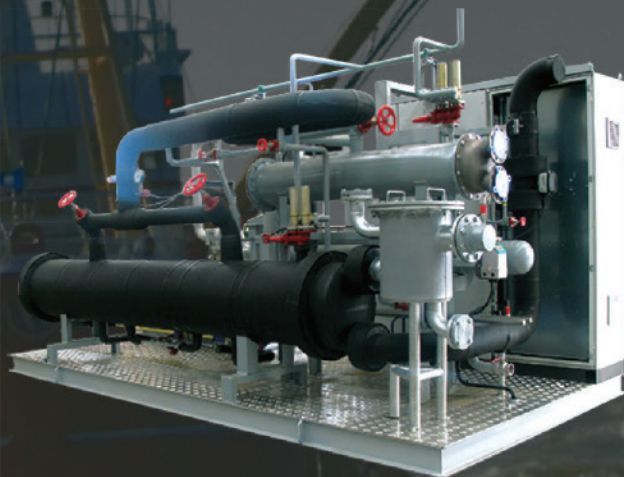
110 TR system with 18 kg Ammonia



110 TR system with 18 kg Ammonia



240 TR system with Ammonia



120 TR system with 35 kg Ammonia

[www.iso-therm.com](http://www.iso-therm.com)

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