

**S.I.T.C OF ONE NO. OF 300 TR CHILLER PALNT AT SYNERGY LHO MUMBAI**

Sr. No.	Description	QTY	UNI	RATES	AMOUNT
	<b>SECTION -A</b>				
1	Water Cooled Screw Chiller				
1.1	Supply and commissioning of 300 TR capacity Water-cooled twin screw Compressor technology , microprocessor based control panel,cooler, water-cooled condenser coil, refrigerant piping, with factory fitted coupling, factory wired power and control cabling. It should have BMS connectivity, Remote and required controlling devices etc.				
	Compressor Technology Chiller designed at 12/7 Deg C Evaporator Temperature and 36 Deg C Ambient conditions				
	300 TR Water Cooled Screw Chiller with Twin Screw Compressor Technology Chiller designed at 12/7 Deg C Evaporator Temperature and 36 Deg C Ambient conditions ( any dismantling and reassemble at the site will be in the scope of vendor )	1	Nos		
	<b>Total of High side</b>				
	<b>SECTION -B</b>				
1.0	Installtion testing and commissioning of 300 TR capacity Water-cooled twin screw Compressor technology , microprocessor based control panel,cooler, water-cooled condenser coil, refrigerant piping, with factory fitted coupling, factory charged R134A/ ecofriendly refrigerant, factory wired power and control cabling. It should have BMS connectivity & Remote monitoring feature as directed by architect/engineers	1	Job		
2	Pumps				
2.1	Chilled Water Pumps-				
2.1.1	S.I.T.C OF End Suction Back pullout Centrifugal pump for chilled water line with coupling with following tech specifications as directed by architect/engineers (Make	2	Nos		
a	Water Qty : 180 CMH				
b	Static Head : 18 Mtrs				
c	Impeller : Bronze				
d	Speed : 1450 Rpm				
e	Seal : Mechanical				
f	KW/HP : 15/20				
2.2	Condenser Water Pumps -				
2.2.1	S.I.T.C End Suction Back pullout Centrifugal pump for condenser water with drive motor and coupling with following tech specifications as directed by architect/engineers	1	Nos		
a	Water Qty : 274 CMH				
b	Static Head : 30 Mtrs				
c	Impeller : Bronze				
d	Speed : 1450 Rpm				
e	Seal : Mechanical				
f	KW/HP : 37/50				

3	MS Piping				
3.1	Supply, Installation, Testing & Commissioning of the following MS class 'C' pipes cut to required lengths with 32mm Thick Nitrile Rubber insulation with Glass Cloth and installed with all welded joints, providing and fixing in position the necessary fittings like Elbows, Tees and Reducers for Chilled Water Line to be connected with existing piping as directed by architect/engineers				
a	200 mm dia	40	RMT		
b	150 mm dia	10	RMT		
c	80 mm dia	150	RMT		
4	Valve Station				
4.1	SITC of Valves comprising Butterfly, Balancing, NRV's, Check, Bleed, Ball, Flow Switches, Temperature & pressure Guages for Chilled Water Line as directed by architect/engineers				
a	Butterfly Valve - 200 mm dia PN16	10	Nos		
b	Butterfly Valve - 150 mm dia PN16	1	Nos		
c	Butterfly Valve - 80 mm dia PN16	3	Nos		
4.2	Non return valve				
a	Non return Valve - 200 mm dia PN 16	4	Nos		
b	Non return Valve - 150 mm dia PN 16	1	Nos		
c	Non return Valve - 100 mm dia PN 16	0	Nos		
4.3	Balancing Valve				
a	Manual Balancing Valve - 200 mm dia PN 16	5	Nos		
b	Manual Balancing Valve - 150 mm dia PN 16	0	Nos		
c	Manual Balancing Valve - 100 mm dia PN 16	0	Nos		
4.4	BALL VALVE				
d	Ball Vave for drain - 50 mm dia	6	Nos		
	Ball Vave for drain - 32 mm dia	8	Nos		
	Ball Vave for drain - 25 mm dia	0	Nos		
4.5	Pressure Gauge 0 to 10kgs /cm2	10	Nos		
4.6	Temperature Gauge 0 to 50 Degree C	10	Nos		
4.7	RUBBER BELLOW				
a	Rubber bellow -200 mm dia	10	Nos		
b	Rubber bellow -150 mm dia	1	Nos		
c	Rubber bellow -100 mm dia	0	Nos		
4.8	Y STRAINER				
h	Y strainer - 200 mm dia	2	Nos		
	Y strainer - 150 mm dia	0	Nos		
	Y strainer - 100 mm dia	0	Nos		
4.9	Air Vent	3	Nos		
5.0	Valve Station				
5.1	SITC of Valves comprising Butterfly, Balancing, NRV's, Check, Bleed, Ball, Flow Switches, Temperature & pressure Guages for Condenser Water Line as directed by architect/engineers				
a	Butterfly Valve - 200 mm dia PN16	4	Nos		

b	Butterfly Valve - 150 mm dia PN16	0	Nos		
c	Butterfly Valve - 100 mm dia PN16	0	Nos		
5.2	Non return valve				
a	Non return Valve - 200 mm dia PN 16	2	Nos		
b	Non return Valve - 150 mm dia PN 16	0	Nos		
c	Non return Valve - 100 mm dia PN 16	0	Nos		
5.3	Balancing Valve				
a	Manual Balancing Valve - 200 mm dia PN 16	1	Nos		
b	Manual Balancing Valve - 150 mm dia PN 16	0	Nos		
c	Manual Balancing Valve - 100 mm dia PN 16	0	Nos		
5.4	BALL VALVE				
a	Ball Vave for drain - 75 mm dia	2	Nos		
b	Ball Vave for drain - 50 mm dia	1	Nos		
c	Ball Vave for drain - 32 mm dia	0	Nos		
d	Ball Vave for drain - 25 mm dia	0	Nos		
5.5	Pressure Gauge 0 to 10kgs /cm2	4	Nos		
5.6	Temperature Gauge 0 to 50 Degree C	4	Nos		
5.7	Y STRAINER				
h	Y strainer - 200 mm dia	1	Nos		
	Y strainer - 150 mm dia	0	Nos		
	Y strainer - 100 mm dia	0	Nos		
6	Chilled water piping insulation for existing chilled water pipes of 250 mm to 50 mm Dia wherever require as per site condition. Vendor shall remove existing damaged insulation and replace the same as per following specification as directed by architect/engineers				
6.1	Supply & Installation Insulation with 25 mm thick Physically crosslinked polyolefin foam with factory laminated heavy duty and ultra tough multi-layered composite aluminum foil facing with puncture resistance of >400N as per ASTM D4833 and Class 0 fire properties as per BS 476 Part 6 & 7sheet cladding.	50	Rmt		
7	Electrical				
7.1	Power Cabling				
a	S.I.T.C. of 4 core 16 Sqmm Cu Armoured cable with 1 runs of 8 SWG GI bare wire for Chilled Water Pump	30	Rmt		
b	S.I.T.C. of 4 core 10 Sqmm Cu Armoured cable with 1 runs of 8 SWG GI bare wirefor Condenser Water Pump	50	Rmt		
c	S.I.T.C. of 4 core 6 Sqmm Cu Armoured for Cooling Tower	50	Rmt		
8	S.I.T.C. of Structural steel for Chiller & Pipe	50	kg		
9	Scaffolding Charges for Dismantling and Fixing MS Piping	1	Lot		
10	S.I.T.C of spring Isolator	4	nos		
11	Lifting of Condenser Pipe and Shifting of Chiller, Pumps	1	Lot		
12	Additional charge of Refrigerant for 300Tr chiller	1	lot		
13	Civil Modification work for Foundation of Pumps and Chiller as directed by architect/engineers.	1	Job		

14	Core cutting 5 inch with leak proof & chemical grouting	6	Nos		
B	Total of low side				
	SECTION -C				
C	Less buy back of existing chiller (1No 300 TR)with accessorie (dismantling of items will be in vendor scope of work )	-1	lot		
	Total HIGH SIDE +low side ( A+B)				
D	<b>Total high and low side- Buy back (A+B-C)</b>				
F	<b><u>GST Extra</u></b>				