

Sr. No.		Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24	KWK445.24	KWK460.24	KWK475.24			
A		General Points																											
	1	Cooling Capacity	ton _R	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	2	Power Consumption	kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	3	Specific Power Consumption	kW/ton _R	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4	Co-Efficient of Performance (COP)	kW/kW	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	5	No. of Compressors	Nos.		1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2			
	6	No. of Individual Refrigerant Circuits	Nos.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
	7	Refrigerant																											
	i	Name	-	R134a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Quantity	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	iii	Technical Specifications	-	Refer ESP-18-19-003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	8	Sound Pressure Level																											
	i	Noise Level	dB	Refer ESP-18-19-001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Measuring Standard	-	ANSI/AHRI Standard 575-2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	9	Insulation Details																											
	i	Material	-	Closed Cell Nitrile Foam	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Insulation Thickness on Various Parts	-	For Standard Temperature Range (LWT upto -10 OC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Shell	mm	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Tubesheet	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Dished End	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator M.W.Box (If Applicable)	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Support Plate	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Compressor Motor Body	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Suction Line Assembly	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Liquid Line Assembly	mm	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	iii	Insulation Thickness on Various Parts	-	For Brine Temperature Range (LWT below -10 OC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Shell	mm	51 (32+19)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Tubesheet	mm	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Dished End	mm	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator M.W.Box (If Applicable)	mm	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Evaporator Support Plate	mm	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Compressor Motor Body	mm	28 (19+9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Suction Line Assembly	mm	28 (19+9)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		Liquid Line Assembly	mm	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	iv	Density	kg/m ³	76.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	v	Thermal Conductivity	W/m.K	0.035 (at 0 OC Mean Temperature)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	vi	Standard	-	IS 14164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	vii	Adhesive	-	Blend of Synthetic Polymers and Synthetic Resin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	viii	Insulation Specifications	-	Refer ESP-18-19-004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	10	Vibration																											
	i	Vibration Level	mm/sec	Less than 1.5 mm/sec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Vibration control	-	Rubber Pads (Standard) / Spring Isolators (At an Additional Cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	iii	Standard	-	IS 12075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	11	Painting Specification																											
	i	Paint Type	-	RAL 7035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Standard	-	Coating as per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	12	Overall Dimensions																											
	i	Approx. Length	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Approx. Width	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	iii	Approx. Height	mm	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	13	Space Clearances Required																											
	i	Plain End Side (For Tube Cleaning)	mm		2900	2900	2900	2900	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800	3800			
	ii	All Other Sides	mm		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1500	1500	1500	1500	1500			
	iii	Overhead	mm		1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			
	14	Weight																											
	i	Approx. Shipping Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Approx. Operating Weight	kg	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	15	Cable Sizes																											
	i	Aluminum Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Copper Cable	-	Refer ESP-14-15-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
B		Compressor Details																											
	1	Make	-	Kirloskar Chillers Private Limited	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	2	Type / Description	-	Semi-Hermetic Twin Screw Compressor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	3	Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	4	Drive	-	Direct Driven by Rotor Shaft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	5	Capacity Control Percentage	%		100-25%	100-25%	100-25%	100-25%	100-25%	100-25%	100-25%	100-25%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%	100-12.5%			
	6	Type of Capacity Control	-	Stepless	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	7	Capacity Control Mechanism	-	Slide Valve Mechanism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	8	Volumetric Ratio	-	Fixed Ratio (2.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	9	Design and Test Parameters																											
	i	Design Pressure	bar	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	ii	Test Pressure (Pneumatic)	bar	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-											

Sr. No.	Description	UOM (Wherever Applicable)	Data (Common For All Models)	KWK105.14	KWK120.14	KWK145.14	KWK165.14	KWK185.14	KWK200.14	KWK220.14	KWK240.14	KWK215.24	KWK245.24	KWK265.24	KWK290.24	KWK310.24	KWK330.24	KWK350.24	KWK370.24	KWK390.24	KWK405.24	KWK425.24	KWK445.24	KWK460.24	KWK475.24		
	ix Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	x Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xi Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xii No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiii Water Velocity	m/s	Less than 3 m/s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiv Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xv Evaporating Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	Physical Data of Evaporator																										
	i Overall Length of Evaporator	ft		9	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
	ii Shell Diameter	inch		20	20	22	24	22	22	22	22	22	22	24	24	24	26	26	26	26	30	30	30	30	36		
	iii Shell Thickness	mm		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10	10	10	10		
	iv Approx. Shell Length	mm		2662	2662	2662	2650	3548	3548	3548	3548	3548	3548	3536	3536	3536	3536	3536	3536	3526	3526	3526	3526	3504			
	v Material of Construction of Shell	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vi Material Standard of Shell	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vii Tube Type/ Nature of Tube Surface	-	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	viii Tube Length	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ix Tube Diameter	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	x Tube Thickness	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xi Material of Construction of Tube	-	Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xii Material Standard of Tube	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiii Water Volume in Evaporator	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	Water Box Details																										
	i Type	-	Standard - Dish Ends (M.W.Box - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ii Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iii Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iv Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	v End connection	-	Standard - Victaulic Conn. (Flanged Conn. - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vi MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vii MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	Accessories Provided																										
	i Pressure Relief Valve	-	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ii Drain/Vent Valves	Inch	Plugged Connection Provided (3/8" NPT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
H	Condenser Details																										
1	Model	-	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	Design Code	-	As per KCPL Standards	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	Type	-	Shell and Tube Flooded Design	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	Tube Side (Fluid)	-	Chilled Water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	Shell Side (Fluid)	-	Refrigerant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6	Design Parameters																										
	i Design Temperature (Refrigerant Side)	°C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ii Max. Operating Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iii Design Pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iv Test pressure (Refrigerant Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	v Testing method (Refrigerant Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vi No. of Passes (Refrigerant Side)	Nos.	Single Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vii Design Temperature (Water Side)	°C	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	viii Max. Operating Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ix Design Pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	x Test pressure (Water Side)	bar	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xi Testing method (Water Side)	-	Refer ESP-07-08-107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xii No. of Passes (Water Side)	Nos.	Two Pass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiii Water Velocity	m/s	Less than 3 m/s	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiv Inlet Pressure	bar	Depends on Site Piping Layout (Maximum Allowable - 9.4 bar)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xv Condensing Temperature	°C	Consult with Engineering Department on Case to Case Basis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7	Physical Data of Condenser																										
	i Overall Length of Condenser	ft		9	9	9	9	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12		
	ii Shell Diameter	inch		16	16	18	20	18	18	18	18	18	18	20	20	20	22	22	22	22	26	26	26	30	30		
	iii Shell Thickness	mm		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	10	10			
	iv Shell Length	mm		2668	2668	2668	2662	3554	3554	3554	3554	3554	3554	3548	3548	3548	3540	3540	3540	3540	3528	3528	3528	3516	3516		
	v Material of Construction of Shell	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vi Material Standard of Shell	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vii Tube Type/ Nature of Tube Surface	-	Integral Helical Fins on the Outside Surface and Integral Helical Ridges on the Inside Surface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	viii Tube Length	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ix Tube Diameter	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	x Tube Thickness	mm	Refer "HX Details" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xi Material of Construction of Tube	-	Cu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xii Material Standard of Tube	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	xiii Water Volume in Condenser	Liter	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
8	Water Box Details																										
	i Type	-	Standard - Dish Ends (M.W.Box - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ii Material	-	Mild Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iii Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	iv Nozzle size	NB	Refer KCPL Chiller Selection System Software	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	v End connection	-	Standard - Victaulic Conn. (Flanged Conn. - Optional)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vi MOC of Water Side Gasket	-	NAM AF 120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	vii MOC of Refrigerant Side Gasket	-	NAM AF 159	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
9	Accessories Provided																										
	i Pressure Relief Valve	-	Spring Loaded (For Safety Valve Set Pressure Refer ESP)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	ii Drain/Vent Valves	Inch	Plugged Connection Provided (3/8" NPT)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
I	Suction Line																										
1	Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	Isolation Valve	-	Butterfly Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	Material of Construction	-	Carbon Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4	Material Standard	-	Refer "MOC" Sheet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5	Angle Valve	-	Provided on Suction Line For Oil Recovery Line	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
J	Discharge Line																										
1	Design Code	-	ASME B31.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	Isolation Valve	-	Shut-off Valve	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	Material of Construction	-	Carbon Steel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

