	Centrif gas compr		
Name	**DGC CENTRIF O2 compressor**	**DGC CENTRIF K-100**	**DGC CENTRIF CO2 compressor**
User tag number	O2 compressor	K-100	CO2 compressor
Remarks 1	Equipment mapped from 'O2 compressor'.	Equipment mapped from 'K-100'.	Equipment mapped from 'CO2 compressor'.
Quoted cost per item [USD]			
Currency unit for matl cost			
Number of identical items			
Installation option			
Casing material			
Actual gas flow rate Inlet [ACT_m3/h]	2331.614904	1309.695378	123.1215425
Design gauge pressure Inlet [kPag]	-1.328921615	895.8710802	895.8710802
Design temperature Inlet [C]	30	25	
Design temperature Outlet [C]	380.4130639	252.5287439	
Design gauge pressure Outlet [kPag]	898.6710776	4898.671082	1098.671081
Compressor speed [rpm]			
Driver power [kW]	278.8669103	995.8376991	8.593753171
Molecular weight	32	15.545378	44.009701
Specific heat ratio	1.396763	1.393844	1.250629
Compressibility factor Inlet	0.999134	1.008085	0.878683
Compressibility factor Outlet	1.001985	1.016509	0.875977
Intercooler required			
Intercooler type			
Aftercooler required			
Aftercooler type			
Inter/Aftercooler excess area [Percent]			
Interstage pressure drop [kPag]			
Driver type	MOTOR	MOTOR	MOTOR
Turbine gauge pressure [kPag]			
Lube oil system			
Allow resize			

Centrif pump	
Name	**DCP CENTRIF P-100**
User tag number	P-100
Remarks 1	Equipment mapped from 'P-100'.
Quoted cost per item [USD]	
Currency unit for matl cost	
Number of identical items	
Installation option	
Casing material	
Liquid flow rate [m3/h]	0.140326488
Fluid head [m]	634.7309886
Speed [rpm]	
Fluid specific gravity	0.651565
Driver power [kW]	
Driver type	
Seal type	
Design gauge pressure [kPag]	5243.421082
Design temperature [C]	166.93621
Fluid viscosity [cP]	0.152
Pump efficiency [%]	75
Allow resize	

Agitated reactor	
Name	**DAT REACTOR GBR-101**
User tag number	GBR-101
Remarks 1	Equipment mapped from 'GBR-101'.
Quoted cost per item [USD]	
Currency unit for matl cost	
Number of identical items	
Installation option	
Application	
Shell material	
Liquid volume [m3]	0.133440719
Vessel diameter [m]	0.3048
Vessel tangent to tangent height [m]	1.8288
Design gauge pressure [kPag]	5243.421082
Vacuum design gauge pressure [kPag]	
Design temperature [C]	287.7777778
Operating temperature [C]	
Jacket design gauge pressure [kPag]	
Jacket type	
Jacket material	
Agitator power [kW]	
Driver type	
Cladding material	
Skirt or leg height [m]	
Base material thickness [m]	
Corrosion allowance [m]	
Cladding thickness [m]	
Fluid depth [m]	
Fluid density [kg/m3]	
Fluid viscosity [cP]	
Impeller type	
Impeller diameter [m]	
Number of impellers	
Impeller speed [rpm]	
Reynolds number	
Power function	
Allow resize	

Vertical vessel		
Name	**DVT CYLINDER V-101**	**DVT CYLINDER V-100**
User tag number	V-101	V-100
Remarks 1	Equipment mapped from 'V-101'.	Equipment mapped from 'V-100'.
Quoted cost per item [USD]		
Currency unit for matl cost		
Number of identical items		
Installation option		
Application		
Shell material		
Liquid volume [m3]	3.269297609	2.401932948
Vessel diameter [m]	1.0668	0.9144
Vessel tangent to tangent height [m]	3.6576	3.6576
Design gauge pressure [kPag]	5243.421082	1068.24608
Vacuum design gauge pressure [kPag]		
Design temperature [C]	21.11111111	121.1111111
Operating temperature [C]	15	25
Skirt height [m]		
Vessel leg height [m]		
Wind or seismic design		
Fluid volume [%]		
Base material thickness [m]		
Corrosion allowance [m]		
Cladding material		
Cladding thickness [m]		
Head type		
ASME design basis		
Allow resize		

Cyclone dust coll	
Name	**EDC CYCLONE X-100**
User tag number	X-100
Remarks 1	Equipment mapped from 'X-100'.
Quoted cost per item [USD]	
Currency unit for matl cost	
Number of identical items	
Installation option	
Material	
Cyclone diameter [m]	0.47650085
Gas flow rate [ACT_m3/h]	5834.892923
Pressure drop [kPa]	
Air temperature [C]	900
Allow resize	

Storage tank	
Name	**DVT STORAGE V-102**
User tag number	V-102
Remarks 1	Equipment mapped from 'V-102'.
Quoted cost per item [USD]	
Currency unit for matl cost	
Number of identical items	
Installation option	
Shell material	
Volume units	GALLONS
Liquid volume(Gallon/Barrel/M3)	
Vessel diameter [m]	7.3152
Vessel height [m]	3.3528
Roof type	
Bottom type	
Design gauge pressure [kPag]	1021.046082
Design temperature [C]	121.1111111
Operating temperature [C]	
Base material thickness [m]	
Corrosion allowance [m]	
Cladding material	
Cladding thickness [m]	
Fluid specific gravity	
Allow resize	

Name	DHE TEMA EXCH Heater O2	DHE TEMA EXCH E-101	DHE TEMA EXCH E-100
User tag number	Heater O2	E-101	E-100
Remarks 1	Equipment mapped from 'Heater O2'.	Equipment mapped from 'E-101'.	Equipment mapped from 'E-100'.
Quoted cost per item [USD]			
Currency unit for matl cost			
Number of identical items		1	1
Installation option			
Heat transfer area [m2]		2.938257318	12.81891565
Number of shells			
Front end TEMA symbol		B	B
Shell TEMA symbol		E	E
Rear end TEMA symbol		M	M
Heat exchanger design option			
Tube material			
Tube design gauge pressure [kPag]		678.3877491	678.8640971
Tube design temperature [C]		427.7777778	927.7777778
Tube operating temperature [C]		35	35
Tube outside diameter [m]		0.0254	0.0254
Shell material			
Shell design gauge pressure [kPag]		1068.24608	1068.960602
Shell design temperature [C]		427.7777778	927.7777778
Shell operating temperature [C]		400	900
Tube side pipe material			
Shell side pipe material			
Number of tubes per shell			
Tube length extended [m]		6.096	6.096
Tube gauge			
Tube pitch [m]		0.03175	0.03175
Shell diameter [m]			
Shell wall thickness [m]			
Shell corrosion allowance [m]			
Expansion joint			
Tube sheet material			
Number of tube passes		1	1
Number of shell passes		1	1
Allow resize			

			TEMA HEX
DHE TEMA EXCH E-103	**DHE TEMA EXCH E-104**	**DHE TEMA EXCH E-102**	**DHE TEMA EXCH Reboiler_@T-100**
E-103	E-104	E-102	Reboiler_@T-100
Equipment mapped from 'E-103'.	Equipment mapped from 'E-104'.	Equipment mapped from 'E-102'.	Equipment mapped from 'Reboiler_@T-100'.
1	1	1	1
11.70283886	32.71425345	13.64286894	11.43597059
B	B	B	B
E	E	E	E
M	M	M	M
3461.837746	3461.837746	678.3877491	760.54608
287.7777778	287.7777778	427.7777778	192.1111111
-29.8	35	35	164.3333333
0.0254	0.0254	0.0254	0.0254
5243.421082	5243.421082	1068.24608	1070.046082
287.7777778	287.7777778	427.7777778	121.1111111
260	260	400	48.88416389
6.096	6.096	6.096	6.096
0.03175	0.03175	0.03175	0.03175
1	1	1	1
1	1	1	1

DHE TEMA EXCH Condenser_@T-100	DHE TEMA EXCH Reboiler_@T-101	DHE TEMA EXCH Condenser_@T-101
Condenser_@T-100	Reboiler_@T-101	Condenser_@T-101
Equipment mapped from 'Condenser_@T-100'.	Equipment mapped from 'Reboiler_@T-101'.	Equipment mapped from 'Condenser_@T-101'.
1	1	1
47.07202696	91.45568632	80.61366593
B	B	B
E	E	E
M	M	M
646.921079	760.54608	646.921079
21.11111111	192.1111111	121.1111111
-29.8	164.3333333	35
0.0254	0.0254	0.0254
1021.046082	1070.046082	1021.046082
21.11111111	177.7777156	121.1111111
12.08827722	149.9999378	42.71034722
6.096	6.096	6.096
0.03175	0.03175	0.03175
1	1	1
1	1	1

DHE TEMA EXCH Reboiler_@T-102	DHE TEMA EXCH Condenser_@T-102
Reboiler_@T-102	Condenser_@T-102
Equipment mapped from 'Reboiler_@T-102'.	Equipment mapped from 'Condenser_@T-102'.
1	1
6.955487942	0.636828745
B	B
E	E
M	M
760.54608	646.921079
192.1111111	165.53091
164.3333333	35
0.0254	0.0254
1068.046077	1021.046082
183.4398067	165.53091
155.6620289	137.7531322
6.096	6.096
0.03175	0.03175
1	1
1	1

Multi-diameter tower			
Name	**DTW TOWER Main Tower_@T-100**	**DTW TOWER Main Tower_@T-101**	**DTW TOWER Main Tower_@T-102**
User tag number	Main Tower_@T-100	Main Tower_@T-101	Main Tower_@T-102
Remarks 1	Equipment mapped from 'Main Tower_@T-100'.	Equipment mapped from 'Main Tower_@T-101'.	Equipment mapped from 'Main Tower_@T-102'.
Quoted cost per item [USD]			
Currency unit for matl cost			
Number of identical items			
Installation option			
Application			
Base material Bottom			
Diameter Bottom section [m]	0.762	0.9144	0.4572
Bottom tangent to tangent height [m]	9.144	9.7536	10.9728
Design gauge pressure Bottom [kPag]	1070.046082	1070.046082	1068.046077
Design temperature Bottom [C]	121.1111111	169.638595	179.1194989
Operating temperature Bottom [C]	46.288575	141.8608172	151.341735
Number of trays Bottom section	9	10	12
Bottom Tray type	SIEVE	SIEVE	SIEVE
Bottom Tray material			
Bottom Tray spacing [m]	0.6096	0.6096	0.6096
Molecular Wt Overhead Prod.	45.712052	46.054267	31.965101
ASME design basis			
Allow Resize			