


PROJECT :			DATE :	22-Apr-11
PROJ. NO.:			BY :	S. Rahimi
CLIENT:			REV :	A
UNIT :			DOC NO.:	

**Blowdown Facilitator**

Input Data								Volume		Surface					Weight
Actual System	Orient. (H / V) (H / E)	Vessel ID / Nominal Diameter	Length / Height	Vessel Liquid Level / Pipe Filling	Shell Thickness + cladding	Head Thickness + cladding	Metal Density	Total Vessel Volume	Total Liquid Volume	Surface Area of Shell	Surface Area of each Head	Total Surface Area	Wetted Surface Area	Gas Surface Area	Total metal Mass
	----	m/ inch	m	m / %	m	m	kg/m3	m3	m3	m2	m2	m2	m2	m2	kg
<b>VESSEL</b>															
V-4808 (main vessel)	VH	4.0	10.0	0.010	0.12	0.08	7860	159.09	33.62	125.6	25.1	175.8	25.2	150.6	150057
-	VE	0.0	0.0	0.000	0	0	0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0
-	VH	0.0	0.0	0.000	0	0	0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0
-	VH	0.0	0.0	0.000	0	0	0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0
-	HH	0.0	0.0	0.000	0	0	0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0
<b>PIPING</b>															
20"-P 21001	H	0	0.0	0.00%	0.03554		0	0.00	0.00			0.0	0.0	0.0	0
16"-P 21002	H	0	0.0	0.00%	0.02919		0	0.00	0.00			0.0	0.0	0.0	0
6"-P 21003	H	0	0.0	0.00%	0.01097		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
-	H	0	0.0	0.00%	0		0	0.00	0.00			0.0	0.0	0.0	0
<b>TOTAL</b>								<b>159.09</b>	<b>33.62</b>	<b>125.6</b>	<b>25.1</b>	<b>175.8</b>	<b>25.2</b>	<b>150.6</b>	<b>150057</b>

Hysys Model	Orient.	Vessel Internal Dia.	Length / Height	Vessel Liquid Level	Shell Thickness + cladding	Head Thickness + cladding	Metal Density	Total Vessel Volume	Total Liquid Volume	Surface Area of Shell	Surface Area of each Head	Total Surface Area	Wetted Surface Area	Gas Surface Area	Total metal Mass
	----	m	m	m	m	m	kg/m3	m3	m3	m2	m2	m2	m2	m2	kg
Vertical Vessel	<b>VF</b>	<b>5.33</b>	<b>7.14</b>	1.51	<b>0.12</b>	0.12	<b>7111</b>	159.09	<b>33.62</b>	119.4	<b>28.2</b>	175.8	25.2	150.6	150057

Hysys Model	Orient.	Vessel Internal Dia.	Length / Height	Vessel Liquid Level	Shell Thickness + cladding	Head Thickness + cladding	Metal Density	Total Vessel Volume	Total Liquid Volume	Surface Area of Shell	Surface Area of each Head	Total Surface Area	Wetted Surface Area	Gas Surface Area	Total metal Mass
	----	m	m	m	m	m	kg/m3	m3	m3	m2	m2	m2	m2	m2	kg
Horizontal Vessel	<b>HF</b>	<b>4.72</b>	<b>17.83</b>	0.83	<b>0.141</b>	0.141	<b>6649</b>	312.06	<b>37.05</b>	264.3	<b>-44.2</b>	175.8	85.0	90.9	164852

HH Horizontal vessel - Hemispherical head  
 HE Horizontal vessel - Flat head  
 HF Horizontal vessel - Elliptical head

VH Vertical vessel - Hemispherical head  
 VE Vertical vessel - Elliptical head  
 VF Vertical vessel - Flat head