


<b>PROJECT :</b>			<b>DATE :</b>	3/4/2011
<b>PROJ. NO.:</b>			<b>BY :</b>	S.R.M
<b>CLIENT :</b>			<b>REV :</b>	0
<b>UNIT :</b>			<b>DOC NO.:</b>	

### Steam Management

Steam Consumption Calculation for Process and Utility Units		Steam			Condensate		Boiler Feed Water		Sour Water	Steam Loss	Balance
		HP	MP	LP	Hot	Cold	HP	MP			
		ton/hr			m3/hr		m3/hr		m3/hr	ton/hr	ton/hr
Process Units	AGR 1		1.5	21.9	-8.0		30.3		-45.7		0.0
	CAT	40.0		2.7	-2.7	-40.0					0.0
	Oil separation train		10.0		-10.0						0.0
	Water Stripper		3.5		-3.5						0.0
	TEG		30.1		-30.1						0.0
	Vacuum Column			9.8					-9.8		0.0
	Amine			30.0	-30.0						0.0
	TGTU	-22.0		25.9	-25.9	12.0		10.0			0.0
	sulphur tank coli			5.0	-5.0						0.0
	Sulphur PIT			0.2						-0.2	0.0
SRU	10.0		-91.0	-12.9			100.0	-5.1	-1.0	0.0	
Utility Units	Power Generation (GTG)	-130.0						130.0			0.0
	Fuel gas	10.0				-10.0					0.0
	Deaerator			5.0			-5.0				0.0
	Flare System										0.0
	steam tracing			5.0	-4.5					-0.5	0.0
											0.0
<b>Plant Overall Consumption/Production</b>		<b>-92.0</b>	<b>45.1</b>	<b>14.5</b>	<b>-132.6</b>	<b>-38.0</b>	<b>25.3</b>	<b>240.0</b>	<b>-60.6</b>	<b>-1.7</b>	<b>0.0</b>

Steam Balance & Related Units Capacity		Steam			Condensate		Boiler Feed Water		Sour Water	Steam Loss	Balance
		HP	MP	LP	Hot	Cold	HP	MP			
		ton/hr			m3/hr		m3/hr		m3/hr	ton/hr	ton/hr
Desuperheating Excess HP to MP		43.0	-45.1				2.1				0.0
Desuperheating Excess HP to LP		10.0		-14.5			4.5				0.0
Desuperheating Excess MP to LP			0.0	0.0				0.0			0.0
Condensing Excess Steam in Aircooler		39.0			-39.0						0.0
Venting Excess Steam to ATM											0.0
<b>Utility Units Estimated Capacity</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-171.6</b>	<b>-38.0</b>	<b>31.9</b>	<b>240.0</b>	<b>-60.6</b>	<b>-1.7</b>	<b>0.0</b>

	Input data
	Calculation Results
-	Production
+	Consumption

**Note:**

- > The balance of each row should be zero
- > Steam loss = vent to atm + steam injected directly into process stream
- > It is assumed that 1 ton/hr of steam is roughly equal to 1 m3/hr BFW or condensate