


PROJECT :			DATE :	3/4/2011
PROJ. NO.:			BY :	S.R
CLIENT :			REV :	A
UNIT :			DOC NO.:	0

Tube Rupture Relief Rate Calculation (Gas & Liquid Services)

Service Gas / Vapor Liquid

Input Data		
Fluid Mass Density	kg/m ³	19.1
HP Side Operating Pressure	barg	24.00
LP Side PSV Set Pressure	barg	13.20
Gas Heat Capacity Ratio	----	1.31
Exchanger Tube Diameter	in	2.00

Calculation Results		
LP Side PSV Relieving Pressure	bara	15.52
Critical Pressure	bara	13.60
Flow Regime	----	Subcritical
Actual ΔP across rupture	bar	9.48
Tube Cross Sectional Area	in ²	3.142
Relief Rate	kg/hr	46779.8

General Notes