

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

RELIEF RATE CALCULATION FOR FIRE CASE

Calculation Basis Wetted Area Unwetted Area

Vessel Type Vertical Horizontal

Head Profile Hemispherical Elliptical Flat

Input Data		
PSV Tag No.	PSV-4102	
P&ID No.	8-FS-DWG-8-0041	
Protected Equipment	20-D-801	
Equipment Diameter	mm	3000.00
Equipment Height/ Length	mm	4700.00
PSV Set Pressure	barg	12.80
Latent Heat @ Relieving Con.	btu/lb	116.00
Liquid Level in Equipment	mm	2500.00
Environmental Factor (F)	----	1.00
Equipment Elevation from Ground	mm	5000.00

Calculation Results		
Exposed Area to Fire	m ²	60.345
Heat Absorbed	kbtu	4251.66
Relief Rate	kg/hr	16310.23

General Notes