

Discharge Report

Workspace: 72341-1RiempimFSRU

Study: Riempimento FSRU-ME4

Equipment Item: 2R Compressore BOG HD

72341-1RiempimFSRU\Riempimento FSRU-ME4\2R Compressore BOG HD

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 75mm

72341-1RiempimFSRU\Riempimento FSRU-ME4\2R Compressore BOG HD\75mm

Weather: Category 2/F

INPUT DATA

Inventory data

Mass in vessel	160,435	kg
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Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	1	bar
Initial temperature	-110	degC
Fluid state	Pressurized gas	

Scenario data

Phase to be released	Vapour	
Hole diameter	75	mm
Discharge coefficient	0,62	fraction

OUTPUT DATA

Mass flow rate	1,32626	kg/s
Release duration	120,968	s

Orifice or pipe exit data (before atmospheric expansion)

Pressure	1,09117	bar
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Temperature	-133,216	degC
Liquid mass fraction	0	fraction
Velocity at vena contracta (at exit for pipe releases)	297,615	m/s
Discharge coefficient	0,62	

Final Data (after atmospheric expansion)

Temperature	-133,705	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	0,0609752	m
Velocity	300	m/s

Weather: Category 5/D

INPUT DATA

Inventory data

Mass in vessel	160,435	kg
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Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	1	bar
Initial temperature	-110	degC
Fluid state	Pressurized gas	

Scenario data

Phase to be released	Vapour	
Hole diameter	75	mm
Discharge coefficient	0,62	fraction

OUTPUT DATA

Mass flow rate	1,32626	kg/s
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Orifice or pipe exit data (before atmospheric expansion)

Pressure	1,09117	bar
Temperature	-133,216	degC
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Velocity at vena contracta (at exit for pipe releases)	297,615	m/s
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Final Data (after atmospheric expansion)

Temperature	-133,705	degC
Liquid mass fraction	0	fraction
Droplet diameter	0	um
Expanded diameter	0,0609752	m
Velocity	300	m/s

