

Discharge Report

Workspace: 72341-2FSRURegas

Study: FSRU in rigassificazione

Equipment Item: 8R Linee mandata pompe HP Booster

72341-2FSRURegas\FSRU in rigassificazione\8R Linee mandata pompe HP Booster

Material	GAS NATURALE	
East	0	m
North	0	m

Scenario (Leak) : 40mm

72341-2FSRURegas\FSRU in rigassificazione\8R Linee mandata pompe HP Booster\40mm

Weather: Category 2/F

INPUT DATA

Inventory data

Mass in vessel	842,108	kg
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Stagnation Data (upstream end for long pipe)

Initial pressure (gauge)	126	bar
Initial temperature	-150	degC
Fluid state	Non-saturated liquid	

Scenario data

Phase to be released	Liquid	
Tank head	0	m
Hole diameter	40	mm
Discharge coefficient	0,62	fraction

OUTPUT DATA

Mass flow rate	80,4406	kg/s
Release duration	10,4687	s

Orifice or pipe exit data (before atmospheric expansion)

Pressure	1,01325	bar
Temperature	-153,607	degC
Liquid mass fraction	1	fraction
Velocity at vena contracta (at exit for pipe releases)	241,934	m/s
Discharge coefficient	0,62	

Final Data (after atmospheric expansion)

Temperature	-160,955	degC
Liquid mass fraction	0,950844	fraction
Droplet diameter	77,9891	um
Expanded diameter	0,108668	m
Velocity	241,934	m/s

Weather: Category 5/D

INPUT DATA

Inventory data

Mass in vessel	842,108	kg
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Initial pressure (gauge)	126	bar
Initial temperature	-150	degC
Fluid state	Non-saturated liquid	

Scenario data

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