Group - IPS
Industrial Projects Services

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Sicherheitsdruckventile

Allnex Surface Specialties S.A./N.V, Belgium, 10/2016 - 03/2017

CHEMICALS | PROJECT REALIZATION | BELGIUM

Allnex ist ein führender Hersteller von Beschichtungen und Zusätze für Beschichtungen und Tinten aus den Bereichen Architektur, Industrie, Automobil und für Spezialanwendungen.

Group-IPS unterstützte Allnex bei der Erstellung eines Index für Sicherheitsdruckventile im Werk. Das beinhaltete die Kontrole vor Ort, die Größe und Dokumentation der Bentile. Der Index basiert auf den SEVESO Standards.

Hauptprojektdaten

Indexerstellung von Sicherheitsdruckventilen vor Ort

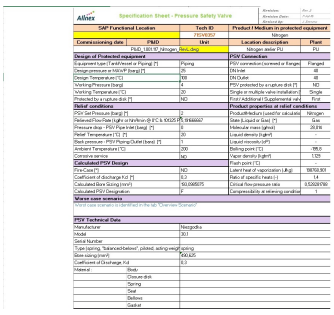
Leistungsumfang IPS

Projektrealisierung

- Sicherheitskontrolle
- Bemessung
- Dokumentation

IPS Niederlassung(en)

- IPS Belgium sa



Specification Sheet - Pressure Safety Valve

SAP Functional Location	Tech ID	Product / Medium in protected equipment
	PSV0001P	Nitrogen

Commissioning date	PMID	Unit	Location description	Plant
	PMID_1B0-TE-Nitrogen_Reg_IN2		Nitrogen Jetter P2	P2

Design of Protected equipment		PSV Connection	
Equipment type (Tank/Vessel or Piping) [?]	Piping	PSV connection (screwed or flanged	Flanged
Design pressure or MAWP (barg) [?]	25	DN Inlet	48
Design Temperature [°C]	100	DN Outlet	48
Working Pressure (barg)	4	PSV protected by a rupture disk [?]	NO
Working Temperature [°C]	20	Single or multiple valve installation [?	Single
Protected by a rupture disk [?]	NO	First / Additional / Supplemental valv	First
Relief conditions		**Product properties at relief conditions**	
PSV Set Pressure (barg) [?]	4	Product/Medium (used for calculatio	Nitrogen
Relieved Flow Rate (kg/h or m³/h/nu-p) IEC & ISO25/PS, 0h46667		State (Liquid or Gas) [?]	Gas
Pressure drop - PSV Pipe Inlet (barg) [?]	0	Molecular mass (g/mol)	28,016
Relief Temperature [°C] [?]	20	Liquid density (kg/m³)	-
Back pressure - PSV Piping Outlet (barg) [?]	1	Liquid viscosity (cP)	-
Ambient Temperature [°C]	200	Boiling point [°C]	195,8
Corrosive service	NO	Vapor density (kg/m³)	1,125
Calculated PSV Design		Flash point [°C]	-
Fire Case [?]	NO	Latent heat of vaporization (J/kg)	198700,000
Coefficient of discharge Kd [?]	0,2	Ratio of specific heats (-)	1,4
Calculated Bore Sizing (mm²)	10,0000375	Critical flow pressure ratio	0,52828766
Calculated PSV Designation	F	Compressibility at relieving condition	1
Worse case scenario			
Worst case scenario to be identified in the tab "Overview Scenario"			

PSV Technical Data	
Manufacturer	Nuovo Pignone
Model	2G1
Serial Number	
Type (spring, "balanced/balanced", piloted, acting weight/spring)	
Bore sizing (mm²)	500,625
Coefficient of Discharge Kd	0,2
Material Body	
Closure disk	
Spring	
Seal	
Bellows	
Gasket	