



Tyco Clean Agent System Flow Calculation Software v4.00 (Novec 1230 - UL/FM & EU)

PRD Piotr Stępień

Skarżysko Kamienna
Rejowska 99
File Name: Serwerownia MHF.FC4

Consolidated Report

Customer Information

Company Name: PRD Fire Solutions
Address: Rejowska 99
26-110 Skarżysko-Kamienna

Phone: 535951939
Contact:
Title: biuro@prd-fs.pl

Project Data

Project Name: Muzeum Histori Fotografii
Designer:
Number:
Account:
Location:
Description:

Enclosure Report

Elevation: 200 m (relative to sea level)
Atmospheric Correction Factor: 1

Enclosure 1 Przestrzeń

Enclosure Temperature:	Number of Nozzles:	1
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Consolidated Report

Minimum: 20.0 C	Width: 20.05 m
Maximum: 20.0 C	Length: 1.00 m
Max. Concentration: 5.62 %	Height: 2.41 m
Design Concentration:	Volume: 48.32 m ³
Adjusted: 5.62 %	Non-permeable: 0.00 m ³
Minimum: 5.60 %	Total Volume: 48.32 m ³
Min. Agent Required: 39.88 kg	
Adjusted Agent Required: 40.01 kg	

Enclosure 2 Podłoga

Enclosure Temperature:	Number of Nozzles: 1
Minimum: 20.0 C	Width: 20.05 m
Maximum: 20.0 C	Length: 1.00 m
Max. Concentration: 5.62 %	Height: 0.30 m
Design Concentration:	Volume: 6.02 m ³
Adjusted: 5.62 %	Non-permeable: 0.00 m ³
Minimum: 5.60 %	Total Volume: 6.02 m ³
Min. Agent Required: 4.97 kg	
Adjusted Agent Required: 4.99 kg	

Agent Source Report

Agent: Novec / Propellant N2
(Novec is a trademark of 3M)
Container Name: 52L TPED Container Assy
Container Part Number: 303.207.012
Agent Per Container: 45.00 kg
Fill Density: 0.865 kg / l
Number of Main Containers: 1
Number of Reserve Containers: 0

Container Empty Weight: 63.70 kg
Weight, All Containers + Agent: 108.70 kg
Floor Area Per Container: 0.13 m²



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Floor Loading Per Container: 840 kg /m ²

Parts Report

Total Agent Required: 45.00 kg

Container Name: 52L TPED Container Assy (Part: 303.207.012)

Number of Containers: 1

Nozzle	Type	Nozzle Diameter	Drill Size	Nozzle Area	Part Number
E1-N1	360-AL (BSP)	32 mm	5.00 mm	314.16 mm ²	310.207.108
E2-N1	360-AL (BSP)	15 mm	2.10 mm	55.42 mm ²	310.207.102

Nozzle	Drill Diameter	Drill Size
E1-N1	5.0000 mm	5.00 mm
E2-N1	2.1000 mm	2.10 mm

Pipe & Fittings	Type	Diameter	Length	Elbows (90)	Elbows (45)	Tees	Unions
	DIN2440	15 mm	6.85 m	4	0	0	0
	DIN2440	32 mm	5.95 m	3	0	1	0

Other Objects	Name	Quantity	Part Number
	50 mm Flex. Discharge Hose	1	306.207.003

Calculation Date/Time: 01 August 2017, 10:01:19

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Key ID: 1728548853



Consolidated Report System Acceptance Report

System Discharge Time: 6.1 seconds
Percent Agent In Pipe: 35.9%
Percent Agent Before First Tee: 18.0%
Dead Volume: 0.0% (0.00 kg)

Enclosure Number: 1
Enclosure Name: Przestrzeń
Minimum Design Concentration: 5.60%
Adjusted Design Concentration: 5.62%
Predicted Concentration: 5.62%
Maximum Expected Agent Concentration: 5.62% (At 20.0 C)

Nozzle	Minimum Agent Required	Adjusted Agent Required	Predicted Agent Delivered	Average Nozzle Pressure
E1-N1	39.88 kg	40.01 kg	40.00 kg	9.377 bar

Enclosure Number: 2
Enclosure Name: Podłoga
Minimum Design Concentration: 5.60%
Adjusted Design Concentration: 5.62%
Predicted Concentration: 5.64%
Maximum Expected Agent Concentration: 5.64% (At 20.0 C)

Nozzle	Minimum Agent Required	Adjusted Agent Required	Predicted Agent Delivered	Average Nozzle Pressure
E2-N1	4.97 kg	4.99 kg	5.01 kg	7.324 bar

Calculation Date/Time: 01 August 2017, 10:01:19
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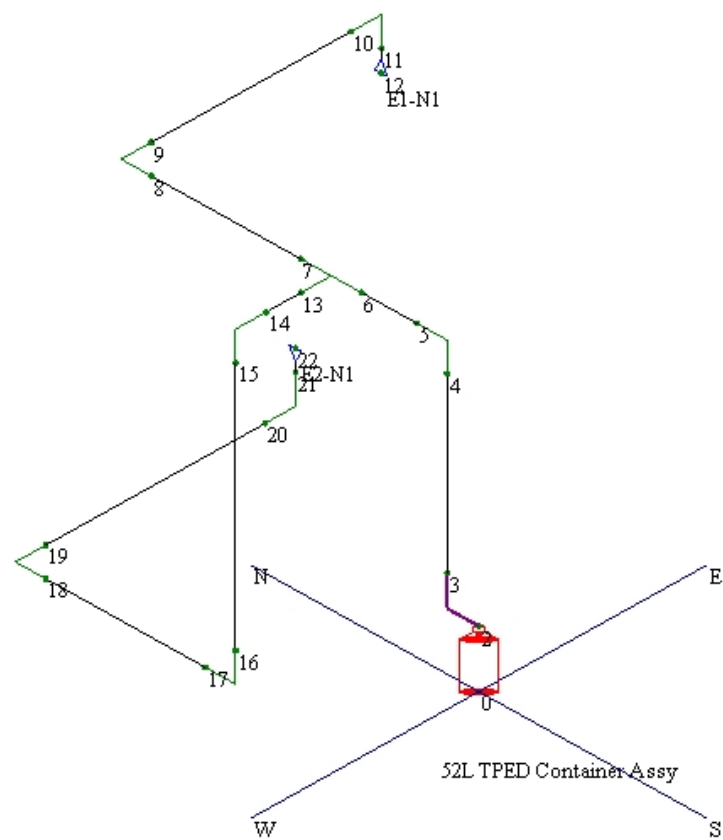
Consolidated Report

Pipe Network Report

Description	Pipe Section	Start Node	End Node	Pipe Type	Pipe Diameter	Pipe Length	Union	Total Elevation Change	Total Equivalent Length	Nozzle Name	Nozzle Size	Nozzle Type	Nozzle Area
Container - On	Man./End	0	2		50 mm	0.59 m	0	0.59 m	10.67 m				
Flex Hose	System	2	3		50 mm	0.64 m	0	0.52 m	5.37 m				
Pipe	System	3	4	DIN2440	32 mm	1.80 m	0	1.80 m	1.80 m				
Elbow (90)	System	4	5	DIN2440	32 mm	-----	0	-----	1.13 m				
Pipe	System	5	6	DIN2440	32 mm	0.55 m	0	-----	0.55 m				
Tee	System	6	7	DIN2440	32 mm	-----	0	-----	0.70 m				
Pipe	System	7	8	DIN2440	32 mm	1.50 m	0	-----	1.50 m				
Elbow (90)	System	8	9	DIN2440	32 mm	-----	0	-----	1.13 m				
Pipe	System	9	10	DIN2440	32 mm	2.00 m	0	-----	2.00 m				
Elbow (90)	System	10	11	DIN2440	32 mm	-----	0	-----	1.13 m				
Pipe&Nozzle	System	11	12	DIN2440	32 mm	0.10 m	0	-0.10 m	0.10 m	E1-N1	32 mm	360-AL	314.16 mm ²
Tee	System	6	13	DIN2440	15 mm	-----	0	-----	1.04 m				
Pipe	System	13	14	DIN2440	15 mm	0.35 m	0	-----	0.35 m				
Elbow (90)	System	14	15	DIN2440	15 mm	-----	0	-----	0.52 m				
Pipe	System	15	16	DIN2440	15 mm	2.60 m	0	-2.60 m	2.60 m				
Elbow (90)	System	16	17	DIN2440	15 mm	-----	0	-----	0.52 m				
Pipe	System	17	18	DIN2440	15 mm	1.60 m	0	-----	1.60 m				
Elbow (90)	System	18	19	DIN2440	15 mm	-----	0	-----	0.52 m				
Pipe	System	19	20	DIN2440	15 mm	2.20 m	0	-----	2.20 m				
Elbow (90)	System	20	21	DIN2440	15 mm	-----	0	-----	0.52 m				
Pipe&Nozzle	System	21	22	DIN2440	15 mm	0.10 m	0	0.10 m	0.10 m	E2-N1	15 mm	360-AL	55.42 mm ²

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View #: 1 - Isometric View-Node



The diagram illustrates the 52L TPED Container Assembly. It features a central vertical structure with various horizontal and vertical beams. Numbered points (0-29) mark specific locations along the assembly. The orientation is indicated by 'S' (South) at the top and 'N' (North) at the bottom. Specific labels like 'E1-N1' and 'E2-N1' point to particular areas on the right side of the assembly.

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View #: 9 - Standard Plan View

