

## Aust.Std Design Notes

### Pre-Engineered Design Calculation

CALCULATION OF VOLUME : Calculation is based on Gross Volume with NO deductions for any Objects that occupy volume within the protected space. The concentration of Aerosol, and leakage allowances is based on Tests conducted in 2010 with Hughes Associates Europe. AS 5062.

Minimum Extinguishing Factor (mef)    145 X 1.3 = 188.5

- Design Calculation has been Confirmed
- FirePro Units have suitable STREAM length for Risk Area Coverage
- Leakage compensation made in Primary Discharge
- Additional HOLD time Required for the risk

# APPROVED

System Design is Complete

Prepared By:	Company
PM	FSE

- L2 Clearance to ensure discharge temperature is less than 200° C
- L3 Clearance to ensure discharge temperature is less than 75° C

**CLIENT NAME** John Holland

**Make / Model** Doosan Flash But Welder - M133771 [TM754]

**Risk Area** Engine Bay

**Classes of Fire**

Class A

Class B

Class E

Class D

Class F

**GROSS DIMENSIONS**

Length 2.50 x Width 2.30 x Height 1.10 = Not Used m<sup>3</sup>

**Actual Leakage Measurement - M<sup>2</sup>** = m<sup>2</sup>

**Leakage Allowance without additional Agent** = 5.10 m<sup>2</sup>

**GROSS Volume used for Calculation** = 6.33 m<sup>3</sup>

**PRIMARY AGENT DISCHARGE** = 1,192 g

**Secondary Agent Discharge** = - g

Model	L2 (mm)	L3 (mm)	Stream (mm)	Agent Qty	Concentration		Primary Quantity	Secondary Quantity
					Primary	Secondary		
FP-20	0	100	1000	20	-	-		
FP-40	0	100	1000	40	-	-		
FP-80	0	100	1000	80	-	-		
FP-100	0	100	1000	100	-	-		
FP-200	100	300	2000	200	-	-		
FP-500	200	500	3500	500	1,500	-	3	
FP-1200	200	1200	3500	1,200	-	-		
FP-2000	200	1200	3500	2,000	-	-		
FP-3000	700	1700	3500	3,000	-	-		
FP-5700	800	1800	8400	5,700	-	-		

Total Concentration	1,500	-	
Required Concentration	1,192	-	
% Required Concentration	125%		

## Aust. Std Design Notes

### Pre-Engineered Design Calculation

**CALCULATION OF VOLUME :** Calculation is based on Gross Volume with NO deductions for any Objects that occupy volume within the protected space. This category covers fixed condensed aerosol extinguishing system units intended for total flooding applications. AS 4487 and AS5062.

Minimum Extinguishing Factor (mef)    **84 X 1.3 = 109.2**

**CLIENT NAME**

**Risk Description**

**Constructed from**

**Classes of Fire**  Class A     Class B     Class E     Class D     Class F

**GROSS DIMENSIONS**    Length  x Width  x Height  =  m<sup>3</sup>

**Actual Leakage Measurement - m<sup>2</sup>** =  m<sup>2</sup>

**Leakage Allowance without additional Agent** =  m<sup>2</sup>

**GROSS Volume used for Calculation** =  m<sup>3</sup>

**PRIMARY AGENT DISCHARGE** =  g

**Secondary Agent Discharge** =  g

- Design Calculation has been Confirmed
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Model	L2 (mm)	L3 (mm)	Stream (mm)	Agent Qty	Concentration		Primary Quantity	Secondary Quantity
					Primary	Secondary		
FP-20	0	100	1000	20	-	-		
FP-40	0	100	1000	40	-	-		
FP-80	0	100	1000	80	-	-		
FP-100	0	100	1000	100	-	-		
FP-200	100	300	2000	200	400	-	2	
FP-500	200	500	3500	500	-	-		
FP-1200	200	1200	3500	1,200	-	-		
FP-2000	200	1200	3500	2,000	-	-		
FP-3000	700	1700	3500	3,000	-	-		
FP-5700	800	1800	8400	5,700	-	-		

Total Concentration	400	-
Required Concentration	393	-
% Required Concentration	101%	

<b>Prepared By:</b>	<b>Company</b>
PM	FSE

- L2 Clearance to ensure discharge temperature is less than 200° C
- L3 Clearance to ensure discharge temperature is less than 75° C