onis
LINE BLIND®

HOW TO DETERMINE YOUR PIPING ISOLATION STANDARD ?

IN 4 STEPS WITH THE HSG253 MATRIX

1. DETERMINE YOUR RELEASE FACTOR

Reflects potential rate of release : High, Medium, Low.

Depending of your line size and pressure

	Pressure		
Line size	**> 50 barg**	**10 barg < 50**	**< 10 barg**
> 8"	High	High	Medium
2" < D < 8"	High	Medium	Low
< 2"	Medium	Low	Low

2. DETERMINE YOUR LOCATION FACTOR

Reflects potential for casualities escalation and damage : High, Medium, Low.

Category	Description
High	**Any numbers at risk > 10** Congested equipment, potential for escalation, large fires with potential for damage and multiples fatalities
Medium	**Typically 3-10 risk** Uncongested plant, storage area or small number of items in open area, minor fires
Low	**Characterized by 1-2 risk** Remonte single items, easily contained minor fires

3. GET YOUR OUTCOME FACTOR

Combine your release factor and your location factor to obtain your outcome factor

Location factor	Release factor		
	High	Medium	Low
High	A	B	B
Medium	B	B	C
Low	B	C	C

4. DETERMINE YOUR ISOLATION STANDARD

Last step : combine your outcome factor with your substance category

Substance category*	Outcome factor		
	A	B	C
1 - TOXIC	R	I	I
2 - FLAMMABLE	R	I	II
3 - CORROSIVE	I	II	II
4 - BELOW FP	II	II	II
5 - OTHERS	II	III	III

I = Positive isolation II = Proven isolation III = Non Proven isolation

R = Depends of the situation

**More informations about subtance category in the HGS253 book p62*

5. QUICK EXAMPLE

For a NAFTA feedline in a steamcracker

Line size = 6”
Pressure = 7 barg

Release factor = LOW

Location factor = Environnement : congested = HIGH

Outcome factor = LOW + HIGH = B

Baseline isolation standard = B + FLAMMABLE = Positive isolation

Thank you for your interest !

Want to learn more about positive isolation?

CONTACT US

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