ZIRCO	ZIRCO LTD.	FLAME ARRESTOR

Client:		REVISIONS				Sheet #
		NO	BY	DATE	DESCRIPTION	Spec. #
					QUOTATION	Contract #
Project:						RFQ #
						PO #
Plant						Approved by:
Location						Checked by:

DESIGN DATA	1	Type (note 1)	
	2	Installation (horizontal/vertical/other)	
	3	Pipe Size	
	4	Flange Rating (ANSI 150# RF standard)	
	5	Arrestor Tag Number	
	6		
	7		
	8		
	9		
MATERIALS***	10	Housing (aluminum/CS/304SS/316SS)	
	11	Cell (aluminum/CS/304SS/316SS)	
	12	Pressure Taps (size & number) (note 2)	
	13	Temperature probe (size & number) (note 2)	
	14	Drain Plug (size & number) (note 2)	
	15	Coating/special Paint	
	16		
	17		
APPLICATION DATA ****	18	Maximum Flow Rate	
	19	Inlet Pressure @ Maximum Flow Rate	
	20	Normal Operating Flow Rate	
	21	Normal Inlet Pressure	
	22	Maximum Temperature	
	23	Normal Temperature	
	24	Molecular Weight	
	25	Specific Gravity	
	26	Gas Group (A, B, C, D)	
	27	Desired Pressure Drop	
	28	Continuous Burning Possible on Cell (Y/N)	
	29	Distance From Flame Possible Source	
	30	Any Bends in Above Distance	
	31	Gas Composition	SEE NEXT PAGE
OTHER	32	**	
	33	**	
	34	**	
	35	**	
	36	**	
	37	**	
	37	**	
	37	**	
	37	**	
	38	**	
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	40	**	
	41	**	
	42	**	
	43	**	

Notes:

1) See arrestor selection criteria sheet for arrestor types.

2) 3/4" NPT is standard other sizes and connection styles available upon request.

3) All items on sheet are required to ensure correct arrestor type and size for your application.

4) Lines marked with ** are for customer use to supply us with any other information such as design codes or certification requirements.

5) Fill out one data sheet per arrestor application.

GAS STREAM COMPOSITION			
COMPONENT	MOLECULAR WEIGHT	AMOUNT	PERCENT

ENARDO FLAME ARRESTOR SELECTION CRITERIA

Parameters	End-of-Line FVFA & SVFA	In-Line (Standard) S7, HP & IL	In-Line HP Deflag. S8	Detonation Arrestor DFA
NEC GROUP "D" or IEC GROUP IIA GASES				
Length of pipe between the arrestor and the ignition source without bends.	(Sits on end of pipe)	20 feet (6 meters)	60 feet (18 meters)	Unlimited
Length of pipe between the arrestor and the ignition source with 1-90° bend.	(Sits on end of pipe)	20 feet (6 meters)	60 feet (18 meters)	Unlimited
Length of pipe between the arrestor and the ignition source with multiple bends	(Sits on end of pipe)	Not Recommended with Multiple Bends	Not Recommended with Multiple Bends	Unlimited
Flame Stabilization at stoichiometric mixture and ambient temperature not to exceed 140°F (60°C).	5 minutes (minimum)	5 minutes (minimum)	15 minutes (minimum)	2 hours (minimum)
Initial Operating Pressure- Pressure of system at near static flow condition.	Atmospheric	15.4 psia (106 kPa)	19.7 psia (134 kPa)	Conc. (2"-12") 22.7 psia (50-300mm) 157 kPa Conc. (14"-20") 20.7 psia (350-500mm) 143 kPa
NEC GROUP "C" or IEC GROUP IIB GASES				
Length of pipe between the arrestor and the ignition source without bends.	(Sits on end of pipe)	6 feet (2 meters) (open ended pipe)	(Pending)	Unlimited
Length of pipe between the arrestor and the ignition source with 1-90° bend.	(Sits on end of pipe)	6 feet (2 meters) (open ended pipe)	(Pending)	Unlimited
Length of pipe between the arrestor and the ignition source with multiple bends	(Sits on end of pipe)	Not Recommended with Multiple Bends	(Pending)	Unlimited
Flame Stabilization at stoichiometric mixture and ambient temperature not to exceed 140°F (60°C).	4 minutes (minimum)	4 minutes (minimum)	(Pending)	15 minutes (minimum)
Initial Operating Pressure - Pressure of system at near static flow condition.	Atmospheric	15.4 psia (106 kPa)	(Pending)	Conc. (2"-20") 20.7 psia (50-500mm) 143 kPa Ecc. (3"-20") 18.7 psia (75-500mm) 129 kPa
NEC GROUP "B" or IEC GROUP IIC GASES (EXCEPT ACETYLENE)				
Length of pipe between the arrestor and the ignition source without bends.	(Sits on end of pipe)	4 feet (1.2 meters) (open ended pipe)	20 feet (6 meters)	Unlimited
Length of pipe between the arrestor and the ignition source with 1-90° bend.	(Sits on end of pipe)	Not Recommended with a Bend	20 feet (6 meters)	Unlimited
Length of pipe between the arrestor and the ignition source with multiple bends	(Sits on end of pipe)	Not Recommended with Multiple Bends	Not Recommended with Multiple Bends	Unlimited
Flame Stabilization at stoichiometric mixture and ambient temperature not to exceed 140°F (60°C).	2 minutes (minimum)	2 minutes (minimum)	15 minutes (minimum)	1 hour (minimum)
Initial Operating Pressure - Pressure of system at near static flow condition.	Atmospheric	15.4 psia (106 kPa)	19.7 psia (136 kPa)	20.7 psia (143 kPa)