



FLAME ARRESTORS

During the tank filling, the breathing valve expel over the tank some gas that could burn.

The tank has to be protected to avoid that the flames spread inside the tank. This is the reason why a flame stopper is installed between the tank and the breathing valve and it has to:

- Defeat the flame
- Resist to make the hot fade away
- Resist to the shock wave producer by an external explosion

The flame arrester efficiency is reduced by the flame arrester element and by the fifth that is inside it. Considering all these things, **CDB engineering** produce flame arrester element only in SS316 and is easy to disassemble for a frequent maintenance.

The flame stopper **cdb engineering** can be also manufactured in cast body and there are many different type as:

Standard flame arrester from 2" to 12" used for breathing valve assembly or free breath.

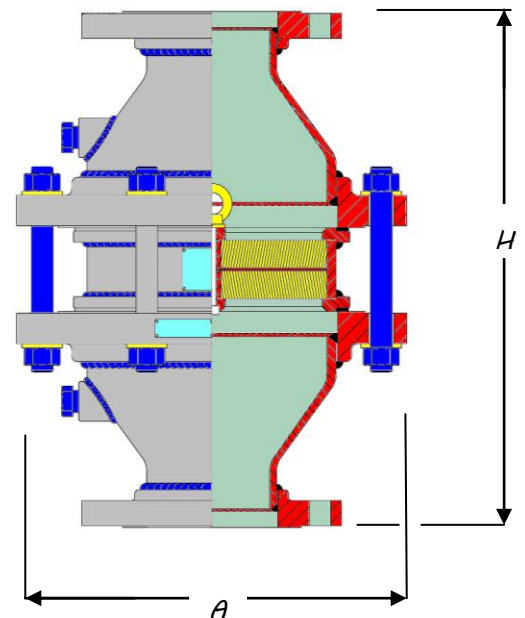
Box flame arrester from 2" to 6" is used for the assembly of breath valve with convoyed breath or on the final part of pipe. The flame arrester element can be slipped removing the cover from the box an the arrester. **Cdb engineering** is also able to manufacture flame arrester with welded body and are available made of the following material : body built with a diameter reduction in a 105n or with a diameter reductions in wp304l or 316l and flange in f304l or 316l from 2" to 12".

Body and flame arrester element built with a plate in SS316L thk 3mm. Sliding flange in s.s.316l from 2" to 6". Body and flame arrester in s.s. 316l thk 3mm, fixed flanges in ss316l from 2" to 6"

Materials and product codes for Fig.422.2 Flame Arrester						
Items	Description	Materials				
1	Body	Carbon steel	SS304L	SS316L	Hastelloy C276	Carbon steel
2	Container	SS316L	SS316L	SS316L	SS316L	Carbon steel
3	Elements	SS316L	SS316L	SS316L	SS316L	SS316L
4	Gaskets	Asbestos free fibre Teflon®				
5	Bolts	B7/2H	8-8A/B8-B8A	8-8A/B8-B8A	8-8A/B8-B8A	B7/2H
6	Label	SS304	SS304	SS304	SS304	SS304

Dimensions & weights			
DN (xx)	Dimensions (mm)		Weight (kg)
	A	H	
2"	230	333	32
3"	280	422	43
4"	345	440	80
6"	483	580	100
8"	597	897	220
10"	699	1211	250
12"	813	1232	360

Technical data	
Design codes	EN.12874 ASME VIII, IX
Design pressure	10 Bar
Design temperature	-10/+250 °C for C.S. -120/+250 °C for S.S.
Installation:	In-line deflagration, vertical, bidirectional, max distance from fire source DNx50
Max operating temperature	60 °C
MESG	>0.9
Gas group	IIA
Atex certificated	Ex-GIIA
Ped certificated	CE1370
Factory tested:	dimensional pressure 19.38 Bar
Size/s	2"...12"
Connections	ANSI 150# FF UNI PN 10/16 FF
External finiture:	epoxy cycle RAL7023 for C.S. or pickled for S.S.



CDB Engineering reserve the right to carry out any necessary modification without prior notice