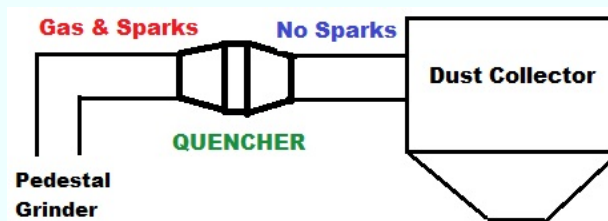




QUENCHER™ Spark Arrestor



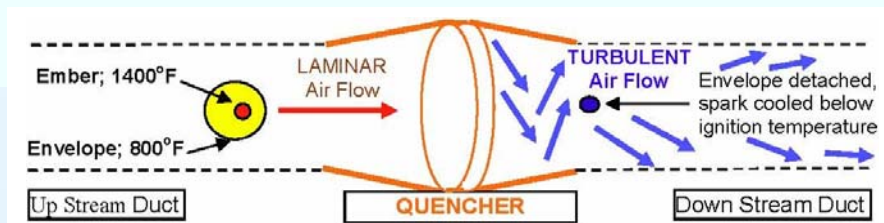
- Welding, grinding, plasma / laser cutting, furnaces, burners etc.
- EXTINGUISHES and cools sparks & burning embers.
- PREVENTS fires & explosions in dust collection systems.
- IN-LINE DEVICE, easy to apply and use.
- NO MOVING PARTS, static device.
- No additional dust collection point required.
- Specifically designed to extinguish sparks & embers, not just an air blender or mixer passed off as a spark suppressor.
- Most advanced technology available, re-engineered in 2003-2004 from proven principals first discovered in the 1960's.
- All Manufacturing and suppliers are exclusively USA & Canadian.



How It Works; view the "Video" at www.qamanage.com

"...and tested it last night. It was quite amazing. We put through a large continuous stream of sparks from a grinder and viewed it..." Grant Stevens, Poxex Ltd.

Refer to the figure below. The spark is surrounded by an envelope of hot air. The envelope keeps the spark in contact with oxygen which fuels the burning ember. The gas in the envelope is less dense than the gas in the gas stream; therefore, it is buoyed up and floats along in the gas stream. By design, the flow in the duct is laminar, the spark and it's envelope moves along in the gas stream undisturbed, at the same velocity as the gas stream and may be carried for hundreds of feet. Eventually it reaches the dust collector and the spark gets deposited on the filter media surface or in the hopper where it will ignite flammable dust or combustible media. The QUENCHER creates extreme turbulence which breaks apart the hot air envelope, stripping the oxygen (fuel) away from the burning ember/spark, therefore extinguishing and cooling it. The temperature of the spark is now too low to cause an ignition. The cooled sparks are carried safely along the gas stream to the dust collector. **Air mixing or air blending devices, which are marketed as spark arrestors/coolers, do not create enough turbulence and have gaps in the cells permitting sparks to slip through.**



Introduction To a Better System

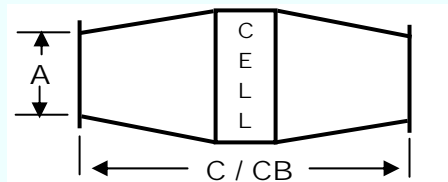
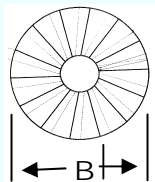
DESCRIPTION

The "Cell" consists of concentric & overlapping radial curved turbulator vanes in a round or square housing, which gives the air a full 90° turn, thereby creating maximum agitation / turbulence of the air stream.

This is a static device, with no moving parts.

It is **not an air blending / air mixer falsely applied to spark cooling**, as others are sold as. The Quencher is designed and built specifically for spark arresting.

"Cell only" models, without the inlet and outlet reducer sections are also available.



Model	SCFM	A	B	C	CB	Model	SCFM	A	B	C	CB
Q-08	490 - 820	6	8	14	28		Q-38	11,300 - 18,800	28	38	56	84
Q-10	790 - 1310	8	10	14	30		Q-48	18,300 - 30,600	36	48	66	96
Q-12	1100 - 1840	10	12	16	32		Q-60	28,900 - 48,200	44	60	80	118
Q-16	1800 - 3000	12	16	26	44		Q-72	41,600 - 69,300	54	72	88	126
Q-20	2980 - 4960	14	20	36	54		Q-84	56,500 - 94,200	64	84	96	144
Q-24	4420 - 7360	18	24	38	58		Q-96	74,200 - 123,700	72	96	116	164
Q-30	7070 - 11,800	22	30	46	66		Q-108	94,200 - 157,100	72	96	128	184

All dimensions are in inches.

A = Standard duct connection size. Other sizes are available upon request.

C = Length of Quencher alone (no Cleaner option).

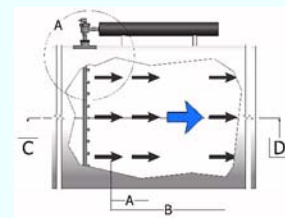
CB = Length of Quencher when a Cleaner – Booster option is included.



Duct Connections; Standard is flanged, sleeve joint (slip / raw edge), rolled-edge (for clamp together duct) and any non-standard size inlet/outlet size is available upon request.

CELL CLEANER / BOOSTER (Option)

Sometimes dust and dirt can dropout in the duct work or within the QUENCHER cell. To help reduce the issues associated with dust accumulations, an optional CELL CLEANER / BOOSTER device can be installed in front of the Quencher cell. It is built as an integral part of the QUENCHER, to ensure critical orientation, jet distances and ease of application. This device can be actuated manually or automatically to give a burst of air into the duct or Quencher, thereby blowing the dust down the duct to be collected at the dust collector. For more information on this device, ask for our technical bulletin, "Auto Booster – Duct Cleaner".



Cell Cleaner / Booster

Other Options:

Custom Duct Connection Size

Paint

Access (clean-out) Port

Companion Flanges with bolt pattern

QAM reserves the right to change design and specifications, without notice.

Sold and Serviced by:



www.qamanage.com

T: 1-800-267-5585