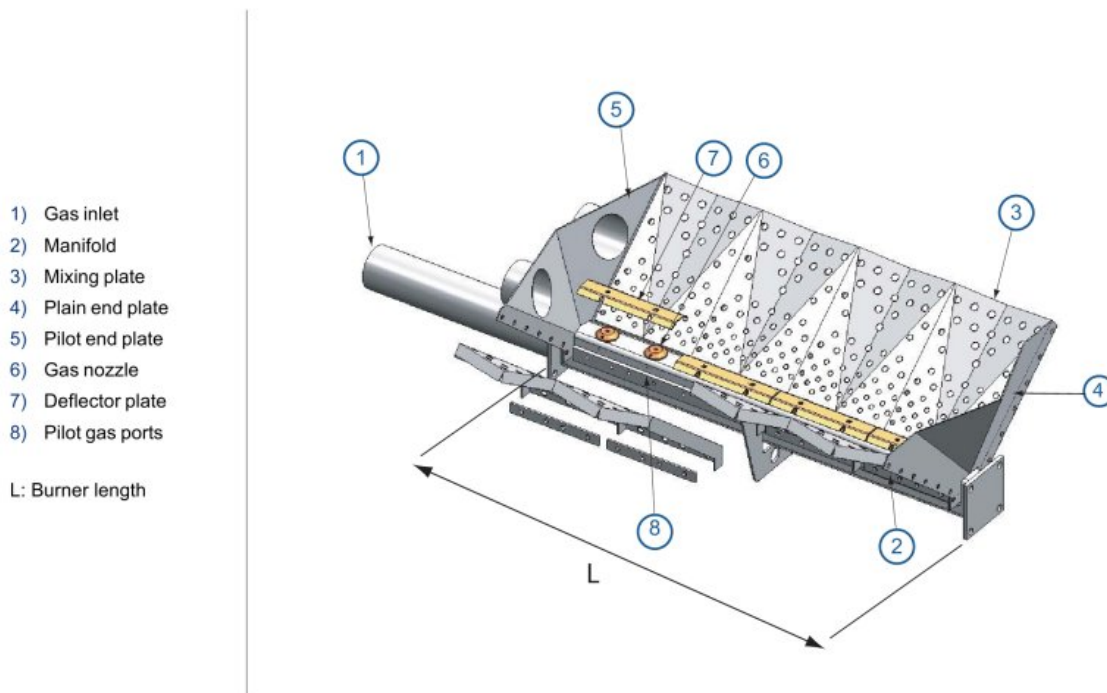


## Product description

MAXON Series "HC" AIRFLO® burners consist of a stainless steel burner manifold which not only serves as a burner frame but also transports the fuel gas to the gas nozzles and supports the diverging Hastelloy mixing plates.



## Principle of operation

The burner is mounted directly into the process air stream being heated. Thanks to the unique design of the V-shaped mixing plates, the high velocity injected fuel and the process air are intensively mixed. The required oxygen for combustion is progressively drawn from the process air stream.

The special designed aeration patterns in the mixing plates insure progressive mixing, superior cross ignition, reliable flame retention, clean combustion over the full capacity range and increased flammability on low O<sub>2</sub> applications.

A small part of the process air stream to be heated is forced through the burner mixing plate holes and is used as primary combustion air. This primary combustion air is mixed with the gas flow injected through the pilot gas ports. The flames retain on the inside of the mixing plates and serve to ignite the high velocity fuel jets injected through the gas nozzles. These jets create large recirculating areas in the flame. This thorough mixing guarantees high capacity clean combustion, avoiding hot spots in the flame and thus reducing thermal NO<sub>x</sub> formation.

This unique principle of operation allows "HC" AIRFLO® burners to operate with both low NO<sub>x</sub> and low CO, over the complete turndown.

W W W . M A X O N C O R P . C O M

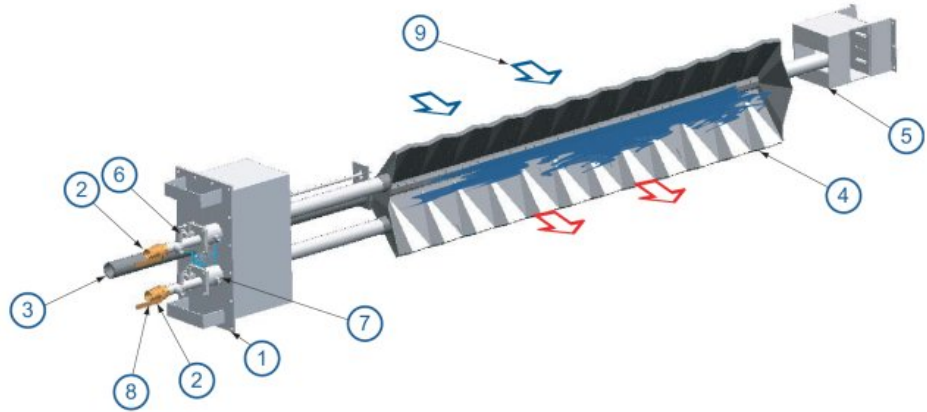
COMBUSTION SYSTEMS FOR INDUSTRY

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## Complete burner assembly

- 1) Mounting plug
- 2) LVDT/HC pilot burner  
(see section 4-22.4 for detailed information)
- 3) Gas inlet 2"
- 4) Mixing plates
- 5) Mounting support
- 6) Test connection (upstream process air pressure)
- 7) Test connection on LVDT/HC pilot burner (downstream process air pressure)
- 8) UV scanner connection
- 9) Process air flow direction



All "HC" AIRFLO® burners include a stainless steel mounting plug which not only supports the burner but also carries the pilot burners and accessories such as ignition transformers, UV scanners etc. A stainless steel mounting support to carry the weight of the burner is standard included. Thus the burner comes as a complete package, allowing easy installation on site.