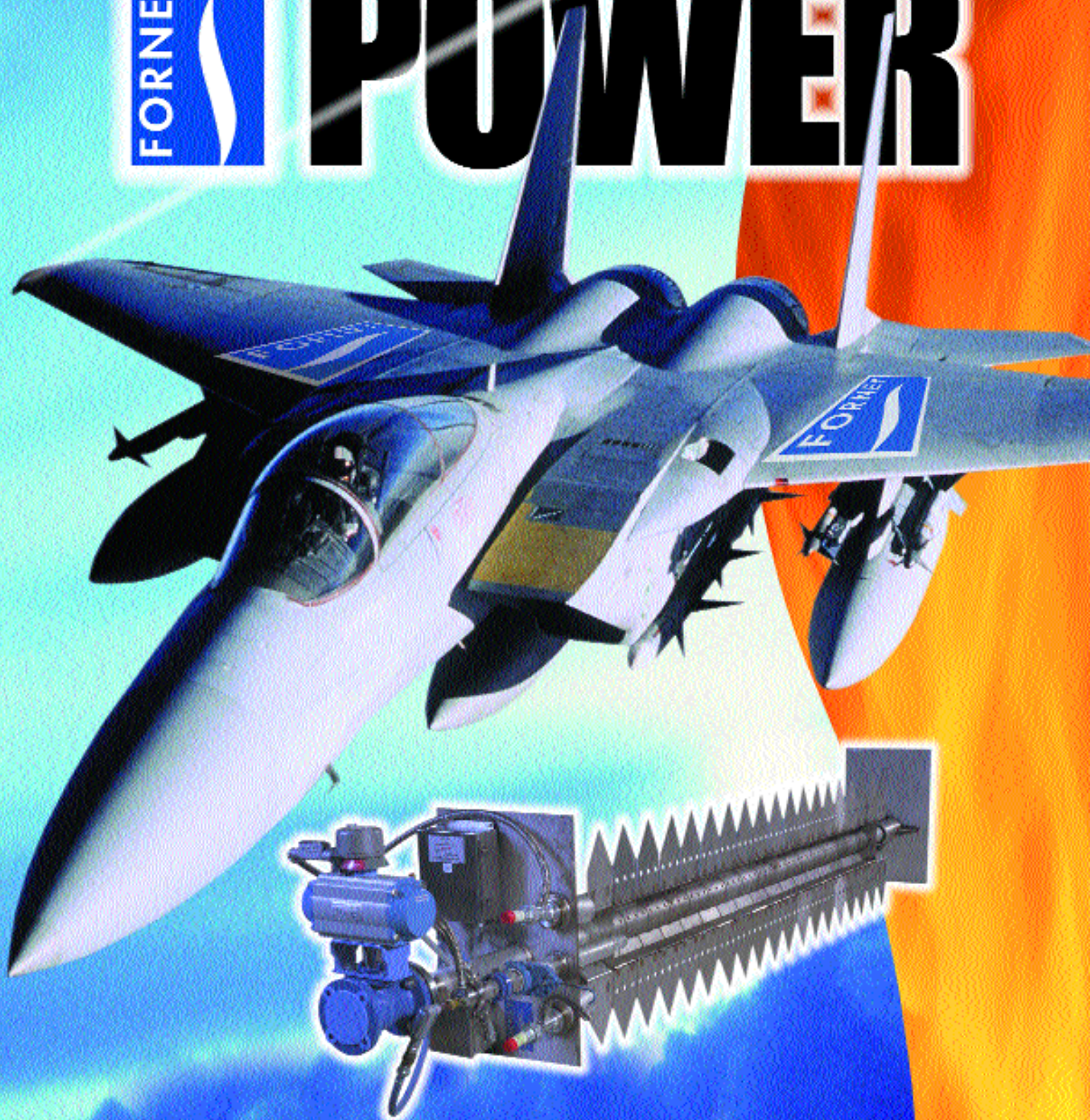




# POWER



The power of the vortex is what gives you the

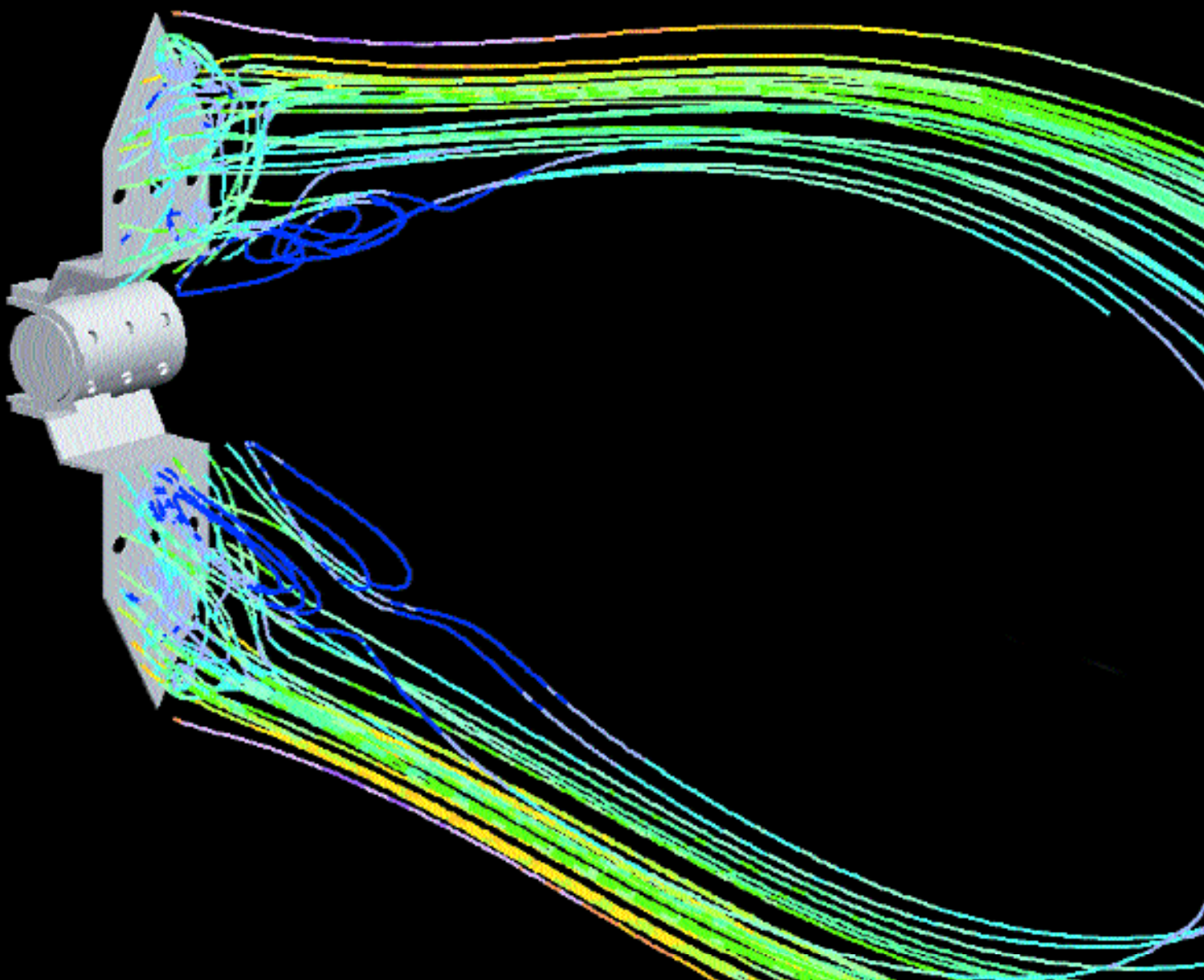
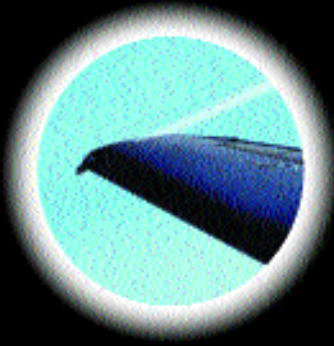
**ADVANTAGE™**

Fomey's unique "wingtip vortices" make our duct burner the most powerful in the industry. Designed to excel under the toughest turbine conditions, the adVantage duct burner performs especially well in the "low-oxygen/ high-water-vapor exhaust" environments found in the most advanced power augmented gas turbines - without augmenting air.

We know that bigger isn't always better, so we created a design that would duplicate the turbulent motion similar to an airplane's wingtip. These vortex streams mix fresh turbine exhaust into the flame at the edge of the envelope effectively scrubbing the CO and UBHC's. Because the vortices act to mix the chilled flame edge with fresh turbine exhaust while still maintaining the peaking flame temperatures at the flame

front, the resulting emissions are low in CO but do not cause an increase in the NOx emissions. This innovation is what allows the adVantage's CO and VOC emissions to perform at 80% lower than recirculation-type burners, without an increase in NOx or pressure drop.

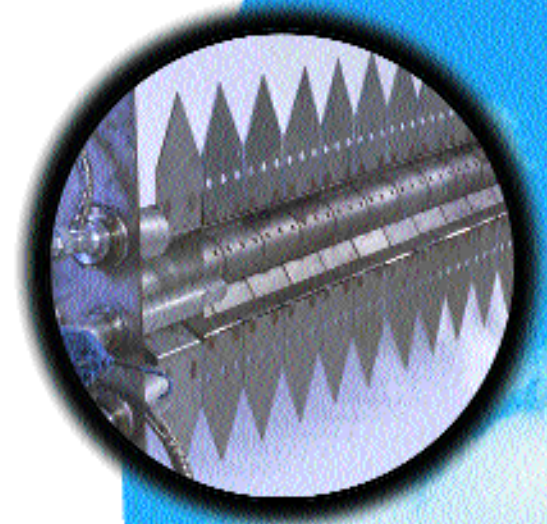
The short flame created by this innovative design allows for improved downstream temperature distribution. The flame is very stable and generates low emissions with wider inlet turbine exhaust gas distribution allowances. Combined with Fomey's reliable high-energy ignition system, the adVantage provides industry-leading performance. All of these elements come together to provide you - the customer - increased reliability, greater efficiency and lower operating costs.



Why it's called the

# ADVANTAGE™

- Reduces CO and VOC by as much as 80%
- No increase in NOx
- No increase in Pressure Drop
- Advanced mixing concepts develops wingtip vortices for efficient combustion
- Greater flow distribution allowances
- Stable, reliable ignition system
- Shorter flame lengths
- Improved temperature distribution
- Easy to retrofit existing duct burners
- Easy installation for new power plants
- Accepts lower O<sub>2</sub>, higher H<sub>2</sub>O and lower inlet temperature without augmenting air
- Lower Operating Costs
- Higher Efficiency
- Lower Maintenance
- Reliable and Innovative Technology



Lower Plant Emissions	=	Low CO/VOC emissions even in low oxygen and high water vapor environments.
	=	Lowers GT NOx by allowing more water/steam injection without burner CO challenges.
Reduce plant operating costs.	=	Reduced CO catalyst dependency.
	=	Potential ammonia savings with SCR and GT water/steam injection.
Low Pressure Drop	=	Better turbine performance and increased power output.
Short Flame Length	=	Better temperature distribution.
	=	Reduced HRSG furnace length.

## Additional duct burner applications by Forney:

- Refinery gas
- Air augmented
- Small industrial waste heat boilers
- Landfill gas
- Coke oven gas
- Hydrogen
- Light oil
- Large air heaters

Contact your nearest Forney representative  
to learn more about the full line of Forney Products.

- Flame Detectors
  - CEMS
- Burner Management Systems
  - Burners
  - Duct Burners
  - Igniters



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ISO 9001 Certified  
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