

HERACLES™ Jet³⁶⁰ nozzle

Advanced boiler spray cleaning technology



Advanced boiler spray cleaning technology

In Waste to Energy (WtE) boilers, ash deposits in the radiation passes reduce heat transfer, increase corrosion risk, and can cause unplanned shutdowns for manual cleaning. Our rotating nozzle is engineered to deliver highly effective, uniform cleaning, even in the most challenging conditions – offering better cleaning performance and longer service life than existing systems.



Heracles™ Jet³⁶⁰ nozzle

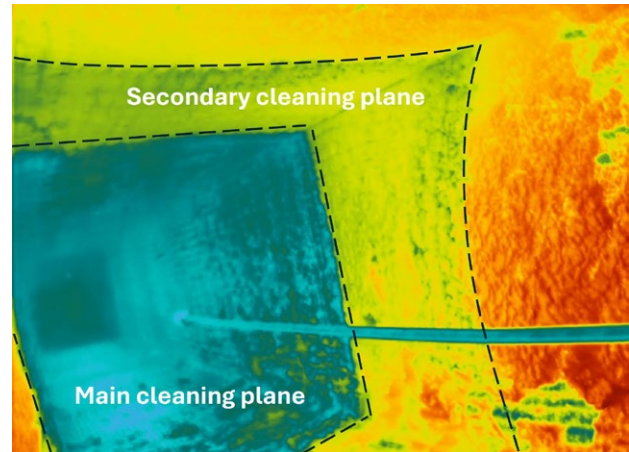
High performance design

The nozzle is the heart of a radiation pass cleaning system, vital for an optimal fluid distribution and cleaning performance. Our Heracles™ Jet³⁶⁰ nozzle uses a dual-action cleaning mechanism that combines mechanical impact with thermal effect.

Its gearless, water-powered drive system is designed to operate at low rotation speed. It therefore ensures minimum water atomisation, maximum impact energy and superior cleaning performance. Its compact design fits in most boiler types and allow upgrading existing spray cleaning systems at minimum costs.

Full coverage of radiation pass

The Heracles™ Jet³⁶⁰ nozzle is designed to thrive with two cleaning areas to guarantee the best cleaning performance.



The infrared camera view shows the effect of the Jet³⁶⁰ nozzle jets on boiler walls. The cooling effect is visible in blue, while fouling shows in red.

Try and buy

Not yet convinced? We offer a free, no-obligation six-month trial of the Heracles™ Jet³⁶⁰ nozzle, allowing you to evaluate its performance in your specific application. After the trial period, you can simply choose to purchase the nozzle head or return it.

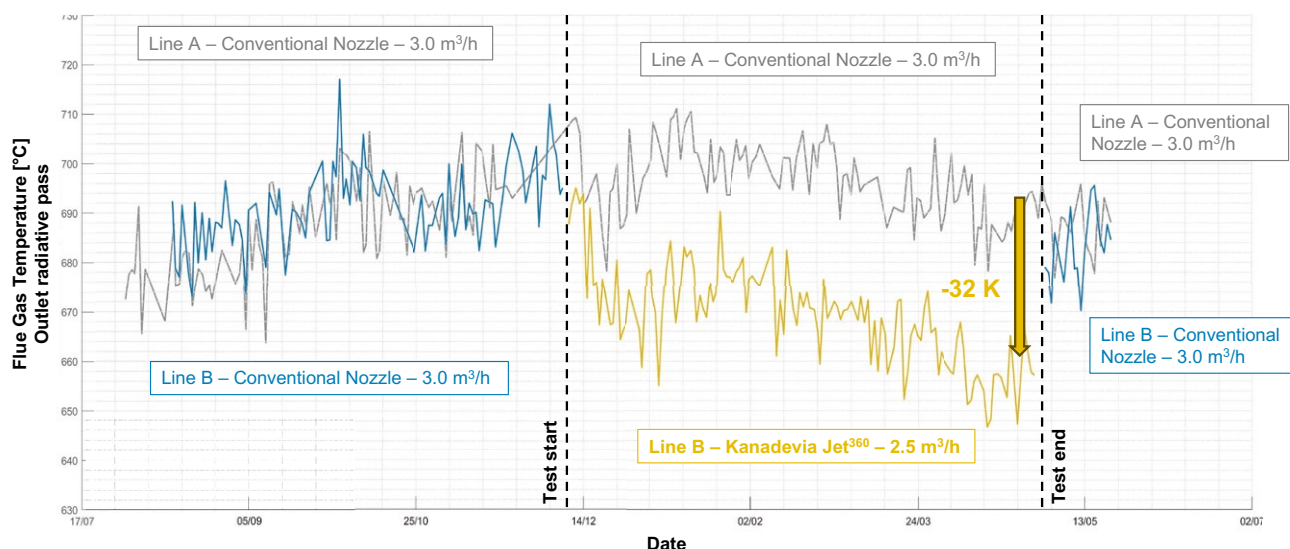
Benefits

- full cleaning coverage of the entire radiation pass section
- up to 50% higher cleaning performance than existing systems
- up to 30% less water consumption than existing systems
- lower risk of SH corrosion due to lower flue gas temperature
- reliable operation thanks to gearless concept
- lower wear parts costs thanks to increased cleaning interval
- retrofitable in 3rd-party systems

Customer success

The Heracles™ Jet³⁶⁰ nozzle has been validated in multiple WtE plants, demonstrating its outstanding cleaning efficiency. The graph below summarises the results from a WtE plant with two identical lines and the same waste feed.

The line B equipped with the Heracles™ Jet³⁶⁰ nozzle achieved a reduction in flue gas temperature of more than 30 K at the convective pass inlet while using 17% less cleaning water than the line A fitted with a conventional nozzle.



Comparison of the flue gas temperature flow over time

HERACLES™ Jet³⁶⁰ nozzle key figures

Description	Figures
Dimensions: diameter/length	78/145 mm
Number of spray nozzles	6, including 2 nozzles directed upwards for roof cleaning (optional)
Recommended guiding tube geometry (diameter / maximum inclination / minimum bending radius)	DN125/35°/300 mm DN100/15°/300 mm
Nominal water flow	2.5 m³/h
Possible water flow range	1.5 – 3.5 m³/h
Working pressure range	1.0 – 4.0 bar
Water quality	Free from impurities (<0,5 mm) Max. temperature 60 °C
Connection	Female 1" Male ¾" Other configuration on demand
Water jet impact distance	up to 4 m
Minimum service interval	120 operation hours or 500 cycles



Kanadevia Inova AG

Hardturmstrasse 127
8005 Zurich
Switzerland
P +41 44 277 11 11
info@kanadevia-inova.com
www.kanadevia-inova.com