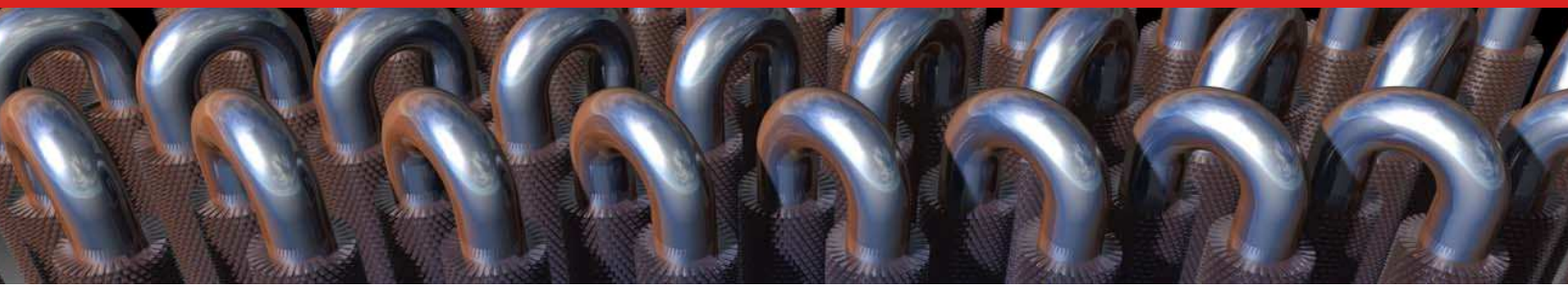
# Fintube AeroSeg® Fin

**EXPERIENCE, QUALITY, AND CONSISTENCY FROM THE HEAT RECOVERY EXPERTS**



## Breakthrough

SINCE ESCOA, A DIVISION OF FINTUBE INTRODUCED THE SERRATED FINNED TUBE IN 1975, THERE HAVE BEEN NO MAJOR QUANTITATIVE CHANGES TO FINNING TECHNOLOGY ... THAT IS UNTIL NOW.

## AeroSeg® finned tubing

FROM FINTUBE, LLC THE NEXT REVOLUTIONARY STEP FORWARD, WILL LEAD TO SIGNIFICANT SAVINGS IN HRSGS, ECONOMIZERS AND OTHER APPLICATIONS WHERE FINNED TUBING IS USED. AEROSEG FINNED TUBES ARE A TYPICAL HIGH FREQUENCY ELECTRICAL RESISTANCE WELDED FINNED TUBE WITH A UNIQUE, PATENTED SEGMENT SHAPE.

## The Contour

MODIFICATIONS TO THE FLOW PATTERN OF THE GAS FLOWING OVER AN AEROSEG FIN SEGMENT LEADS TO A SIGNIFICANT INCREASE IN HEAT TRANSFER. AUGMENTATION AS HIGH AS 29% COMPARED TO REGULAR SERRATED FINNED TUBE HAS BEEN OBTAINED IN EXPERIMENTAL TESTING AT THE FINTUBE TEST FACILITY

*SHOWN IN FIGURE 1

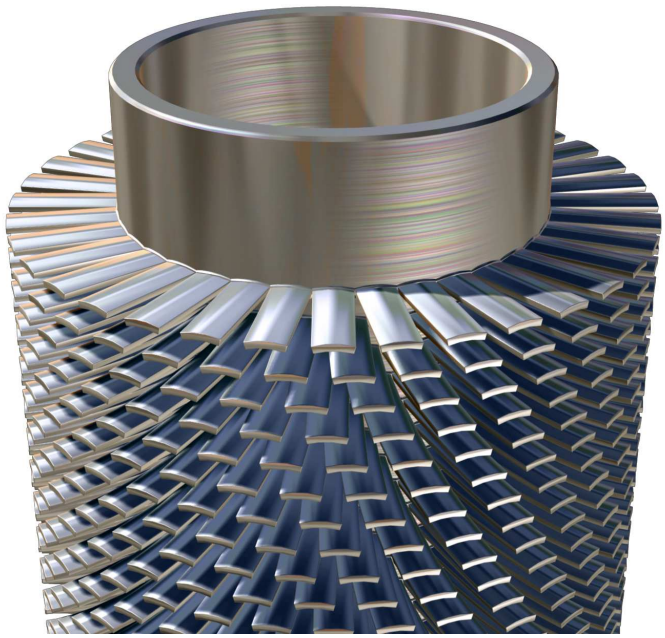
**Figure 1**

## AeroSeg

AEROSEG FINNED TUBES ARE SUITABLE FOR APPLICATIONS WHERE CLEAN BURNING FUELS ARE FIRED. THEY ARE AVAILABLE IN CARBON STEEL AND STAINLESS STEEL ALLOYS AND CAN BE PRODUCED IN THE TYPICAL BOILER TUBE SIZE RANGES THAT ARE STANDARD IN THE INDUSTRY.

# MAXIMIZED HEAT TRANSFER

INDEPENDENT RESEARCH AND FIELD PERFORMANCE CLEARLY DEMONSTRATE THE SUPERIOR HEAT TRANSFER OF THE SEGMENTED FIN OVER THE PLAIN FIN. CUTTING THE FIN SURFACE INTO SEGMENTS RESULTS IN A THINNER LAMINAR BOUNDARY LAYER ON THE FIN SURFACE AND INCREASED TURBULENCE IN THE FLUID FLOWING OVER THE SURFACE. THIS, IN TURN, SIGNIFICANTLY INCREASES HEAT TRANSFER WITHOUT A PROPORTIONATE INCREASE IN PRESSURE DROP.



## Taking a Stand For Excellence

## Heat Transfer

FIGURE 2 ILLUSTRATES THE AERODYNAMIC FLOW OF THE GASES OVER THE FIN SURFACE. THIS BETTER CONTACT BETWEEN THE GAS AND THE FIN SURFACE LEADS TO INCREASED HEAT TRANSFER PERFORMANCE AND IS A FUNCTION OF TUBE LAYOUT AND FIN GEOMETRY.

AEROSEG PERFORMANCE HAS BEEN TESTED IN THE FIELD AS WELL. THERE ARE HUNDREDS OF OPERATING ECONOMIZERS WITH AEROSEG FINNED TUBES PERFORMING IN ACCORDANCE WITH TEST DATA.

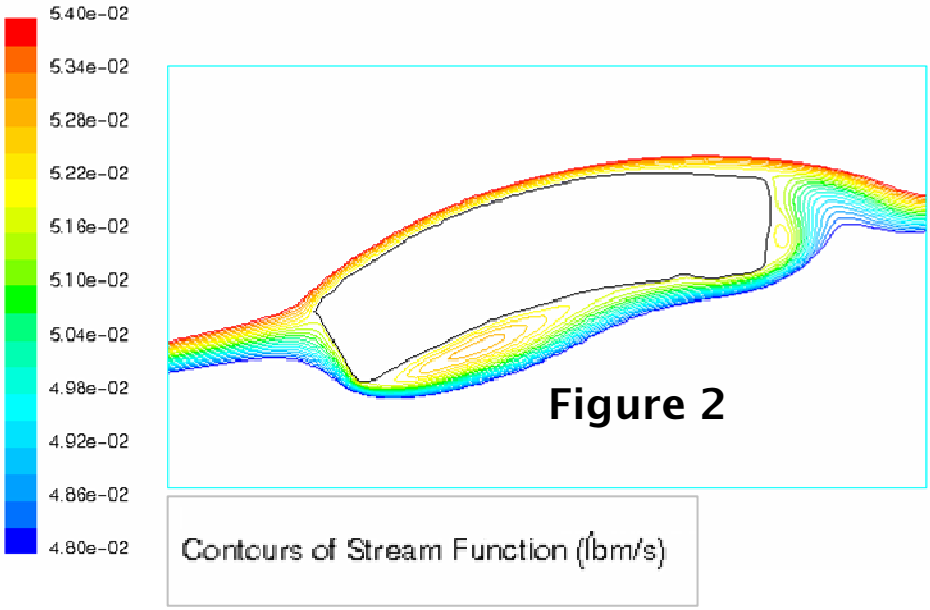



**Figure 2**

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