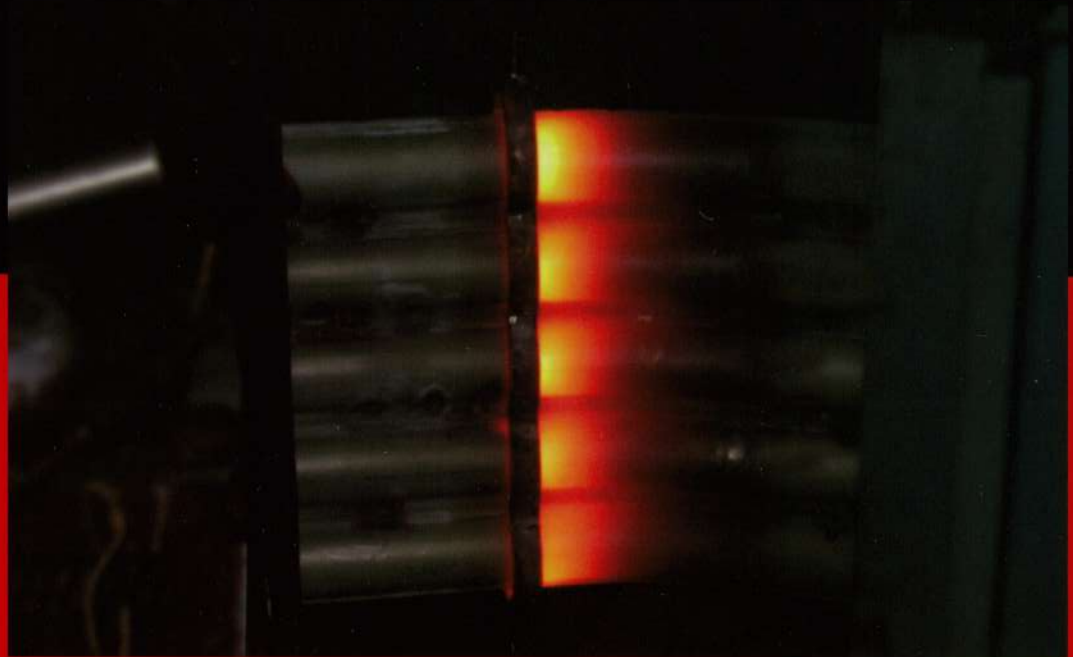


DHF

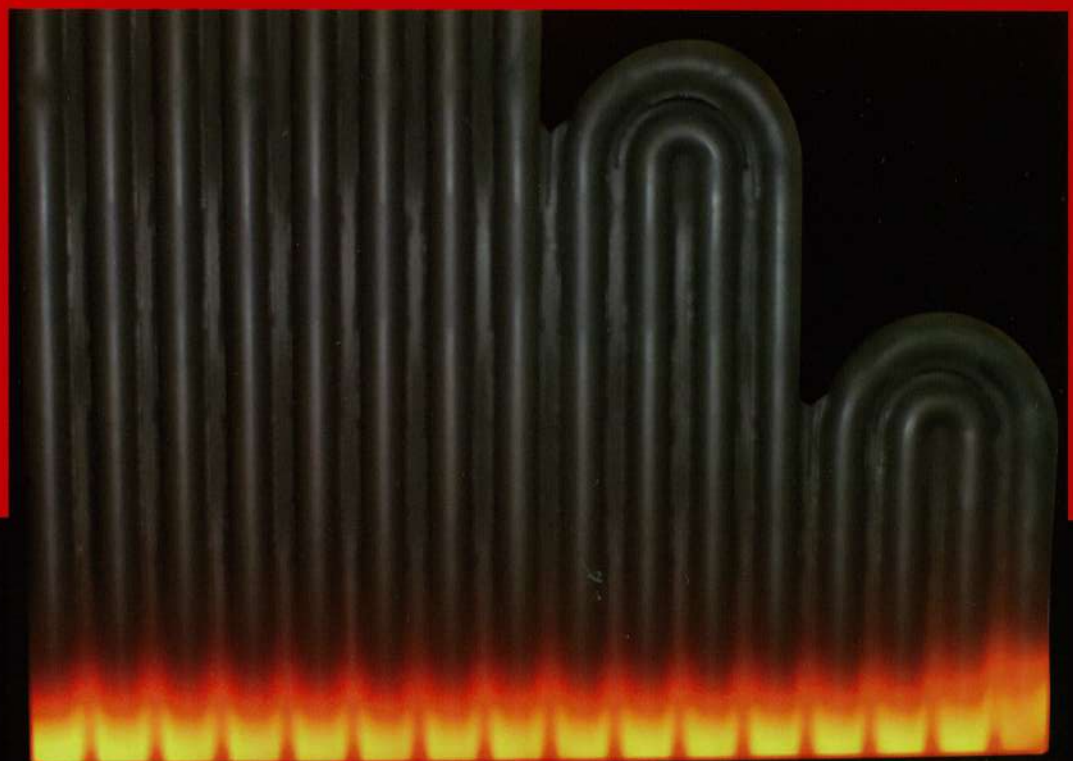


High-performance Bimetallic Boiler Tubes and Panels

DHF Bi-met BT&P™

Maximize Efficiency and Service Life !

Minimize Downtime and Maintenance Costs !



第一高周波工業株式会社
DAI-ICHI HIGH FREQUENCY CO., LTD.

Induction heat treatment in the fusing process creates a metal coating of exceptional quality and reliability. By simultaneously performing IH fusing while IH bending, DHF can produce a whole range of tubes and panels to fit all boiler shapes.



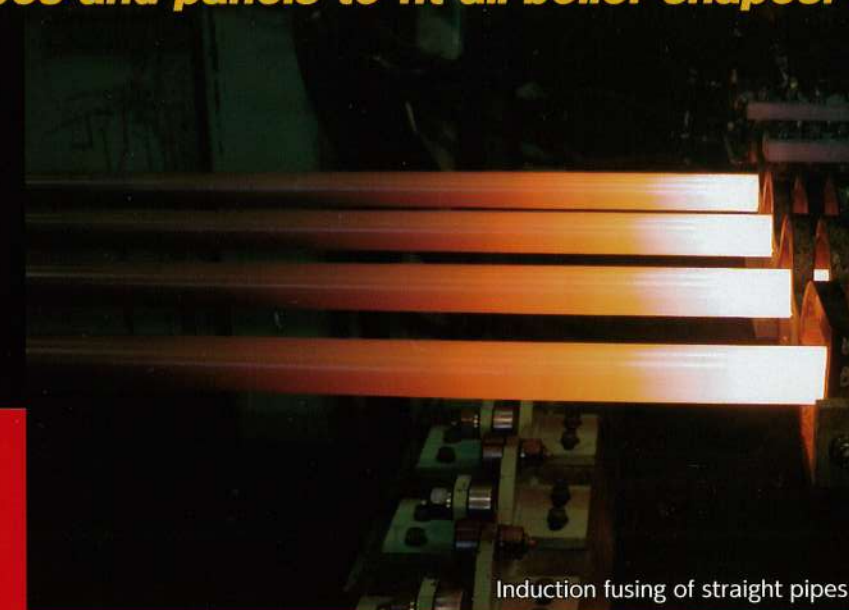
Panel undergoing simultaneous fusing and bending



Cross section of Bi-met boiler tube



Microstructure of diffusion-bonded layer at interface of mother pipe and coating



Induction fusing of straight pipes



Induction fusing of straight tube panel

High-performance Bimetallic Boiler Tubes and Panels

DHF Bi-met BT&P™

**DHF Bi-met Boiler Tubes and Panels:
Cost-effective - Reliable - Durable**

DHF Bi-met BT&P are bimetallic boiler tubes and panels, thermally coated with nickel-based self-fluxing alloy with high anti-corrosion and anti-erosion properties.

Unlike conventional thermal coating methods, DHF's unique induction heating technology, utilizing thermal process automation and strict temperature control, virtually eliminates pores and other irregularities to form a sturdy protective coating. It also produces a powerful diffusion bond between the base pipe and the coating, providing exceptional adhesion. The resulting long service life of Bi-met products is key to maximizing boiler performance.

DHF's induction bending technology also enhances design flexibility when building or renovating boilers. Bi-met tubes and panels can be adapted to any type of existing manufacturer's boiler.



Bent tubes ready for shipping



Bi-met boiler tubes assembled in Circulating fluidized Bed boiler block



Bent panels for roof of combustion chamber



Bent panel



Bent panels installed in roof area of combustion chamber

Product Specifications

Coating Thickness: 1 mm (Standard), Max. 2mm

Product	Type	Pipe size (D)	Max. Length	Max. Width	Min. Bending Radius	Max. Bending Angle
DHF Bi-met BT	Single Tube	Max. 5"	10m	NA	1.5D*	180°
DHF Bi-met BTP	Panel	31.8~(mm)		500mm	500mm	90°

* D: Pipe size (mm)

* Material 1) Pipe: STPG 2) Coating: Nickel-based Self-fluxing Alloy

DHF Bi-met BT&P™

Maximizes thermal efficiency, operational lifetime, safety and reliability.
Minimizes costly shutdowns caused by tube damage.

- Boiler Types :
- Waterwall panels for garbage incinerators
 - Biomass-fired boilers for power generation
 - Single-fuel coal-fired boilers
 - Fluidized-bed boilers
- (Other boilers using solid fuels)



第一高周波工業株式会社
DAI-ICHI HIGH FREQUENCY CO., LTD.

Head Office: Yoshino Dai-ichi Bldg, 4F 1-6-2, Nihonbashi Bakurocho, Chuo-ku, Tokyo, 103-0002, Japan.

TEL: +81-3-5649-3725 FAX: +81-3-5649-3726

DHF HP: <http://www.dhf.co.jp/>

Product information: <http://www.dhf.co.jp/products/hardfaced/boiler-tube.html>
Contact: TEL: +81-3-5649-3727 FAX: +81-3-5649-3722