



Wave Recuperator: Combustion Air Preheater

BOOST YOUR PLANT



HEAT RECOVERY

Efficiency has become synonymous with success. When a company manages to reduce its primary energy consumption, the positive effect on the process is very evident – as are the benefits to the investor.

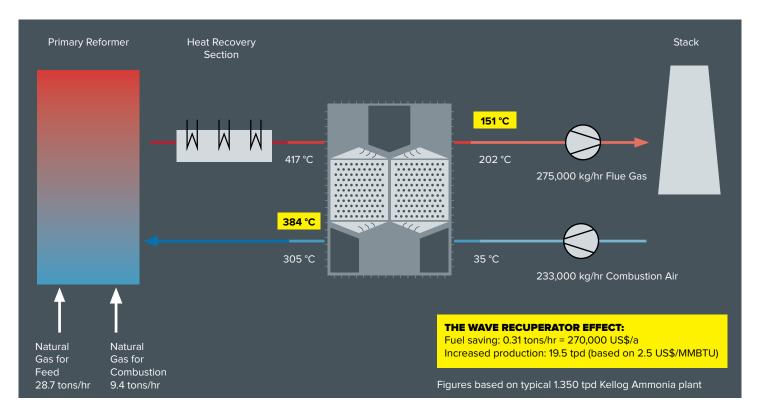
By replacing low performing combustion air preheaters with WAVE RECUPERATOR you can boost the productivity and reduce the fuel consumption of your plant. At the same time CO_2 emissions can be reduced.

The WAVE RECUPERATOR is about half the weight and half the plot space of tubular type Heat Exchangers with the same duty and even more its weight benefit compared to cast iron units is considerable.

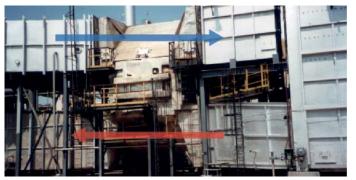
ADVANTAGES

- ► All types of air preheaters can be replaced:
 - ► Tubular type
 - ▶ Cast iron type
 - ► Rotary regenerative type
 - ► Other plate type (OCAP)
- ► High efficient WAVE RECUPERATOR can be installed
 - within the same plot space
 - ▶ on existing APH foundation
 - ► during regular shutdown
- ► KTS provides the full scope of servcie
 - ▶ design of new heat exchangers and ducts
 - ▶ site supervision and assembly concept
 - ▶ structural analysis & foundation loads

REVAMPING EXISTING PLANTS WITH WAVE RECUPERATOR



QUALITIES	BENEFITS
1. Recuperative welded plate heat exchanger	1. Leak-free *
2. Counter flow design	2. Maximum heat recovery
3. Small gaps between plates	3. Very compact heat exchanger
4. Thin plates	4. Light weight
5. Corrugated plates	5. Increased heat exchanging area; high turbulance; max. heat transfer
6. Support dimples / edges pressed to form gaps	6. Less material, less weight compared to other plate types
7. Vertical flow direction	7. Easily accessible and easy cleaning in both ways
8. Modular design	8. No upscale issues
	*99,9% leak-proofness



Prior arrangement with rotary regenerative type, several unexpected shutdowns and 15% leakage



New arrangement with WAVE RECUPERATOR, no unexpected shutdowns, zero maintenance, achieved energy saving 134,000 MMBTU/a (39,260 MW/a)**

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*** Any specifications, especially pertaining to performance data and suitability for specific operating purposes, are dependent upon the individual circumstances at the

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