The Advantages of the Clayton Super Economizer (SE) include:

**IMPROVED EFFICIENCY**
Provides an additional 3% to 4% thermal efficiency with additional 35% heating surface.

**RAPID PAYBACK**
As little as 15 to 18 months, depending upon fuel costs and operation.

**SIMPLE INSTALLATION**
No intervening stack connectors or additional support structure required.

**COMPACT DESIGN**
Integrally mounted to reduce installation costs and space requirements.

**AVAILABILITY**
Available on new units, 60 BHP and above, or in field retrofit kits.
The Clayton Super Economizer (SE) coil assemblies are constructed in a similar fashion to the main heating coil section. The typical SE coil assembly has six (6) coils enclosed in a carbon steel jacket surrounded by insulation and a sheet metal outer shell. Each coil is a spirally wound, tube section constructed of SA178 carbon steel tubing. The assembly is welded with clips and spacers in a monotube coil design to optimize heat transfer between combustion gas and water flow. Water flow in the SE section is counter to the exhaust gas flow, with the feedwater entering at the top and exiting at the bottom. Exhaust gases flow from the bottom to the top.

On a Steam Generator, the SE section is mounted on top of the main heating coil and adds approximately 15” to 36” to the overall height, depending on the model selected. No special supports are required as the weight of the SE section is supported by the main heating coil. SE sections are factory mounted and tested with the unit. Depending upon height restrictions for shipment, the SE section can be removed for shipment and reinstalled on site by the installing contractor.

SE sections increase the heating surface by approximately 35% and can increase unit thermal efficiency by 3% to 4%. By using exhaust gas flow to heat the feedwater going to the main heating coil, an SE section will decrease stack temperature by a nominal 100°F to 150°F at full load, depending on the model selected.