

Exhaust Heat Exchanger Pays for Turbine Generator and Itself in Less Than 6 Years!

Take a prime power generator, install a Cain Industries exchanger and great things happen...

Let's start with a new 1000kW turbine generator at a cost of \$1,200,000. Now we're going to place a Cain HRSR heat exchanger into the exhaust stream at a cost of \$108K. With a conservative fuel cost of 65¢ per therm and 8,000 annual operating hours our exchanger is going to yield almost \$226K of recovered heat energy per year for approximately 20 years.

Generator \$1.2MM + Exchanger \$108K ÷ Recovered Energy \$226K = 5.7 Years Payback

Here's the heat recovery science behind it all:

Combustion Source:

1000kW Turbine Generator

Return Water Heat Sink

Waste Exhaust Temp.	582°F
Water Temp. Inlet	188°F
SCFM	11,720
Fuel Type	Natural Gas
Fuel Cost per Therm	\$.65
Annual Operating Hours	8,000

Cain Model Installed:

HRSR Exchanger

Liquid Flow Rate	444.5 gpm
Final Exhaust Temp.	271°F
Liquid Temp. Outlet	208.1°F
Pressure Drop, Water	1.44 psig
Pressure Drop, Exhaust	1.55" WC
BTU/hr Recovered	4,347,000
BTU/hr Saved	4,347,000
Total Cost	\$108,103

Life Expectancy Savings:

\$4,520,420 (20 years)



Every exhaust heat recovery application is unique and will provide different payback results. Contact Cain Industries today to evaluate your specific requirements and to receive a **FREE Savings Analysis Study with Guaranteed Performance!**