



**Passion & Innovation:
The Enertech Team**

IGSHPA 2011 CONFERENCE

Member



Passion & Innovation

- 15 years of solutions in promoting geothermal heat pump technology
- 4 years as a manufacturer
- 100+ years of collective experience in the senior management team
- Dedicated to quality
- Industry first with several new designs

Here's a look at what's new at Enertech ...

What's New At Enertech?

- Enertech expansion / senior management update
- Micro channel air coils
- Gen. 2 combination units
- Energy Star Tier 3 water-to-water product line
- Energy Star Tier 3 split system product line
- New horizontal product line
- GeoAnalyst software
- Geothermal University
- More to come in 2012 ...



Mitchell, SD Manufacturing Plant Expansion

40,000 SQ. FT. ADDITION / QUALITY SYSTEM INSTALLATION



Greenville, IL Corporate Headquarters Department Expansions

PSYCHROMETRIC LABS / ENGINEERING OFFICES



The Enertech Team

LEFT TO RIGHT: STEVE SMITH, BRIAN URLAUB, DAN JACKSON, TIM WRIGHT, JEFF HAMMOND, GREG KURTZ, BILL DEAN, SHAWN MELTON

Micro Channel (MCHX) Benefits

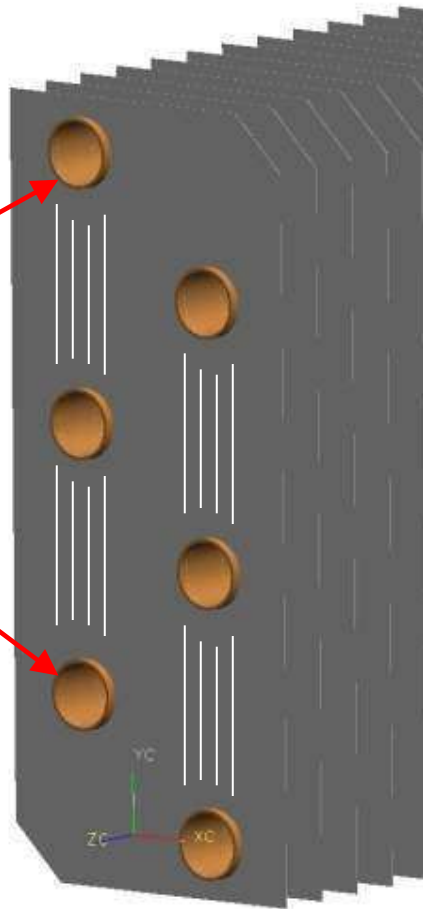


- All aluminum construction
 - Formicary corrosion issues solved
- Higher system efficiencies (15% increase in EER!)
- Significantly lower pressure drop
 - Lower HP blower = less Watts
- Less refrigerant charge
- Fully recyclable

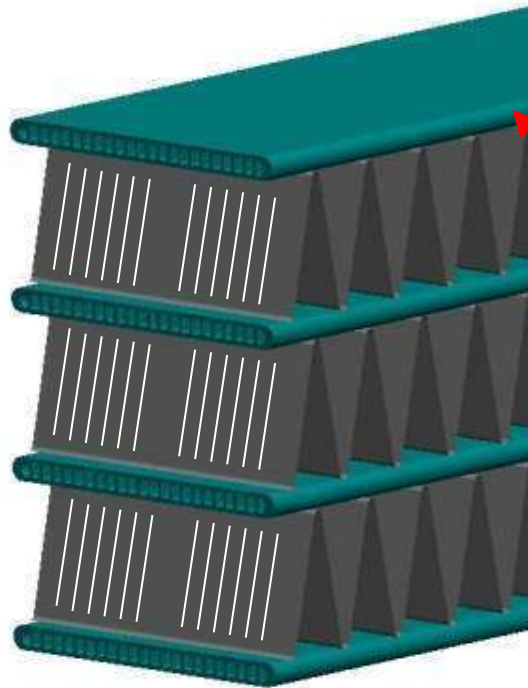
Advantages of Brazed Design Compared to Tube & Fin

Tubes Mechanically Connected to Fins

- Tube is expanded into fin
- Less thermal efficiency vs. brazed



Tube & Fin Design

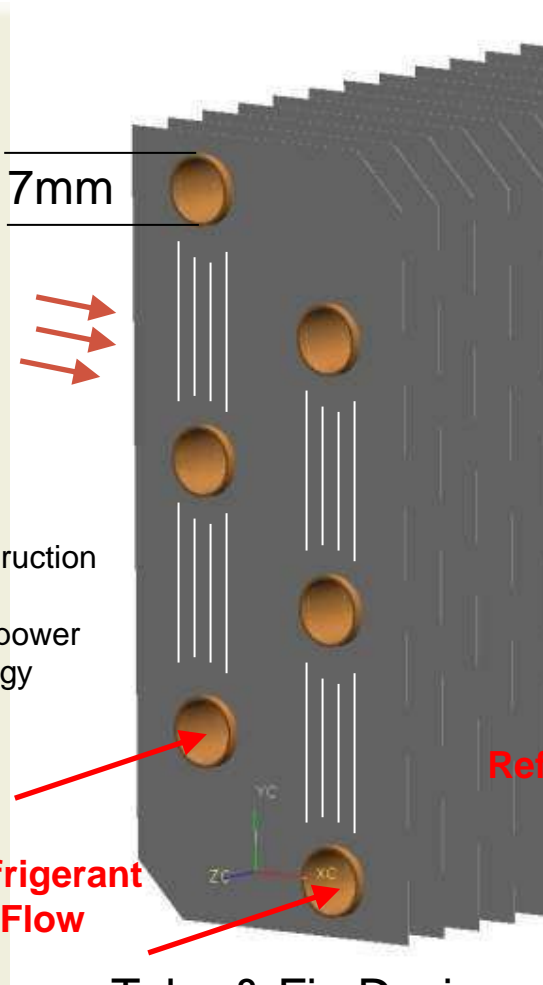


Tubes Metallurgically Bonded to Fins

- Entire assembly brazed in furnace
- Superior thermal efficiency

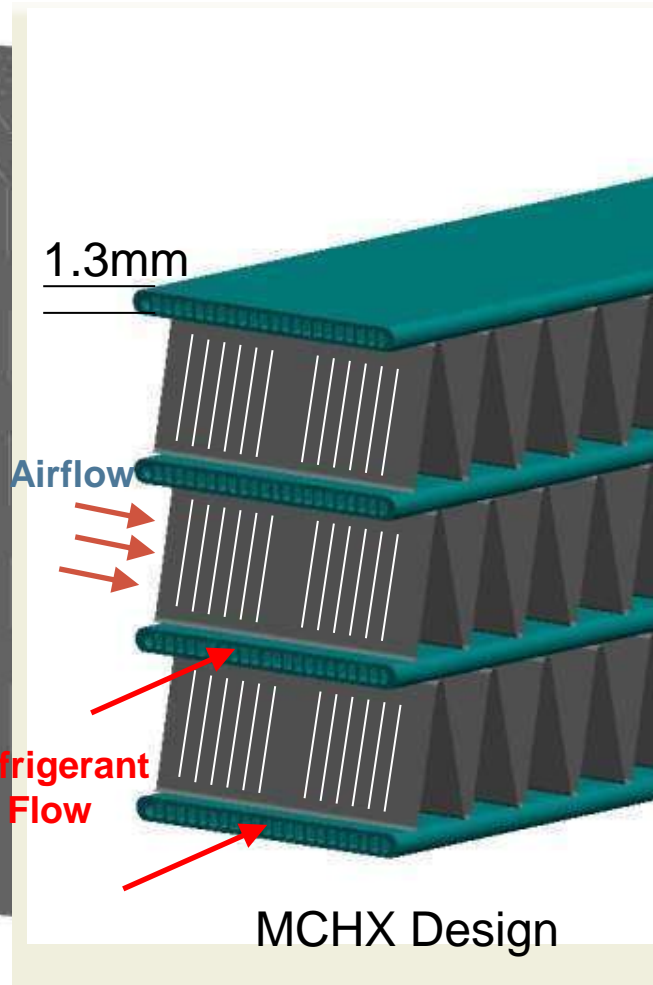
MCHX Design

Advantages of Brazed Design Compared to Tube & Fin



Tube & Fin Design

- Larger Tubes
 - More obstruction To airflow
 - More fan power
 - Less energy efficiency



MCHX Design

- Thin tubes
 - Less obstruction To Airflow
 - Less Fan power
 - Improved energy Efficiency
- Internally webbed Tubes
 - Improved Strength
 - Increased surface area
 - Improved Thermal efficiency

Product Lines with MCHX

- GeoComfort, Hydron Module, and TETCO vertical packaged units (GXT / HXT / TXT models)
 - 2, 3, & 4 ton models first
 - 5 & 6 ton units Summer 2012
- Other product lines to be converted in 2012



Vertical Packaged Units with MCHX

- 2, 3, 4 ton to start; 5 & 6 ton in Summer 2012
- Industry exclusive multi-position cabinet
 - Field-convertible to LH/RH return and upflow/downflow supply
- First in industry to use micro channel as evaporator
- Anti-microbial plastic drain pan with condensate overflow sensor
- Eye-level control box
- Optional lifetime compressor warranty (standard for Hydron Module brand)

Gen. 2 Combination Units

- Same reliable refrigerant circuit (forced air heating, forced air cooling, hydronic heating) with all new features ...
 - 3, 4, 5, 6 ton models (2 ton coming in 2012)
 - Multi-position cabinet (same as vertical packaged units)
 - Appliance look
 - New brazed plate HX for hydronic heating (coaxial for ground loop HX)
 - “Smart” board carried over to new design
 - Forced air, hydronic, or shared priority and numerous options
 - Micro channel air coil coming in 2012

Combo Unique Features



Industry exclusive source (ground loop) heat exchanger is completely foamed-in to prevent condensation and corrosion.



Braided plate load (hydronic) heat exchanger is smaller in size and more efficient than the older Gen. 1 style.



Combo board allows hydronic priority, forced air priority, or shared priority. Fan options and diagnostics create a "Smart" board. Lights indicate operation mode and inputs/outputs.

Energy Star Tier 3 Water-to-Water Product Line

- 3, 4, 5 ton models
- Next generation Copeland UltraTech compressor
- Two-stage operation allows smaller buffer tank
- Significantly higher heating capacities
 - e.g. New 5 ton has higher heating capacity than previous 6 ton model
- Low temp (110F water) hydronic fan coils with ECM motor available



Energy Star Tier 3 Split Product Line

- 2, 3, 4, 5, 6 ton models (6 ton is new to product line)
- Next generation Copeland two-stage UltraTech compressor
- Significantly higher EER and COP (15-20% increase in EER!)
- Matching air handler (ECM fan) or A-Coil



New Horizontal Product Line

- 2, 3, 4, 5 ton models
- Next generation Copeland two-stage UltraTech compressor
- Higher EER and COP than previous product line
- Stainless steel drain pan
- Ideal for crawl space applications, low ceiling basements, or above the ceiling in commercial applications



GeoAnalyst Software

- Always “NEW” with automatic updates
- Operating cost analysis
 - Geothermal (including dual fuel)
 - Air-to-air (including dual fuel)
 - Gas/Propane/Oil furnaces
 - All the latest efficiencies (up to 98% furnaces / 21 SEER A/C)
- IGSHPA loop sizing algorithms
- Pressure drop/pump sizing
- Sales proposal
- Economic analysis
- Customized reports with dealer's logo

Geothermal University[®]

- All new training materials
- Wide variety of seminars
 - IGSHPA/NATE Installer Workshop
 - Applied Service & Installation (NATE credits)
 - Residential Design, Sizing, & Software
 - Product Introduction/Update
 - Sales & Marketing
- Experienced factory trainers available
- “Train the Trainer” for distributor trainers

Coming in 2012 ...

- Continuing to convert to micro channel
 - Continuing to convert to next generation (K5) Copeland UltraTech scroll compressors
 - Additional new product launches (you'll hear about them soon!)
 - New customer secure website
 - New CRM package for lead tracking
 - New Dealer program
 - And lots more ...
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- More information at www.enertechgeo.com



Geothermal Made Better™

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