

### **DDI Heat Exchangers Inc.**

Don't WASTE the WASTE, use DDI HEAT RECOVERY Exchangers

## www.ddi-heatexchangers.com

# **Energy Recovery Solution**

For Large Buildings, Hotels, Workers Buildings, Laundromats, Industrial etc... Recovery Heat from Wasted Grey/Black Water in Large Buildings & Hotels. Recovery Heat for WWTP - Waste Water Treatment Plants

# PARTNERING OBJECTIVES

Looking for Representatives

Hotel Chains
Engineering Firms
Builders
HVAC Contractors
Large Worker Buildings
Waste Water Treatment Plant Operators
Government - Energy Savings Departments

# **Technology/Product**

Innovative approach in HEAT RECOVERY, using DDI Patented "Rectangular, Square, Cube" ™ with very large gaps.

#### **MARKETS**

- 1. Wasted GREY/BLACK water
- Recovering Energy DIRECTLY from the CITY SEWAGE which flows below the building
- 3. WWTP Waste Water Treatment Plants



Tel: 1.514.696.7961 Email: erwin@ddi-heatexchangers.com

www.ddi-heatexchangers.com and www.energyrecoverysolution.com

Reference: http://ddi-heatexchangers.com/references

"RECTANGULAR, SQUARE, CUBE" ™
Don't WASTE the WASTE, use DDI HEAT RECOVERY Exchangers

Representative Info: Tel:
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# Cut costs by recovering heat from your wastewater. DDI Heat Exchangers Inc. BUYS YOUR WASTE.

If your facility produces wastewater, there's a good chance that potential dollars are flowing off your premises along with that flow. Fight back by recovering some of the cost of heating that water, by using its heat to warm incoming flows. As well as saving money, you'll be benefitting the environment by reducing energy consumption as well as boosting your "green" credentials.

**DDI Heat Exchangers** are a proven, practical technology for reducing operating costs. Cold incoming water is circulated in rectangular channels past the warm or hot outgoing liquid – whether it is grey water, black water, sewage or industrial sludge -- to recover the heat from the outgoing flow. This reduces the cost of bringing the incoming water up to the required temperature for washing, laundry, industrial use or HVAC purposes.

## DDI Heat Exchangers have a proven track record:

- · Low capital cost and easy installation.
- *Double-walled construction* option, meets safety regulations to prevent contamination of the inflowing water.
- Rectangular flow channels (patented) maximizes the amount of heat transfer, and provides a large gap to prevent plugging, even in thick sludge and high % solids flows.
- The controlled width of the channel provides for a fast flow against baking to the surface.
- *Easy cleaning*: DDI'S **ECPS** Easy Cleaning Ports System™ makes it easy to open the channels for inspection and maintenance.

# **DDI buys your waste!**

We believe so much in the cost and environmental benefits of DDI heat exchangers that we will share the cost savings with you.

#### Here's how it works:

- 1. DDI provides a heat exchanger unit at no cost; it remains DDI property
- 2. Your company takes responsibility for installation
- 3. You and DDI share the benefits of the energy savings
- 4. DDI *calculates the energy saved* by measuring the flow and temperature difference, in the recovered liquid side

### Here's how we divide up the savings:

- Customer receives 20 to 30 percent
- Agent or representative collects 10 percent
- DDI receives 60 to 70 percent

### Opportunities to partner with us

Add DDI heat exchangers to the solutions you offer your clients! Great potential for hotel chains, engineering firms, builders, HVAC contractors, WWTP operators and government energy-savings departments. Contact us to see how we can help you succeed.

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## DDI Solutions for hotels, hospitals, condo towers, office buildings

Heating water for showers, laundry, dish-washing and other uses costs you money – and it's money that literally flows right out of your building and into the sewers. Fight back by installing a DDI heat exchanger that circulates that waste heat past the incoming cold water flow.

The heat exchanger warms the incoming flow, reducing the operating cost of your water heaters, boilers, laundry operations, dishwashers and other energy users.

Savings can be considerable, and ongoing. For example, consider a hotel, with 300 rooms, that has its own laundry facility and restaurant. Documented evidence indicates that a well-designed heat recovery system, installed for the hotel's greywater, would save approximately \$500,000 over a period of 15 years.

#### YOUR NEEDS

A safe way to recover energy, without risk of contaminating incoming flows

High efficiency in capturing energy from wastewater

Fast return on investment

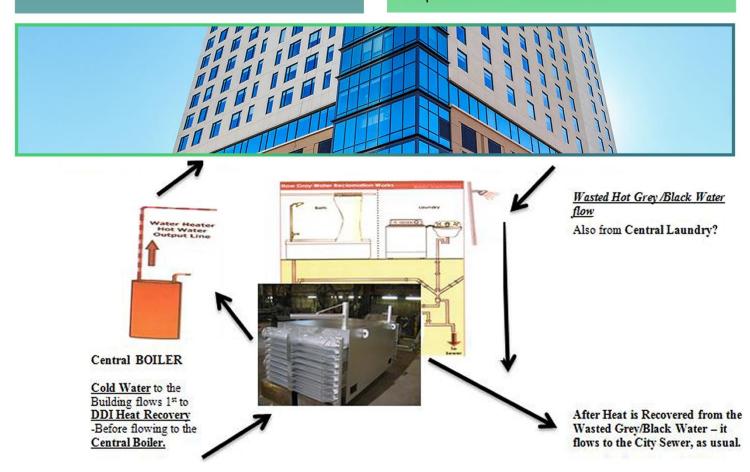
Able to fit into existing spaces

Low cost of installation

Easy cleaning

#### DDI'S SOLUTION

- DDI complies with requirements for double-wall construction, to meet safety regulations
- DDI'S rectangular design supports efficient heat transfer
- Experience shows we can save you 10 to 30 percent on water-heating costs
- · DDI can change the sizing to fit
- Requires only two bypasses and valves
- DDI'S ECPS Easy Cleaning Ports System™
  makes it easy to open the channels for
  inspection and maintenance



# **DDI solutions for WWTP - wastewater treatment plants**

Wastewater treatment plants face the need to manage their costs, and one of those costs is in heating cold, untreated sludge to the required temperature. That investment in energy is then lost when the waste flow is released.

DDI'S direct sludge-to-sludge heat recovery system pumps incoming sludge through a system of rectangular channels, so it absorbs most of the energy in the hot wasted digested sludge.

With DDI Heat Exchangers, there is low risk of plugging due to very large gaps, and the risk of baking to the surface is low because of controlled fast flow of both incoming and outgoing sludge. Experience has found that the time to return on investment is usually a year or less.

#### YOUR NEEDS

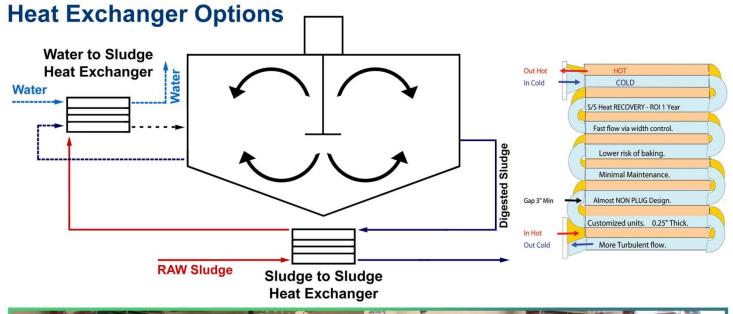
Easy and simple installation

Low-cost operation and maintenance

Application to a wide range of processes

#### **DDI'S SOLUTION**

- Simple design
- Can be sized to fit the available space
- Efficient, non-pluggable design and large heat-transfer surface
- Routine maintenance required only every five years in most municipal installations
- DDI'S ECPS Easy Cleaning Ports System™
  makes it easy to open the channels for
  inspection and maintenance
- Experience in many applications has shown us how to modify designs to meet your needs (including water-to-sludge heat transfer)





## DDI solutions for recovering energy from municipal sewage

Municipal sewage flows contain significant heat that can be recovered at treatment plants, often saving 20 to 30% on the building's heating and cooling bill. Sewage is pumped through a DDI Heat Exchanger without need for holding tanks, screens or macerator costs.

#### YOUR NEEDS

Easy and simple installation

A safe way to recover the energy in the sewage flow

Recovering all available energy

Low-cost operation and maintenance

Application to a wide range of processes

#### **DDI'S SOLUTION**

- · Simple design
- Can be sized to fit the available space
- No need for a holding tank, helping to reduce risks and costs from storing sewage
- · No need for a macerator
- Also recover energy found in particles
- Efficient, non-pluggable design and large heat-transfer surface
- Routine maintenance required only every five years in most municipal installations
- DDI'S ECPS Easy Cleaning Ports System™
  makes it easy to open the channels for
  inspection and maintenance
- Experience in many applications has shown us how to modify designs to meet your needs (including heating and cooling)

## DDI Heat Recovery from CITY Sewage PIPES - SETUP

