

Sustainability is Profitable for Owners with Integrated Plant Packages

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Your Mechanical Room is an Overlooked Source for Improved Earnings

- ▶ Improved Occupant Comfort
- ▶ Up to 50% Energy Savings
- ▶ Up to 20% Reduction in Greenhouse Gases

Armstrong has created a new category of mechanical room performance with an integrated cooling solution that can pay for itself in less than 5 years.



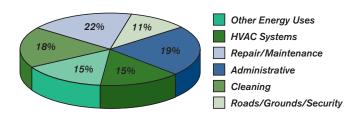
HVAC operating costs are a major operating expense for a commercial building, accounting for up to 15% of the total operating budget. Savings you generate by making your HVAC system more efficient will have a significant impact on your net operating income. The Armstrong Integrated Plant Package (IPP) system is the leading HVAC chilled water system available, offering up to 80% energy savings compared to today's operating plant designs. This represents an entirely new category of performance, and the savings could amount to as much as 5% of the total building operating costs.

An Increase in Energy Savings Leads Directly to an Increase in Net Operating Income

EPA studies link energy savings to significant increases in net operating income. For example, a 40% reduction in energy usage achieved with Armstrong's Integrated Plant Package could increase your net operating income by as much as 6%.

Average Shares of Total Operating Cost

Average of Urban & Suburban Non-Government U.S. Buildings*

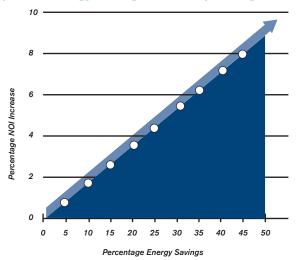


An HVAC Solution that Will Build Your Revenue and Your Property Value at No Extra Cost

When you choose to install an Armstrong IPP system, Armstrong will help you finance your project, and you can use the savings generated by reduced energy usage to pay for the equipment over time. In many instances, the energy and maintenance savings from your project will pay for the new equipment costs in less than three years.

Install a new HVAC packaged system and reduce your carbon footprint by up to 50% at no additional cost.

Impact of Energy Savings on Net Operating Income†

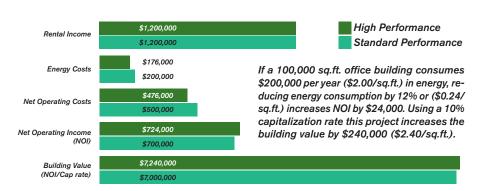


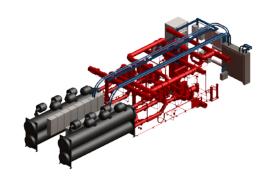
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Net Operating Income is a Key Component in Driving the Appraised Value of Your Building

Today's real estate investors demand returns of 10% to 20%, and prefer to purchase buildings that produce capitalization rates of 10% or lower. Standard industry calculations suggest that retrofit projects aimed at reducing energy consumption lead directly to increased building value.

Appraised Value as a Function of Net Operating Income





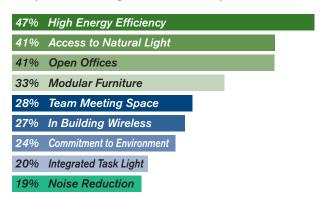
Tenants Demand High Energy Efficiency in the Building Spaces They Lease

This is especially important for owners of older buildings, where a retrofit project to upgrade the HVAC system will allow an older building to compete against newer, more energy-efficient buildings.

A retrofit project to reduce spending on energy usage will make your building more attractive to prospective renters, especially during periods of higher vacancies. High-performance buildings will be easier to lease, and will command premium rates. Most importantly, you'll be taking an important step to reduce carbon emissions and minimize your impact on the environment.

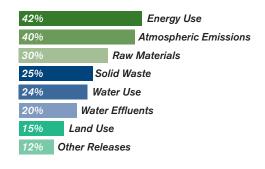
Tenant Demand for Property Management Services*

Percentage of respondents rating item 4 or 5 on a 5-point scale of importance affecting selection of rental space



Environmental Impact of Buildings

Percentage of U.S. Nationwide, Annual Impact ‡

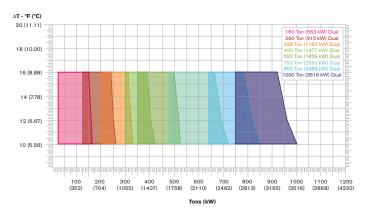


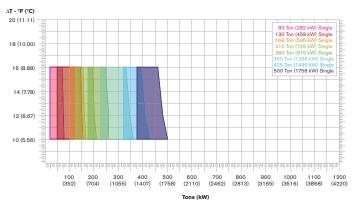
Integrated Plant Package Systems - A New Category of Performance

Look beyond initial equipment costs and focus on life-cycle costs. When you evaluate and select your investment based on the lowest cost of ownership, taking into account the initial costs, installation savings, energy use, reduced maintenance expenses and extended equipment life, you'll find that the IPP-CHW has a 35% lower 5-year, and a 50% lower 20-year life-cycle cost than standard chilled water plant designs.

Design Envelope

Future-proof your designs and reduce your risk with Armstrong's configured Design Envelope approach to equipment and system selection. Adaptability and scalability allow standard IPP-CHW configurations to be easily configured to practically future-proof designs. Using the Design Envelope method will provide your customers longer equipment life and flexibility to accommodate future changes in building use that may involve a change in cooling demand. A properly selected Design Envelope allows designers complete flexibility to change a building's use in response to changes in market demand.





Lowest Total Cost of Ownership

The Armstrong IPP provides the highest payback at the lowest first cost for a true, fully-integrated chilled water system.

Energy Savings

- •10% to 20% savings on an existing building's total operating costs
- •Complete system control integration using the patented Hartman LOOP adds 40% improvement in efficiency over current leading control philosophies

Installation Savings

- •Off-site fabrication accelerates project completion for faster building occupancy and reduced tenant disruption
- •The IPP-CHW has the smallest physical footprint of any packaged system available, requiring 40% less infrastructure space

Reduced Maintenance Costs

- •Using an integrated control strategy, the IPP-CHW operates plant devices at lower speeds, reducing wear. This results in less down-time and a 50% reduction in maintenance costs
- •Easy access to all components reduces down-time and service costs
- •Built-in redundancy with standard Armstrong dualARM vertical in-line pumps
- •Chemical-free cooling tower water treatment reduces chemical and water usage costs

Extended Equipment Life

- Operating variable speed devices at reduced speeds extends the lifespan of the equipment
- •Motors operate continuously at lower speeds to reduce on/off cycling
- •Off-site manufacturing in a controlled environment improves quality
- •Durable, heavy-duty components and quality construction lead to system reliability

The Most Stable Comfort Levels

- •Demand-based control (versus capacity control) matches equipment performance to building cooling load demand for longer operating intervals at reduced speeds. This provides a more stable and comfortable environment for tenants
- •Optimized reliability of the system with built-in control, pump and compressor redundancy allows for scheduled service with no disruption to tenant comfort

Reduce your Business Risk & Optimize your Asset Performance

- •Single source of supply and warranty offers easy, direct contact access for your contractors
- Adaptability and scalability from standard Design Envelopes future proof your investment against changes in building use
- •System monitoring identifies potential problems and system malfunction

Built-In Sustainability

- •Reduce your company's carbon footprint
- •Reduce Greenhouse Gas (GHG) emissions
- Oil-free compressor technology eliminates environmental disposal concerns
- •The LEED-NC's 'Energy and Atmosphere Credit/Optimize Energy Performance' category offers points for reduced energy cost for the building. The Armstrong IPP can reduce energy usage by 60%-80% which will contribute to earning points in this category.

EXPERIENCE BUILDING ... _



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