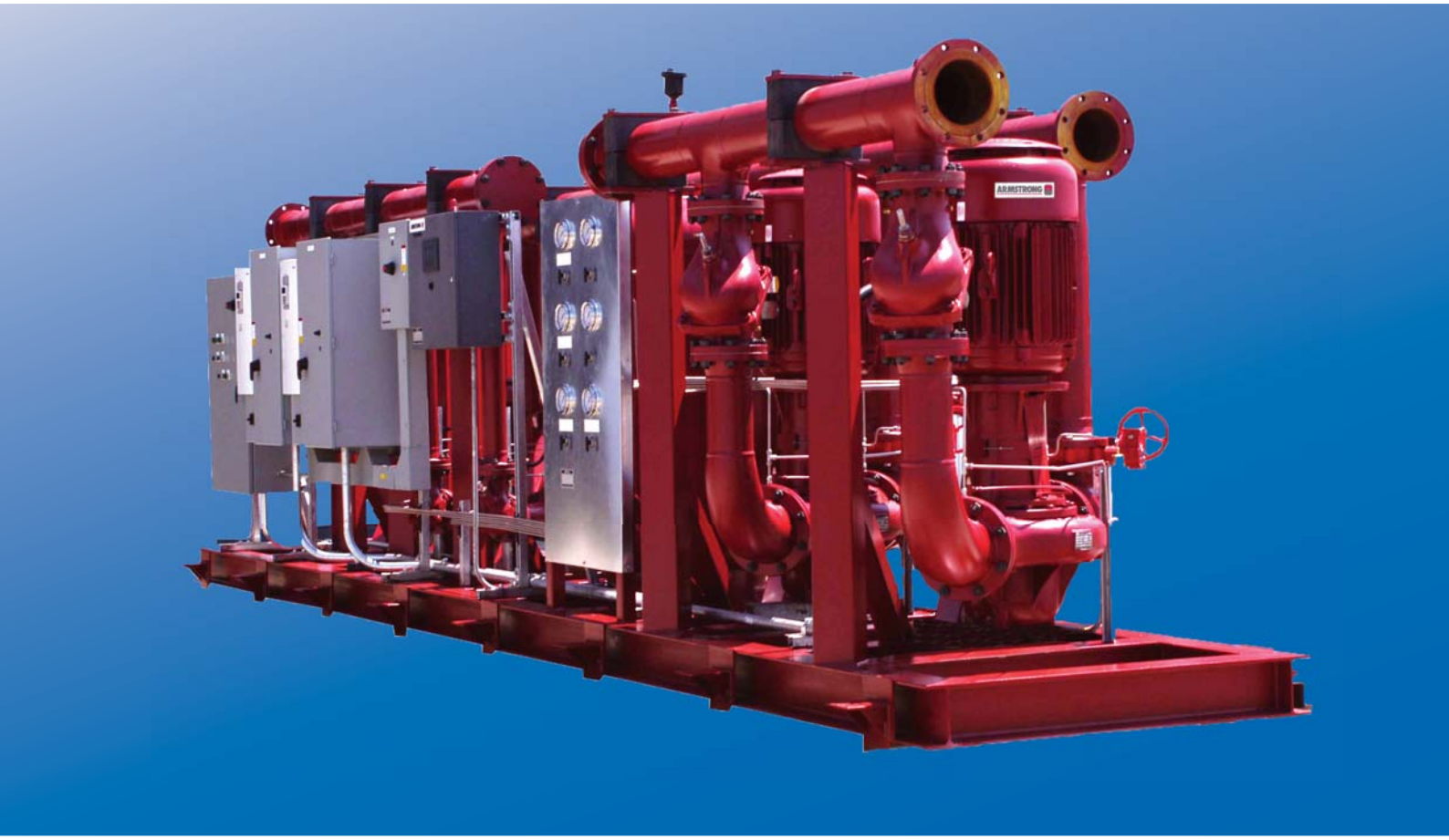
Series 8000

ARMSTRONG



HVAC Packaged Solutions

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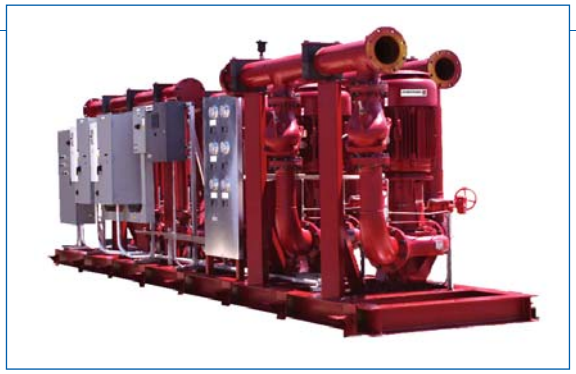
A Partnership Approach for Optimum Solutions



With over 270 years of combined expertise, Armstrong is uniquely experienced in providing integrated solutions to its customers. Armstrong's product development begins with an interactive approach encompassing their own engineering, manufacturing, and field sales personnel.

They listen to their customers' needs and consult with leading international design and engineering teams. This process promotes the development of cutting edge technology, resulting in products that are right for you. The company's engineers work closely with your team to focus on optimal solutions, minimised costs, and maximised value for your particular fluid flow requirements.

The Series 8000 has been designed through collaborative working to specifically meet customer's needs in the commercial building industry.

Armstrong 's commitment to partnering allows them to further enhance this service and provide their clients with value added benefits.

We offer both pre-engineered package designs and project configured solutions for chilled water, heating, steam-based and condenser water systems.

▶ Best Selection

By undertaking partnering Armstrong Holden Brooke Pullen are able to anticipate customers' needs and provide the best solutions. Many bespoke systems can increase capital and running costs due to over-design. The Series 8000 has been developed for maximum efficiency, which eliminates this initial and continuous waste of revenue.

▶ Advanced Technology

New technology for computer aided design now makes it possible for building services systems to be designed far more effectively using 3D graphic modelling. All key HVAC system components in the Armstrong range have been modelled in 3D SolidWorks. This means that perfectly scaled graphics of the components can be manipulated on screen to enable customers to see a simulation of the exact configuration of the HVAC system. This greatly enhances the ability to plan the system and ensure the speed and efficiency of installation.

▶ Quality Controlled Environment

By constructing pump packages offsite in a controlled environment Armstrong is able to ensure the highest quality product for their customers every time. As mark of this quality, they also hold the ISO 9001:2000 Quality Assurance Accreditation.

▶ Health and Safety

Health and Safety issues surrounding the construction of pumping systems are removed by pre-packaging the product offsite. At the factory, equipment can be assembled on modular bases with open access on all sides, and overhead lifting equipment for the movement of large components. It is impossible to replicate this level of control on onsite. By transferring these issues from the customer, the company is providing a significant level of added value in an industry where health and safety (and the monitoring of it) is paramount.

Series 8000 HVAC Packaged Solutions

Reduced Costs and Timescales

Independent research by BSRIA shows that off-site manufacture of plant rooms can reduce the overall project cost by as much as 24% compared to conventional methods. Off-site manufacture also offers faster assembly and streamlined planning as weather constraints, skills shortages and other issues related to building onsite are removed. The system arrives ready assembled on the day you want it and requires only the minimum time and resource to complete installation and commissioning. This ensures costs and timescales are significantly reduced giving the customer peace of mind.

Risk Control

Risk is shared through the partnering process and is therefore minimised and controlled on behalf of the customer. Building in the factory removes the "unknowns" and reduces the risk of costly on-site delays, waste and rework. This allows the customer to focus time and resources on other important areas within the project and be secure in the knowledge that their product will arrive on time and within budget.

Three Products - Unlimited Solutions

ARM*Pak*

Using 3D technology Armstrong design engineers developed the Series 8200 ARMPak as an efficient alternative to bespoke systems. By providing a pre-configured system as a standard product they are able to reduce costs and lead-times for the customer.

Vertical In-Line Pump Packages

The Series 8000 Vertical In-Line packaged pump system has been mass configured to combine the convenience of the pre-engineered ARMPak with the flexibility to choose any VIL pump from the Armstrong range.

End Suction Pump Packages

The Series 8000 End Suction packaged pump system offers the same mass configured system as above but allows the customer to choose any End Suction pump from the Armstrong range.

By providing the customer with the option to choose from a range of pumps and header sizes, the Series 8000 provides all of the cost effective advantages of a mass-configured packaged pumping system with the flexibility of a bespoke system.

Vibration Control

The Series 8000 facilitates easy anti vibration treatment and can be applied directly to the steel base frame, which is integral to the package. The **ARM*Pak*** and Series 8000 Vertical In-Line packages use Armstrong vertical in-line pump technology. Because of the direction of the rotational forces and the dynamically balanced impeller the vibration generated from these packages is minimal and as such the units can be installed onto the plant room floor with just neoprene rubber pads inserted between the concrete slab and the package base frame.

The End Suction variant of the Series 8000 will generate more vibration due to the direction of the rotational forces even thought the impeller on this model is also dynamically balanced. As such this packaged pump solution needs to have anti vibration spring mounts fitted to the base frame. However, due to a number of machines fitted to a base and the headers being integral to the package, this lowers the centre of gravity. In this case the finished unit makes it unlikely that a full inertia base need be used.

Key Benefits

Pre Configured Solution

- Cost effective
- Reduced lead-time
- 3D Design
- Factor-tested for performance

Compact Design

- Reduced foot print
- Series 8200 ARMPak is designed to fit through standard single doorway

Offsite Manufacture

- High quality products due to a controlled environment
- No weather constraints
- No skills shortage constraints
- Controlled health and safety environment removes the risk from site
- Guaranteed system solution with factory warranty

Reduced Installation Cost

- Minimal AV requirement when using Vertical In-Line option. Minimal site activity to position and install package
- Package includes Suction Guide incorporating 90° bend and strainer whilst the Flo-Trex Valve incorporates a shut off feature, flow regulation and non return valve
- Up to 8 components can be eliminated when using Suction Guides and Flo-Trex Valves saving a significant amount of space, time and cost

Technology Integration

- Include pump speed controllers (IPS 3000/5000/9000)
- Include an Integrated Plant Controller (IPC 11000)
- Pre-wired control panels, VFDs, sensors and control valves
- Factory tested sequences of operation
- Remote monitoring & web-based control features
- Native communications protocols including LonWorks, BACnet, Johnson Controls Metasys N2, Modbus, Trend and pLAN

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