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## **New Heating Handbook Released By Grundfos**

The new "Hydronic Heating and Hot Water Recirc Systems Handbook" from Grundfos Pumps offers insight into the proper application and installation of a broad range of hydronic and domestic hot water recirculation system components. The richly illustrated 4-inch by 7-inch color handbook is pocket-shaped and durable, built to withstand the rigors of jobsite use.

The guide contains detailed information about many topics of importance to system installers and service technicians, including heat sources, piping strategies, radiant heating, hot water recirculation, pump selection, installation tips, troubleshooting and references.

The heat sources section, for instance, examines various types and applications of solid fuel systems, oil- and gas-fired boilers, condensing and steam systems, integrating condensing/modulating operation, annual maintenance, direct and indirect hot water heating.

The handbook's radiant heating section offers insights into concrete slab, under-floor, above-floor and wall and ceiling applications. It also devotes two pages to essential snow-melting techniques.

In addition, the company's expanded line of hydronic technology is explained. Grundfos offers insights into the use and application of multipump zone controls, isolation valves and the



company's broad offering of wet rotor, three-speed pump technology. The expanded SuperBrute pump line now replaces 37 competitive pumps.

In the "installation tips" section, technicians have ready access to information about common challenges and solutions. For example, insights are offered into air elimination, pump installation, thermal expansion, sizing water heaters, calculating heat loss, outdoor reset, venting combustion exhaust and pipe sizing.

The booklet's reference section is now an essential reference guide, providing quick access to a variety of valuable tables and charts. These include a chart of pipes of equivalent size or flow, temperature-affected lineal expansion of several different types of metal pipe, water capacity per lineal foot of tubing, and pipe and tube heat loss tables.

"The book is designed to be an essential reference for hydronic technicians on the job where there's no convenient access to large desk references or the Internet," says Dave Yates, president of York, Pa.-based F. W. Behler Inc. "It's a valuable new tool for the plumbing and mechanical contractor."

For more information, trade professionals are encouraged to take their online browser to www.grundfos. us/handbook. After completing the sign-up procedure, a booklet will be sent out promptly from Grundfos.

With an annual production of more than 10 million pumps, Grundfos Pumps Corp. is the world's leading pump manufacturer. Circulator pumps, submersible pumps and centrifugal pumps are the company's three major product groups. Grundfos also manufactures electric motors for pumps and sells state-of-the-art electronics for pump controls and others systems. Facilities in North America include sales and marketing for the United States in Olathe, Kan.; a service center in Allentown, Pa.; and a manufacturing plant in Fresno, Calif.

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