GF Piping Systems

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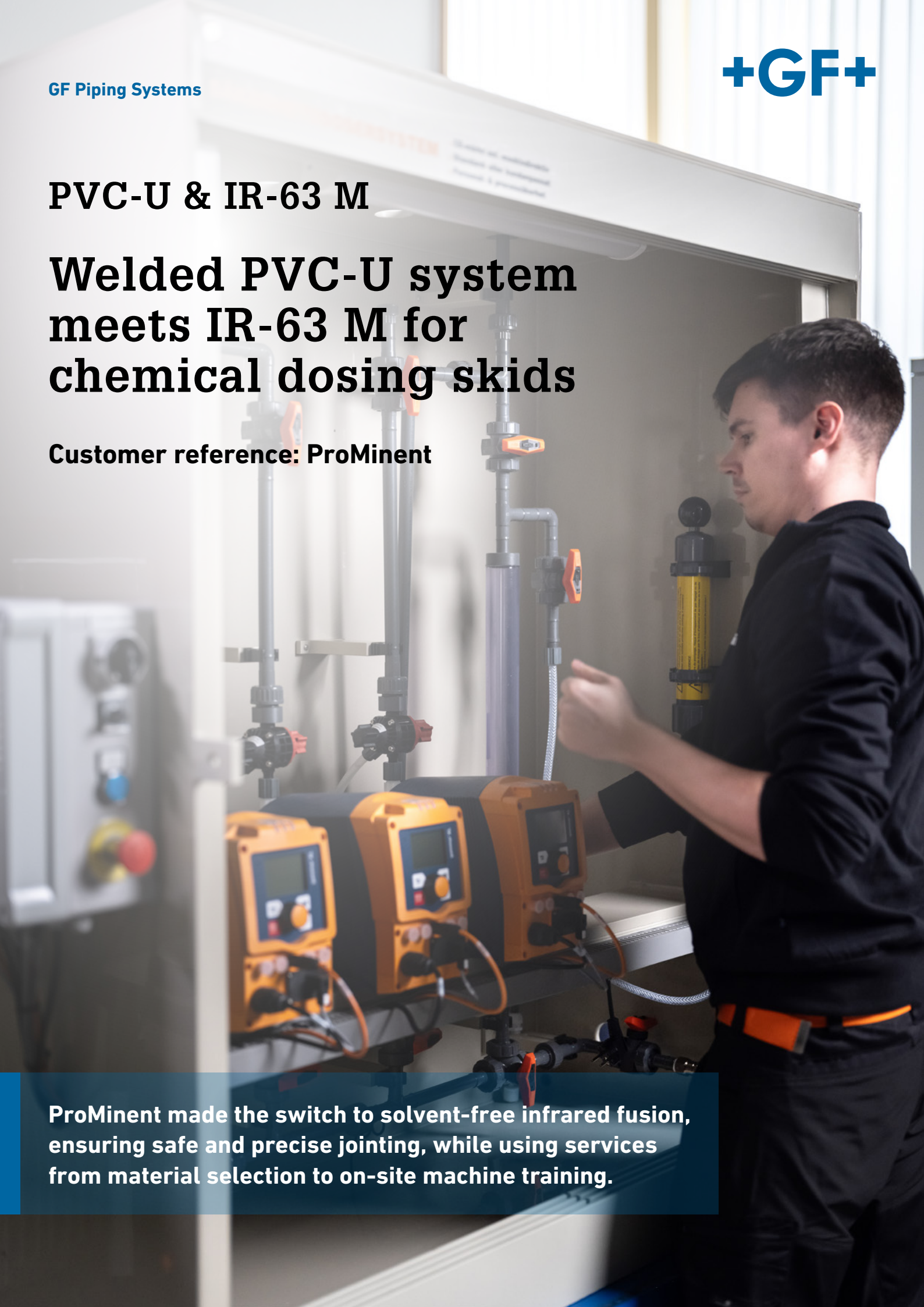
PVC-U & IR-63 M

Welded PVC-U system meets IR-63 M for chemical dosing skids

Customer reference: ProMinent



ProMinent made the switch to solvent-free infrared fusion, ensuring safe and precise jointing, while using services from material selection to on-site machine training.

Enhanced safety and process reliability thanks to state-of-the-art infrared welded PVC-U

ProMinent®

Chemical dosing cabinets are integrale components in water treatment, ensuring precise and consistent dosing levels. ProMinent chose GF Piping Systems' infrared welded PVC-U system for preassembled dosing cabinets due to its chemical resistance against various acids and alkalis and ease of weld reproducibility with the IR-63 M fusion machine.

Project background

ProMinent provides plug-and-play dosing skids assembled on-site in Sweden, utilizing multiple piping materials, including PVC-U. However, cementing has become rare as local regulations put high requirements on health and safety during assembly and installation. Recognizing the new innovative jointing technology and advantages of the IR-63 M fusion machine, ProMinent decided to transition to an infrared welded PVC-U system. The company sought a versatile material capable of serving various chemical processing and water treatment applications, enabling reliance on a single system to reduce spare parts and save storage capacity.

Selected technical solution

IR PVC-U offers enhanced chemical resistance without the need for adhesives, ensuring durability while meeting all environmental requirements for the Nordic market. This system enables immediate pressure testing, eliminating curing times and enhancing production efficiency. The machine-guided welding process minimizes the risk of human error and provides consistent joint quality, allowing the highest reliability and security for chemical dosing cabinets. The IR-63 M is equipped with printer compatibility to generate labels and protocols for each weld, facilitating thorough traceability and documentation of the welding process.

Achieved improvement

Switching to IR PVC-U offers advantages due to its versatile range of pipes, fittings, and valves. It reduces the need for material changes in cabinets, thereby streamlining operations. Furthermore, PVC-U's durability extends the lifetime of piping systems, thereby enhancing the longevity of ProMinent's modules. Compared to cemented joints, IR welding allows to reduce the derating factor, enabling higher temperature or pressure while maintaining the same lifespan. Jan Sunden, ProMinent's project manager, highlighted the value of partnering with GF Piping Systems, which offers comprehensive training in infrared welding. "GF's expertise and know-how ensure optimal installation practices. The introduction of infrared welded PVC-U establishes us as pioneers in chemical dosing systems, merging proven PVC-U piping with advanced welding technology." With 20 % reduced preparation time, 30 % fewer process steps, and up to 50 % reduced cooling times, the IR-63 M fusion machine, in comparison to its preceding model, sets new standards for seamless infrared welded joints.

On-site consulting enables correct material selection tailored to application requirements and customer needs. Weld labeling enhances process traceability.

Local instructors from GF Piping Systems deliver vital training, ensuring that operators acquire the necessary expertise to achieve optimal welding results.

Customer benefits

- **IR PVC-U seamlessly integrates the robust qualities of PVC-U with a cutting-edge welding machine, ensuring secure and reliable pipe connections.**
- **The welding process eliminates curing periods, allowing for immediate pressure testing.**
- **The uniform and reproducible joints performed by the IR-63 M significantly reduce the risk of human errors.**
- **The innovative IR PVC-U extends piping systems' lifespan while its versatility minimizes the storage of multiple spare parts. One system for multiple applications.**

Where next?

Watch the video

Visit the IR-63 M webpage

Visit the IR PVC-U system webpage

Visit our webpage to get in touch with your local specialist:
www.gfps.com/our-locations

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