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Smart Automation for Efficient Water Management in Steelmaking: The Q-WATER System

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Advanced automation is essential for ensuring precise control of cooling water flows at the right pressure and temperature, aligning with the real-time demands of industrial processes. This optimization maximizes energy savings while minimizing water consumption, forming the foundation of sustainable and efficient metal production.

The Q-WATER system is a cutting-edge technological package designed for comprehensive water management. It precisely matches the water supply from the water treatment plant (WTP) to the specific needs of each technological user during production. A key feature of Q-WATER is its integrated real-time monitoring, which includes process analytics, key performance indicators (KPIs), and detailed reporting on energy, power, and water consumption. This ensures enhanced efficiency and resource optimization across operations. This paper presents the implementation of the Q-WATER system in industrial plants, highlighting its performance, achievements, and the benefits realized since installation.

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