CASE STUDY
INDUSTRY: **HOSPITALITY**

CUSTOMER: Rydges Newcastle

LOCATION: New South Wales, Australia

BACKGROUND: Rydges Newcastle is a 175-room hotel that had been experiencing some inconsistency maintaining hot water temperature and pressure in guest rooms at the extremities of the hotel, which covers a large area of waterfront on Newcastle harbor.

SCOPE OF WORK: The facility was equipped with several Thermostatic Mixing Valves that generated hot water at 158°F (70°C) to guest rooms; however the valves were struggling to maintain consistent temperature at 125°F (52°C). Armstrong's local representative, Armstrong Flow Control, evaluated the existing hot water system and recommended the installation of an Armstrong Digital Mixing Center complete with The Brain® DRV80 Digital Recirculating Valve to replace the Thermostatic Mixing Valves and act as the primary water temperature control valve. The system set point is set to 125°F (52°C) and will act as the "Thermal Barrier" to provide an increased level of safety. Local contractor, MultiValve, was tasked with installing and also modified existing piping to help eliminate the pressure drop concerns.

BENEFITS:

Upon commissioning, Hotel Engineer, David Thomson, remarked, "The installation of the Armstrong Digital Mixing Center has consistently provided 125°F (52°C) hot water to the guest rooms, providing an increased level of safety. The very steady temperature and pressure we are now receiving at the guest rooms will provide an increased level of comfort and satisfaction for our guests"

Since commissioning, the Armstrong Digital Mixing Center has consistently maintained a set point of 125°F (52°C) to the guest rooms and provided Rydges Newcastle with the following:

- Safety: Constant and accurate water temperature prevents potential scalding.
- Accuracy: Outlet temperature to system is +/- 1 degree F/C.
- Simplicity: Single digital control valve (The Brain® DRV80) replaces multiple components.
- Connectivity: The Digital Recirculating Valve communicates through an on-board status display and remotely through a Building Automation System to provide self diagnostics, alarms and temperature trending.