CASE STUDY

INDUSTRY: FOOD & BEVERAGE

CUSTOMER: Foyle Food Group

LOCATION: Donegal, Ireland

BACKGROUND: The Foyle Food Group, a fourth generation family-owned business, provides quality beef to leading retailers, manufacturers, and food service companies around the world. The Foyle Food Group employs over 1,000 people at nine sites. Slaughtering and deboning are carried out at the Donegal plant. The hot water that previously supported these processes was provided by two kerosene fired boilers. For several reasons, the water provided from the two boilers was inadequate for the unique and growing demands of the site.

SCOPE OF WORK: Foyle Food Group looked to Armstrong International for an alternative solution. Armstrong designed and specified a skid mounted Armstrong Flo-Direct® Complete Thermal Exchange (CTE) gas-fired water heater with a 3,700 gallon (4m^3) stainless steel integrated buffer tank and a recirculating system to maintain water temperatures at 180ºF (82ºC) at a peak demand of 3,700 gallon per hour (14m^3/h).

The hot water requirement on the site is threefold; 180ºF (82ºC) for sterilization of the equipment, 162ºF (72ºC) for washdown, which takes place at night, and 113ºF (45ºC) for general hot water used hand washing, etc. During the day, the water is preset to 180ºF (82ºC) and is controlled to 113ºF (45ºC) by an electronic mixing valve. During the night, the water temperature is preset to 162ºF (72ºC).

BENEFITS: The plant now produces hot water at 99.7% efficiency with the Flo-Direct® running on LPG gas that is stored in four cylinders on site. Foyle Food Group has enjoyed 40% in savings on the site's energy bill due to the new hot water system.

CS_Food_Foyle Food Group.indd 10/2014