CUSTOMER SITUATION:
The Antwerp Masterplan is an initiative sponsored by the Flemish Government to ease traffic congestion on the Antwerp Ring Road in Belgium. Part of the strategy is to divert container traffic to a central terminal on the Albert I Canal, located in Limburg. There, container traffic will board transport ships and travel via the canal, thus helping to alleviate road congestion. However, as a result of diverting container traffic from the road, more bottlenecks are expected to occur at the many bridges along the canal.

To address the interconnected road and canal traffic issues, work commenced in 2012 on the first of 57 new bridges along the Albert I Canal. These bridges will offer higher clearance for passing ships, allowing four stories of storage, which means an increased capacity for the diverted containers and fewer ships on the canal.

To prepare for bridge installation, pipelines located near existing bridges must be relocated, which included two Air Liquide industrial nitrogen gas pipelines near bridges Geel-Pevel and Grobbendonk. The challenge was that in relocating the two lines, Air Liquide required uninterrupted product flow.

TDW SOLUTION:
For relocation, Air Liquide needed to ensure that their pipelines could be properly plugged and safely isolated without shutting down and halting product flow. The TDW STOPPLE® Train plugging system was engineered for this precise purpose. This unique plugging system features a double-block and bleed design that inserts two consecutive plugging heads through a single fitting. The system includes two bleed ports. The first port is located on the pipe between the double blocking heads, allowing for the creation of a pressure differential and a more reliable seal. The second port is also located on the pipe, just downstream from the plug, and allows for pressure and product evacuation.

Utilizing a standard 660 tapping machine, TDW technicians hot tapped each gas line and inserted a single six-inch STOPPLE Train. Once the STOPPLE Train was in position and the bleed ports opened, each line was completely and successfully isolated, creating a safe and secure environment for removal and relocation of the gas pipeline.

CUSTOMER BENEFIT:
Working closely with Air Liquide to understand their needs and the scope of their project, TDW’s STOPPLE Train plugging system provided them with the solution to avoid the costly task of bleeding down and voiding their pipelines to facilitate relocation. As promised, TDW was able to safely execute these operations in tandem, utilizing two teams of two technicians, in just five working days. At no time was Air Liquide’s service interrupted.