



## ATC Connectors

### BACKGROUND

Worth over \$100 Billion dollars globally each year, the heavy equipment market is constantly working to remain competitive in harsher environments while becoming more efficient. There are always areas of the vehicles that require the high performance of traditional metal connectors. In other areas of the vehicle, however, high quality thermoplastic connectors with superior terminal technology can be used as a cost and weight savings measure, while not compromising on quality. As one of the world's largest connector suppliers, Amphenol is able to provide sealed thermoplastic connectors to meet the harshest of environments with our AT contact technology.

### PROBLEM

Standard automotive connection systems do not survive in the harsh environments of the heavy equipment market where downtime and warranty issues are costly to customers and OEM's. Also, the Society of Automotive Engineers (SAE) needed to make a specification for the heavy equipment industry to rationalize the best practices to be used for communication and diagnostics among vehicle components, now known as SAE J1939. SAE J1939 is used in the heavy equipment industry for communication throughout the vehicle, including between the tractor and trailer. The connection for this specification requires a robust 9-way sealed system with size 16 terminals.

### AIO SOLUTION

Amphenol's AT® Circular 3-way, 5-way, and 9-way sealed connectors with caps available provide the ruggedized thermoplastic solutions needed in the demanding heavy equipment market. It has a positive reverse bayonet retention system and has redundant grommet wire sealing. The size 16 terminals are available in gold or nickel, and the connection system is rated to 125C. Higher temperature ratings may be available upon request. Panel mount receptacles are a drop-in replacement for existing connectors, and the jam nut versions provide quick installation. The 9-way receptacles are in accordance to the interface of J1939.

