Unique challenges require unique solutions. One example is the use of specially-designed robots to inspect the piping systems in sensitive industrial facilities such as nuclear power plants, or oil and gas refineries. Working alongside the engineers at INSPECTOR SYSTEMS, HELUKABEL® developed a special cable that ensures uniform transmission of power to the new, flexible and ultrasonic testing robot.

These special robots, being developed for GE Hitachi Inc. in the United States, will be used to determine the wall thickness of buried pipelines. The pipe robots consist of several drive elements, which are flexibly connected together with bellows. These are supplemented by an individual testing element. The wheels of the drive elements are pneumatically pressed against the inner wall of the pipe. This technique allows the robot to move through dry and water-filled pipes with bends and vertical sections up to 984 ft. long.

“HELUKABEL® has developed a cable that is tailor-made to our specific requirements, which allows us to control our robot perfectly,” said Marcus Hitzel, CEO of INSPECTOR SYSTEMS. “Their cooperation in the development of the cable was superb and we are very satisfied with the quality of the final product.”

Through the development of various pipe inspection robots for one of the world’s largest technology companies based in the United States, INSPECTOR SYSTEMS is further building up its technological expertise in the field of internal pipe inspection and demonstrates that German ingenuity is in high demand on the international market.