Pipeline integrity management strongly depends on the quality of in-line inspection data. Many gas pipelines are operated at high flow rates for maximum throughput. In the past these flow rates had to be substantially reduced when operating in-line inspection tools.

Today, our Speed Control Technology allows the inspection of pipelines at high flow rates while maintaining the necessary data quality.

THE SOLUTION
ROSEN’s speed control unit reconciles the conflicting goals of the required moderate inspection velocity versus high throughput rates by creating a controlled bypass of the product through the inspection vehicle. The product bypass is most efficiently controlled by an active valve system. To achieve smooth run conditions, the target tool velocity can be preset inside the tool electronics.

Each individual speed control unit for different pipeline sizes are designed using 3D finite element modeling to minimize unwanted turbulences resulting in a maximum difference between the tool speed and the gas flow.

KEY ADVANTAGES
• Accurate and precise feature classification and sizing across the entire multi diameter range.
• High data quality by smooth tool propulsion.
• Excellent passage capabilities for the entire multi diameter range, e.g. 1.5D bends and heavy wall.
• Inspection tool qualification by individual full scale testing.
• High availability and a wide range of proven tool configurations designed to transverse long Y-pieces and unbarred full bore Tees.
• High quality service with certified processes (API 1163), personnel qualification (ASNT) and equipment (CE, ATEX).

SERVICE OPTIONS
All aspects from the inspection request to the final report are covered with the flexibility to choose from various service options.
• Cleaning – operational and pre inspection
• XYZ – route mapping and strain analysis
• Multi-Diameter – pipelines with varying diameter
• Combo – multiple inspection technologies in one run
• Offshore – long distance and high pressure
• Post ILI – data alignment and combined evaluation
• Integrity – RBI, FFP, CGA
• ROAIMS – versatile asset integrity software suite

Photos of the SCU, with rear inlet into tool body on the right