

Elbow Components in Lyft 1.2 Software Workflow

Elbows are often encountered during pipe inspections. They must be scanned too, but they are complex components that require special attention.

The Problem

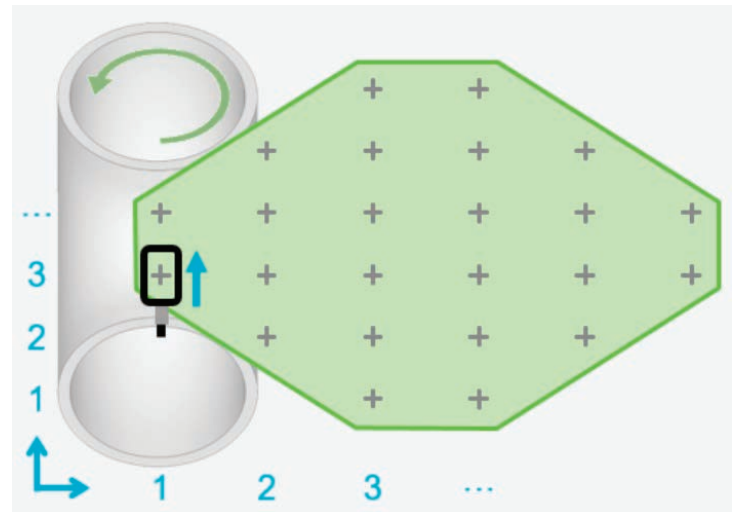
Elbow wall properties may be different from those of the pipe. The wall thickness of the elbow may also vary along the circumference. Finally, elbows feature welds at both ends and the curvature radius is, of course, different inside and outside.

The Solution

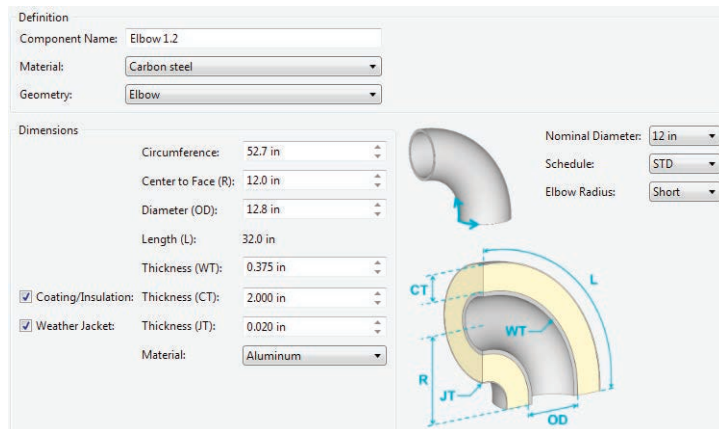
Because of their specific properties and geometry, elbows must be treated as independent components when inspected with pulsed eddy currents (PEC).

In Lyft® software versions earlier than 1.2, users had to use a pipe component when inspecting an elbow, and then consider, if scanning axially, its longest part as said component's length. Doing this led to some confusion and inconsistencies in the grid referencing.

To address this issue, Lyft 1.2 or later features an elbow component to handle the specific shape. The nominal diameter of the elbow, its schedule, and its curvature radius can be selected from standard values or specified manually.



The elbow component is one of the many improvements brought to Lyft 1.2.



Scan zone settings are also tailored for elbows. The scan zone is diamond-shaped, but the blacked out portions can take data points there is bleed during a dynamic scan.

