

Rockford Engineering



SIMSA Member

Rockford Engineering Works, a mechanical/industrial design consulting with extensive experience in purpose-built machine design in mobile, industrial and commercial applications.

The Client

CJ-CSM Inspection Ltd.

“They didn’t offer a cookie-cutter solution. We benefitted from the drive and teamwork to do something totally different - and many times better.”

- Clayton Jahn, CJ-CSM

The Challenge

To help an Alberta-headquartered inspection company that serves the oil industry to find a safer way to perform pipe inspections and prevent costly leaks.



The Story

For any company, the labour, transportation and materials costs of a pipe leak can be major - even more so if the leak leads to public criticism or regulatory violations. Pipeline inspection facilities are designed to prevent these leaks and complications.

But a pipeline inspection facility can be a challenging work environment, particularly in regard to safety: most are noisy outdoor yards where multiple employees use traditional equipment to maneuver heavy pipes around potentially dangerous “pinch points.” Injury risk in such areas is high - as is the risk for improper inspection, particularly when the task is assigned to less experienced workers or workers at the end of long shifts.

The Solution

Working with CJ-CSM Inspection Ltd., SIMSA member Rockford Engineering developed an Automated Pipeline Inspection Facility designed to eliminate pinch-points and drastically reduce

chances for error. Operated by a single skilled operator, the new indoor pipeline inspection facility dramatically improves safety, reduces costs and ensures highly reliable grading.

Project Details

The Facility is operated through the PLC (programmable logic control) system that communicates the status and position of all actuators (pneumatic cylinder responsible for moving or controlling a mechanism) and product locations. The automated inspections enable the facility to sort and catalogue product into good, bad, and unusable batches - all from a touch screen station operated by a single, skilled worker. Pipes for future processing are stored on a multitude of racks and tables complemented by five building exits for additional handling.

See what SIMSA members can do for your business.

Contact us today to learn more: eric.anderson@simsa.ca