

# CSNRI Snap Wrap Restores Strength to Corroded Pipelines

## CSNRI Snap Wrap Restores Strength to Corroded Pipelines

### Pipe Details

- 10-inch (254-mm) line
- Wall loss up to 74%

### Summary

- Racked pipe in a Jacksonville, FL, refinery suffered corrosion and wear at the points at which it came in contact with pipe supports
- A Clock Spring trained repair team jacked up the pipes and supported them with blocks while the Snap Wrap units were applied
- Each Clock Spring unit was installed in 30 minutes.
- The repair restored 100% of the pipe's hoop strength, allowing the pipes to safely remain in service for 50 years

The work environment in terminals leads to pipe corrosion and wear, so owners have to remain vigilant. There are several common areas where corrosion becomes a problem, one of which is in racked pipe because the pipe tends to wear at the points at which it comes in contact with the pipe supports, where movement wears away coatings. Water collects in these areas, speeding up crevice corrosion, and recoating is impossible without lifting the pipe.

In a terminal in Jacksonville, FL, corrosion pitting in the transfer lines came to light during a pipe rack renovation project. With areas of wall loss up to 74%, there was concern about the integrity of the transfer piping system. The lines were jacked up and supported with blocks, allowing easy access for the Clock Spring Snap Wrap installation.



*BP Terminal, Jacksonville, Florida*



*Corrosion at pipe supports*



*Technician aligns Snap Wrap coils prior to tightening*



*Snap Wrap installed - bands removed after one hour cure*

Clock Spring trained technicians filled the pits in the pipe and affixed the Snap Wrap units to the affected areas of the pipe using high-strength adhesive. Placement for each unit took 30 minutes. Once the repairs were in place, they were tensioned and allowed to cure for an hour.

This simple technique restores 100% of the pipe's hoop strength and is designed for 50 years of service life.

There are nearly 3,000 trained Clock Spring installers around the world who are qualified to provide repairs with Clock Spring products. Clock Spring regularly offers training classes for installers and can custom design training for individual company needs.