



CASE STUDY - MILKING CAROUSEL PEDESTAL BASE STABILIZED WITH HS030 SINGLE-COMPONENT GROUT

Wisconsin



THE PROBLEM

A Wisconsin dairy farm was experiencing settlement at the center pedestal base of a cow milking carousel. The base had settled slightly to one side, approximately 1/8 to 1/4 inch, which was enough to create minor misalignment in the overhead carousel mechanism.

Because the carousel was part of the farm's daily milking operation, shutting the system down for an extended repair was not a practical option. Any disruption to the milking schedule could affect production and create additional stress on the herd.

The underlying soil was sandy and coarse-grained, making it a good candidate for permeation grouting.





THE SOLUTION

To stabilize the pedestal base and help prevent further settlement, HMI's HS030 single-component grout was used to permeate the sandy soil beneath the affected side of the carousel base.

The grout was injected through 9 points on the side of the pedestal experiencing settlement. Approximately 600 lbs. of HS030 was installed to help bind and stabilize the coarse-grained soil beneath the base.

Key project Details:

- **Application:** Milking carousel pedestal base stabilization
- **Soil Type:** Sandy, coarse-grained soil
- **Material:** HMI HS030 single-component grout
- **Injection Points:** 9 points
- **Material Used:** Approximately 600 lbs.
- **Project Duration:** Completed in less than one day
- **Operational Constraint:** Work performed while the carousel remained in operation



THE SUMMARY

The project was completed in less than one day without interrupting the farm's milking schedule.

By using HS030 single-component grout to permeate and stabilize the sandy soil beneath the affected side of the pedestal base, the farm was able to address the conditions contributing to settlement while avoiding downtime.

This project demonstrates how targeted permeation grouting can be used in active agricultural environments where equipment alignment, production schedules, and herd health all need to be protected.

