

# BARNES®

## ORIHULA SANITARY SYSTEM Fremont, WI

### Application Overview

When the Orihula Sanitary (Pressure Sewer) System of Fremont, WI was installed, 30 homes were planned for the Red Oaks segment, so a 3" pressure main was put in place. Only 8 homes were built on this segment. When 2 of the 8 homes became seasonal use, the progressing cavity pumps could not provide flow rates sufficient to scour solids from the main piping, resulting in clogging.

It was necessary for Fremont Plumbing & Heating, Orihula's contractor, to flush the line frequently to keep it open as well as to replace the progressing cavity pump's stators as they wore out quickly whenever the line became plugged, at high cost to the municipality.

Jim Murray, Inc., a Crane Pumps & Systems distributor, shared the improved operation and benefits provided by the Barnes centrifugal Omni Grind Plus™ (OGP) pump with Phil Hering of Fremont Plumbing & Heating. A Crane Pumps & Systems engineer conducted a complete piping analysis modeling the system utilizing OGP pumps and demonstrated the ability to eliminate clogging and repairs. It was clear, the OGP replacement core unit was the solution.

### Installation

Fremont Plumbing & Heating replaced 7 progressing cavity pumps with Barnes Omni Grind Plus replacement core units in the Red Oaks segment of the Orihula Sanitary System. Hering reports they have not had to flush the system since installation.

## Key Takeaways

### Pain Points

Expensive, frequent main flushing required to keep one of the pressure sewer's segments, Red Oaks, from clogging. The clogging was due to the inability of the progressing cavity pumps to adequately flush solids from the 3" pressure main.

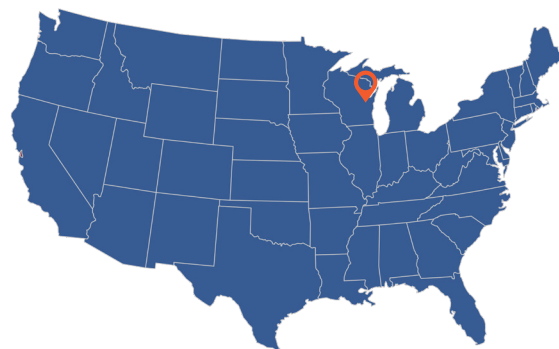
### Solution

Crane Pumps & Systems modeled the Orihula Sanitary System using sophisticated piping software, illustrating to Fremont Plumbing & Heating the benefits and improvements the Barnes Replacement Core Units, utilizing the Barnes Omni Grind Plus, can provide.

Key features include universal design to fit directly into the current grinder wetwell, higher flow rates for greater velocity in the pressure main to eliminate odor and clogging, and the grease-proof ESPS level control assures trouble-free operation.

**"Through the years, Barnes pumps perform, have a longer life span and do not have the call backs we've experienced with other pumps."**

Phil Hering,  
Fremont Plumbing & Heating



### PUMP

Omni Grind Plus Grinder Pump



### OPERATIONAL IMPROVEMENT

Reduced Maintenance Costs



### INSTALL DATE

June 2010

