

MRI Hoseless Cable-Vac™ Sludge Collector

The Original Hoseless Sludge Removal System

- Highest sludge concentration and least water waste in the industry
- Forward-facing, tangential inlet orifice maximizes sludge removal efficiency
- Non-clog orifice* eliminates orifice blinding
- Flow Balancing Ring* ensures even sludge removal
- Performance guarantees for ultimate confidence in our quality product

Sludge collection products built on experience.

Meurer Research began developing high-quality equipment in 1978 to provide water and wastewater treatment facilities with effective, reliable and economical methods of removing sludge from sedimentation basins. Over the years, MRI has built upon these standards by incorporating new ideas and technology into the design and manufacture of its products. The MRI Hoseless Cable-Vac™ Sludge Collector now has over 1,500 units of its current design (finalized in 2002) installed worldwide.

The MRI Hoseless Cable-Vac eliminates the hose.

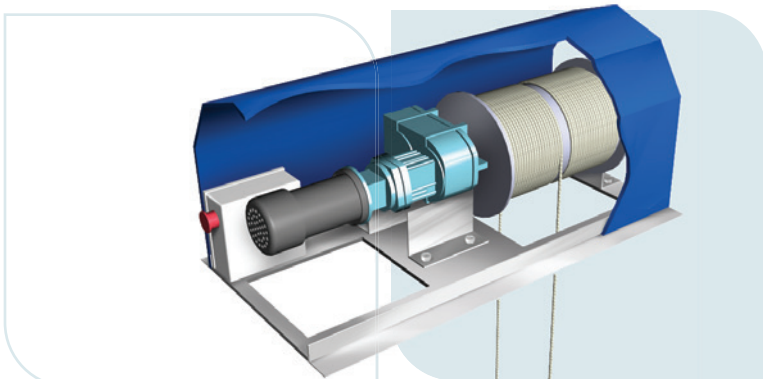
The MRI Hoseless Cable-Vac™ Sludge Collector delivers all the benefits of suction sludge removal without the need for hoses. Perfect for use in new or existing basins and with complete design flexibility, the patented system has four key components:

- Tandem header pipes with forward-facing tangential flow orifices optimize sludge removal and concentration
- Telescoping sludge conduit is self-priming and eliminates the need for hoses
- Shared-Reel Drive ensures reliable power without tensioning or extreme fleet angles, extending lifespan of the cable, pulley and bearing
- MRI's signature control system designed and manufactured in-house to project requirements

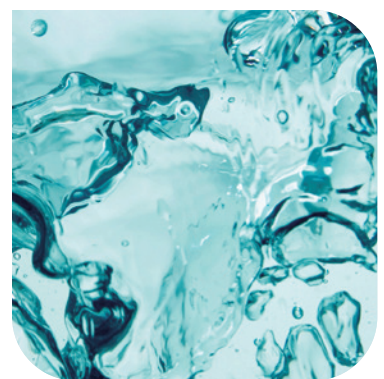


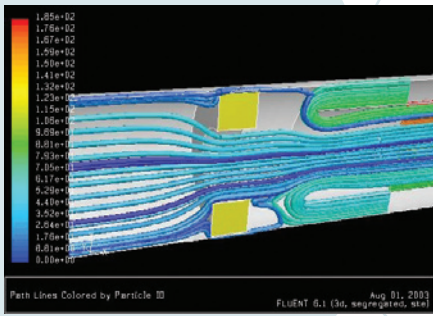
The Integrated Local Control Module (ILCM) is built into the collector drive. This option offers many of the same capabilities as a PLC/HMI and is a cost-effective alternative.

PLC/HMI panels designed and built in-house to meet any specification need.

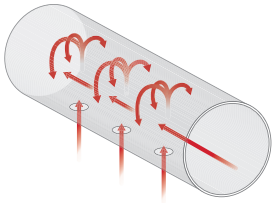


MRI's patented Shared-Reel Drive assembly offers above-water position limit sensors and a powerful, low RPM gear reducer. A lightweight aluminum drive cover comes standard and an elevated drive stand can be offered for ease of maintenance.

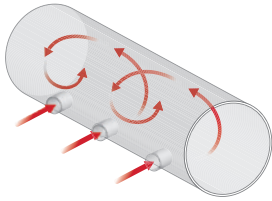




◀ **Flow Balancing Ring**
 Designed around CFD analysis to ensure even flow distribution across all orifices from a collapsed to fully extended position.



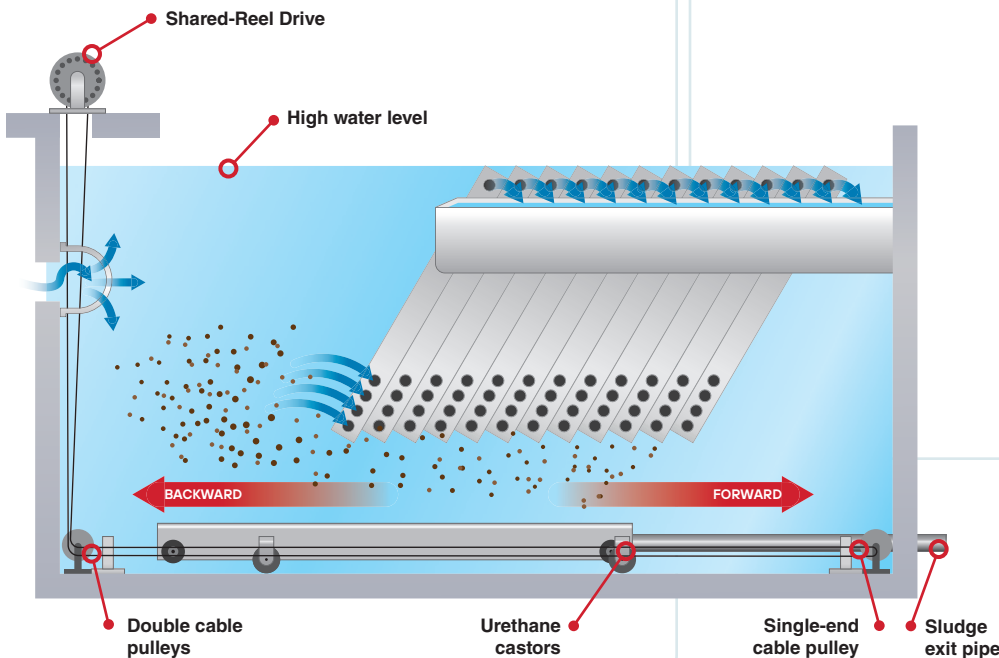
Conventional Sludge Collectors
 In conventional sludge collectors, the incoming flow enters at the bottom and continues upward, perpendicular to the internal flow, which is moving laterally toward the center outlet. This causes the two flows to collide at the orifices, disrupting the flow pattern and decreasing sludge removal.



MRI's Exclusive Tandem Collectors
 With MRI's tandem collection design, the incoming flow enters tangentially to the bottom of each collector, causing the internal flow to travel in a spiral toward the center outlet. As the spiraling flow passes each orifice it is re-energized by the incoming flow. This creates a uniform, organized flow pattern that increases sludge removal and prevents clogging.

Innovative tandem collectors maximize efficiency.

Unlike conventional equipment, MRI's system has two collectors instead of one, with sludge collection orifices located on the side and facing forward, rather than pointing downward. This allows for enhanced, one-way directional sludge extraction as the assembly moves into the sludge. On the reverse stroke, suction ceases and water is pushed backward through the orifices ensuring they are free of debris for the next cycle. The orifices direct sludge into the collection pipe tangentially to prevent clogging, reduce system headloss, and remove more solids with less wasted water.



Side view of MRI Hoseless Cable-Vac shows the low profile design. This enables use under plate settlers or tube settlers where clearance can be limited or in open basins.

MRI offers flexibility for custom designs to fit all new and retrofit applications. Drive and sludge exit can be located at either end of a basin.

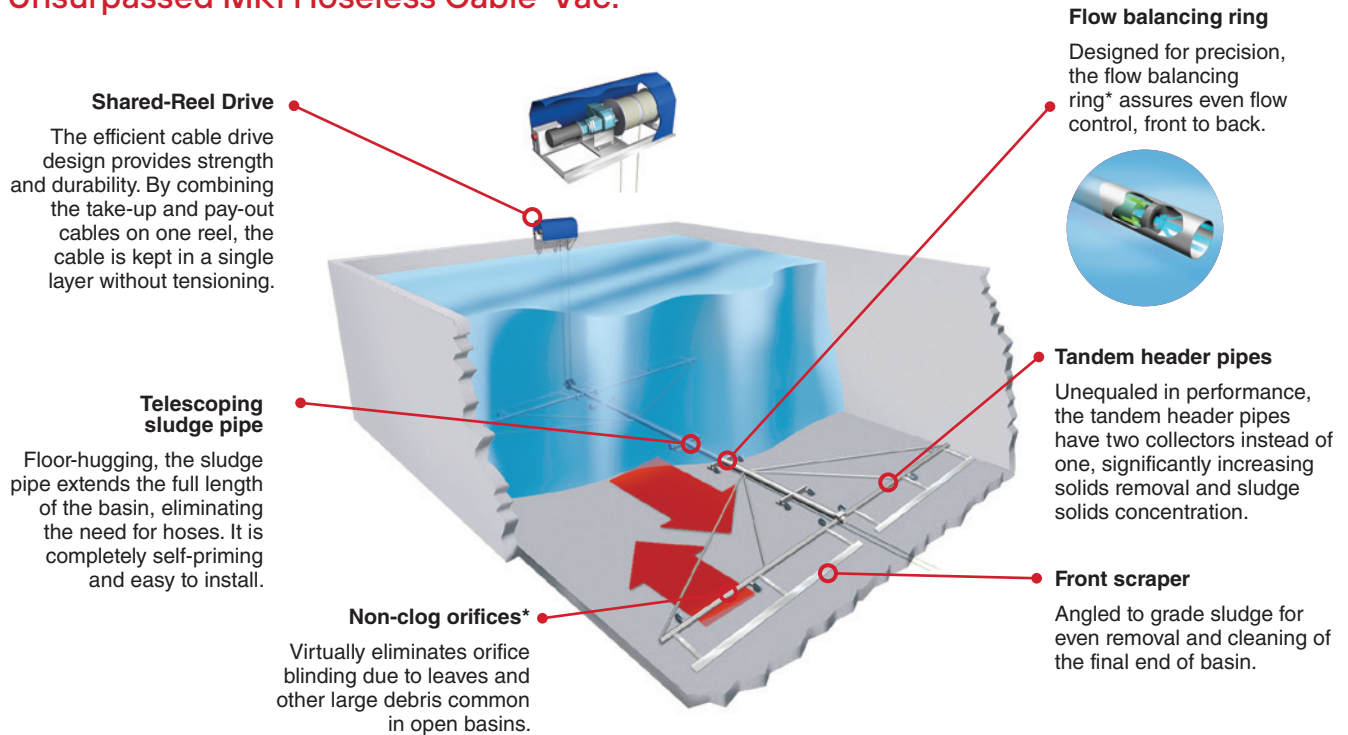


MRI Hoseless Cable-Vac: low profile, floor-hugging and powerful.

MRI's Hoseless Cable-Vac features a floor-hugging, telescoping sludge removal pipe and a simple, powerful cable-winch movement. Durable enough for continuous operation, treatment plants generally run the Hoseless Cable-Vac from one to several times a day. Offering a highly scalable design, the Cable-Vac is available in widths up to 30 feet and length up to 300 feet per unit. It can be used with flat sloping or slanted floors and has variable travel speed and orifice sizes to accommodate all applications.



Unsurpassed MRI Hoseless Cable-Vac.



*Patented



Denver
(303) 279-8373
(303) 279-8429 FAX

mrisales@parkson.com
www.meurerresearch.com



MRI-HCV