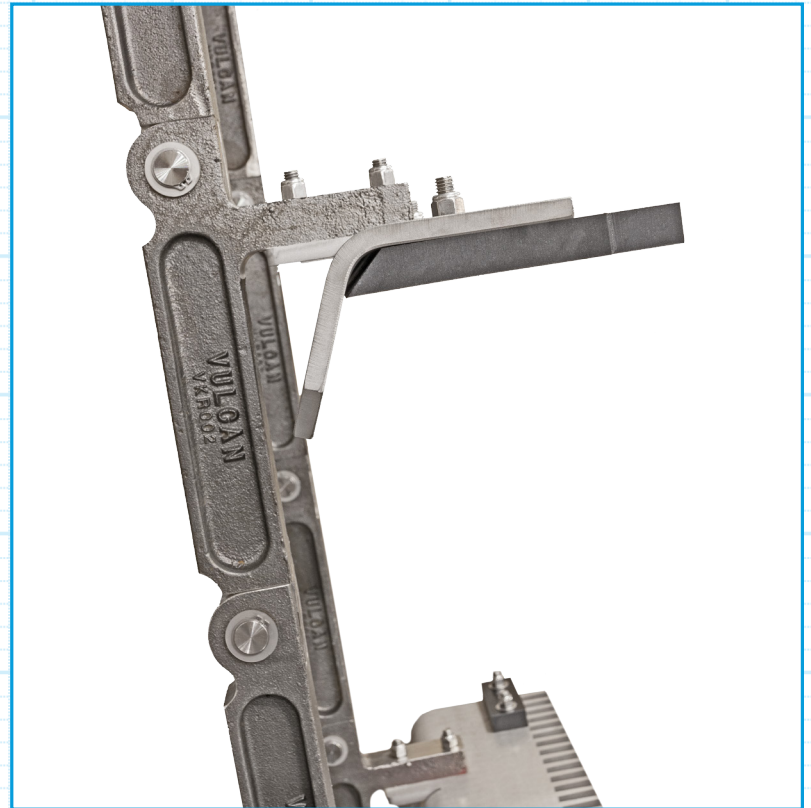
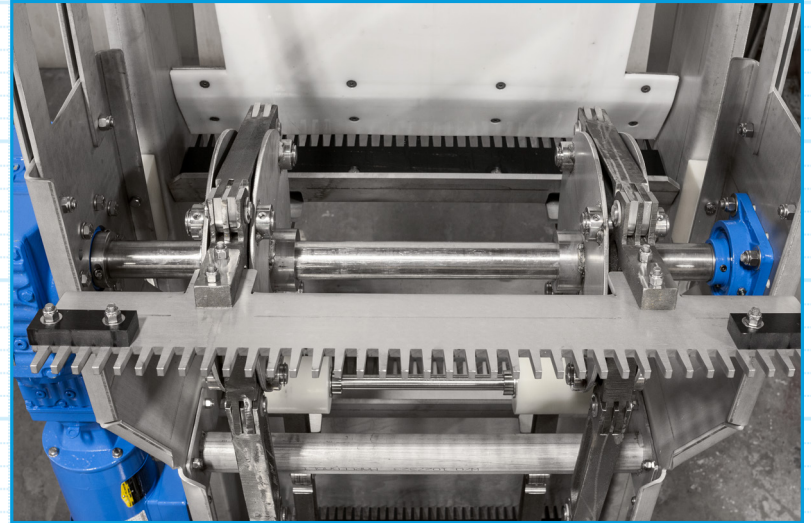
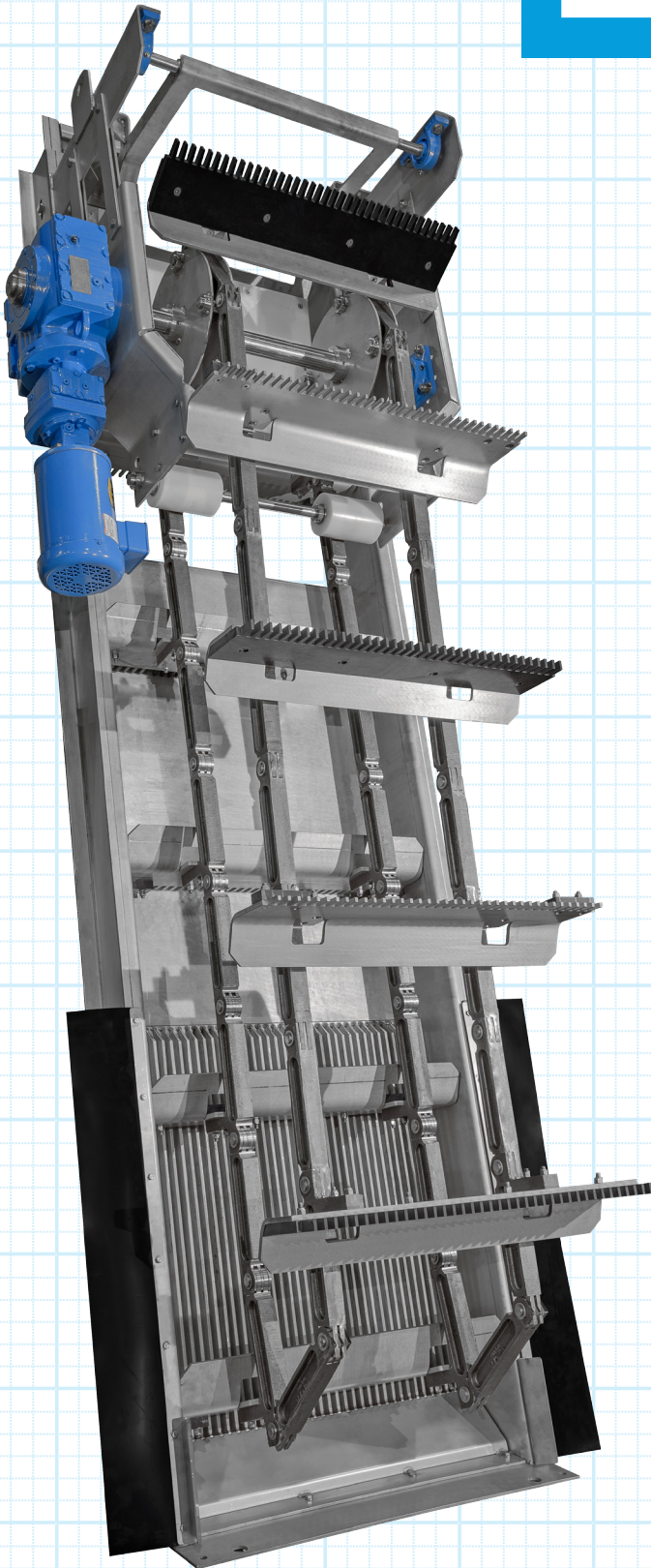
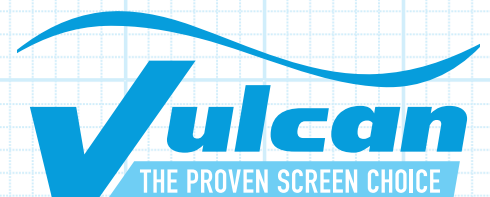


# Model VKR Knuckle Rake Bar Screen

## Product Information Guide



Find more product information at:  
[vulcanindustries.com](http://vulcanindustries.com)





# Model VKR Knuckle-Rake Bar Screen

## Introduction

Vulcan brings the simple design of the **Model VKR Knuckle-Rake Bar Screen** to market for those owners seeking a “budget” screen that can do the job right. But don’t worry, “budget” doesn’t mean flimsy or cheap. Vulcan designed this screen to handle debris found in wastewater, storm water and combined sewers of smaller systems with lower flow rates, but with the same challenges seen in higher flow systems. The Model VKR Screen is an automatic, self cleaning mechanical bar screen customized for existing channels or for new construction. Bar screen openings from ¼-inch and larger provide the right screenings removal and downstream equipment protection at your pump station or at the wastewater treatment plant.

## Vulcan Innovations

So what’s different? The Model VKR Knuckle-Rake Bar Screen uses a unique knuckle chain link that only bends in one direction. This allows engagement of the rake teeth into the bar rack by the knuckle link design forming its own lower turn-around without a sprocket or guide rail system in the flow. Additionally, this same formed return feature at the drive end provides for engagement of the “quad-pin” sprocket keyed to the drive shaft. To insure that the bar rack remains cleaned, the rake heads are only 21-inches apart and run at a much slower speed compared to a typical multiple rake bar screen. Additional screenings removal capacity can be achieved by simply increasing the motor speed. Each rake head is provided with rake teeth so that every rake head engagement cleans the three sides of the bar rack bars exposed to the screenings. No flat head “staging” scraper used (or needed).

Rake head shapes control where the screenings end up. VKR rake heads are formed with a scoop shovel shape to contain the screenings collected from the bar rack. That way, screenings are kept on the rake head until the rake wiper removes them automatically. This reduces the amount of screenings falling back into the flow or onto the operating floor.

## Low Cost, Not Low Quality

Sound good? You bet it does and at a price you can afford. And the materials of construction hold up to the nasty environment they are exposed to. Combinations of stainless steel, nylon and UHMW polyesters make up the major components of the frame, structural members, drive system, rake heads / rake teeth and wiper system. The knuckle links are cast from C8FM stainless steel with the corrosion resistance comparable to 316 stainless steel.

Power requirements are low. Typically 0.5 HP motors are used to drive the Model VKR Knuckle-Rake Bar Screen. A variable speed drive allows for low and high speed operation. Controls can be economical too. Start-Stop switches along with timers and floats can operate most systems. Additional controls can be supplied to provide differential level control and connection from a PLC / OIT to the plant SCADA system. Oh, did we forget to mention, Vulcan designs and builds the control systems too! It’s “one-stop” shopping here!

## Post-Screening

The Vulcan Model VKR Knuckle-Rake Bar Screen could be the best choice for your application. And, we have multiple options for handling the screenings collected by the VKR. Sluice trough conveyance systems, shaftless screw conveyors, belt conveyors, screw presses and washing presses are available to make your life easier and cleaner. Of course, we can integrate all of the equipment controls into one fine control panel for any of our screens and screening handling systems. So why chose Vulcan? WE ARE THE PROVEN SCREEN CHOICE!

Find more product information at:  
**vulcanindustries.com**

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