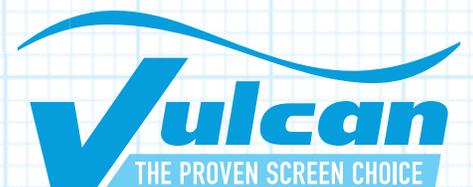


# Model VMR Multi-Rake Screen

Product Information Guide



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





# Model VMR Multi-Rake Screen

## Chain Take-Up Mechanism

## Wiper Mechanism

Internal to screen frame with no brushes or water required.

## Stainless Steel Side Frame

Full Frame (as shown), and Spliced Frame (for installation in existing buildings) are available. Standard side frames are formed from 1/4" thick stainless steel plate with four engineered bends for rigidity creating a side frame width of 28" - the strongest frames in the industry.

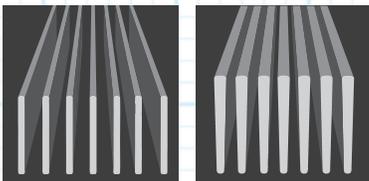
## Dead Plate

## Rake Heads

Multiple, large-capacity rake heads with deep tooth penetration and positive engagement of the bar rack.

## Choice of Rectangular or Trapezoidal Bar Rack

Bar spacing from 1/4" to 3"+



## Sized For Your Project

Channel widths from 18 inches to 8 feet, and depths to over 50 feet.

## Upper Stainless Steel Drive Sprockets

## Drive Options

TEFC and explosion-proof motors available with variable frequency drive (VFD) for soft start and flexible operating speed control.

## Stainless Steel Chain Guides

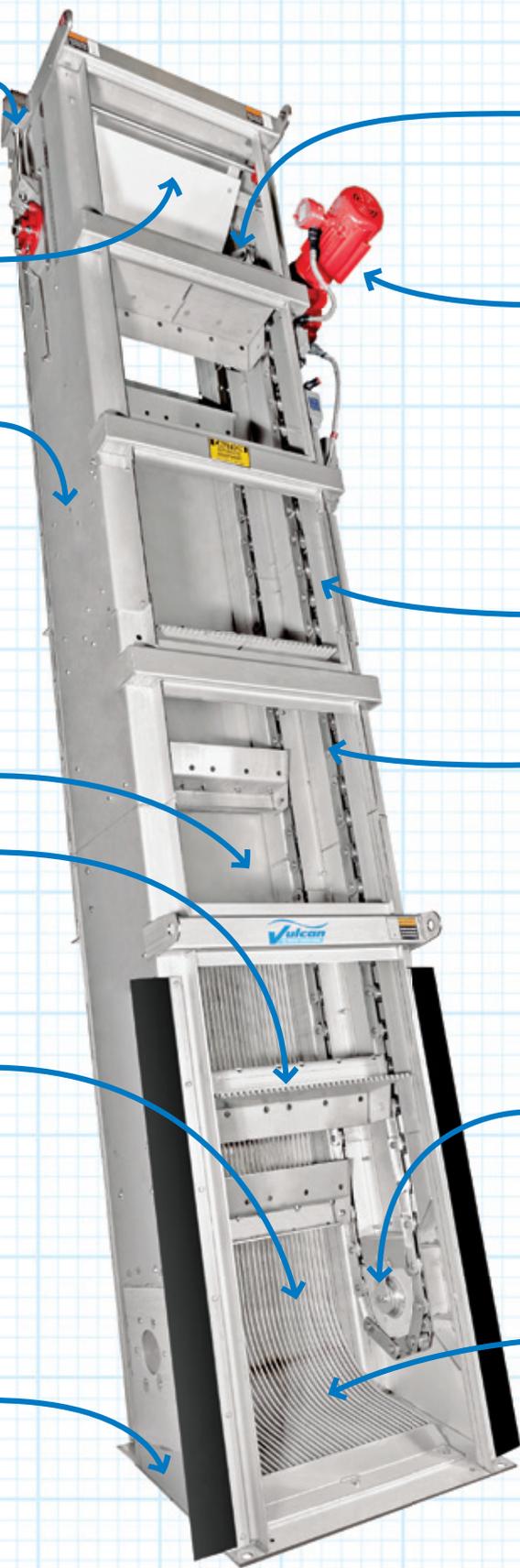
## Drive Chains

Heavy-duty stainless steel roller chains.

## Lower Engagement System

With choice of guide rail bearings or sprockets.

## Lower Curved Bar Rack Bars



# Engineered for Capacity, Known for Reliability

Since 1978, Vulcan has been a leader in manufacturing quality wastewater equipment. The **VMR Multi-Rake Screen** continues this tradition of excellence, incorporating many of the same features found in our Mensch Severe Duty™ Bar Screen. Coupling these tried and true features with Vulcan's own UL approved fully automatic and multiple speed controls produces quick and efficient screenings removal.

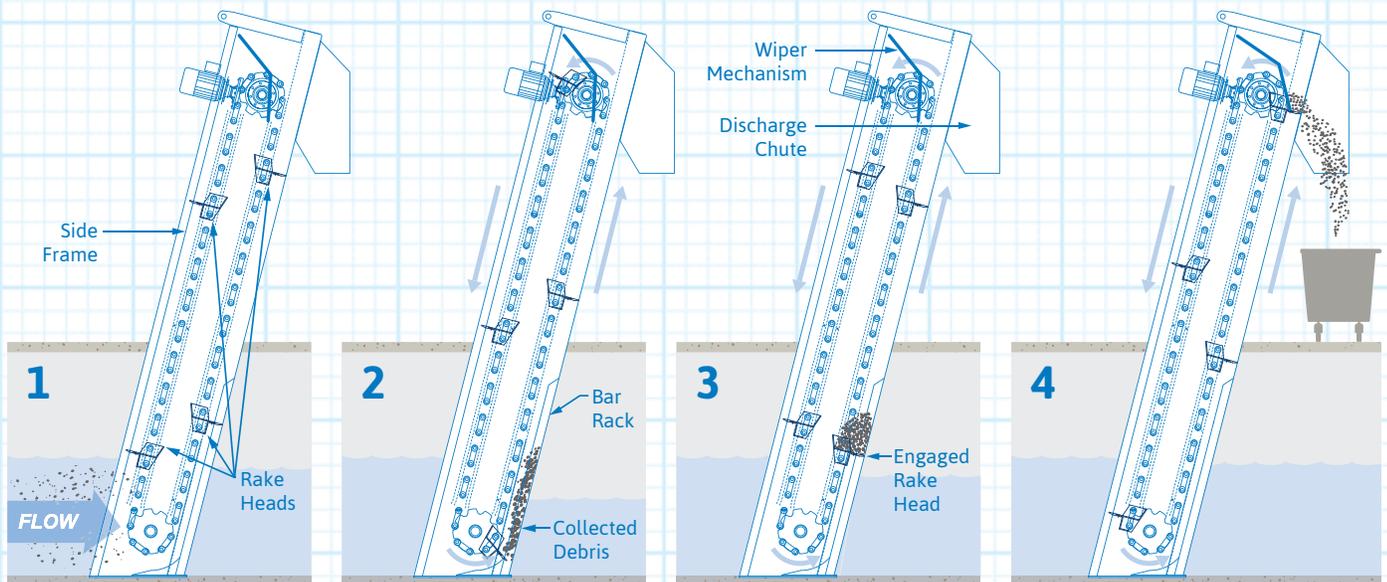
Designed for use in high screenings volume applications, the VMR Multi-Rake Screen can efficiently remove large amounts of screenings with continuous operation. The versatility of the VMR Multi-Rake Screen makes it ideal for special applications of extreme channel depth and severe screen blinding. Heavy duty components used in the VMR Multi-Rake Screen ensure a long and productive service life even under the most severe conditions.

The VMR Multi-Rake screen is an automatic, self-cleaning mechanical bar screen designed for tough primary and secondary screening applications.

The VMR Multi-Rake Screen can be customized for new construction as well as existing channels.

## Electrical Controls

Each control panel we provide is designed and manufactured by highly skilled technicians in our own electrical facility to meet the specifications for the particular project. Our panels are UL Listed and can meet UL 508A or UL 698A standards. Prior to shipment, each panel is fully assembled and tested with the equipment. Panels can be installed as free standing, wall mounted or screen mounted. Control system design can include a variety of relay or programmable logic devices to interact with today's SCADA and HMI systems. Our standard control package includes timers with ultrasonic differential level control for starting and stopping the screen. Variable Frequency Drives (VFD) provide soft motor starts and a wide range of operating speeds to accommodate each particular application. Motor current is monitored to prevent damage to the screen drive system if something were to lodge into the bar rack. A reversing feature allows back cleaning of the bar rack to dislodge the object and then reverses again to continue screening.

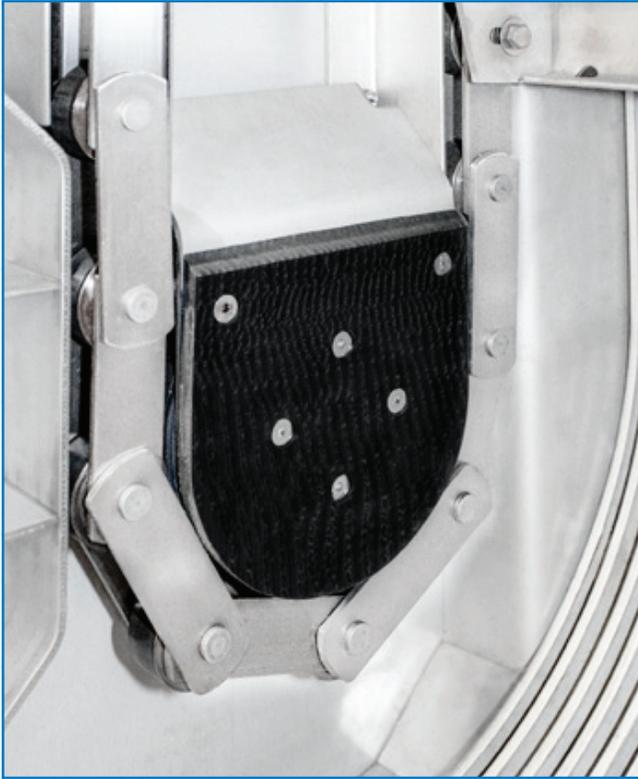


### ▲ Sequence of Operations

- 1** The bar rack begins to collect screenings while the bar screen is in the idle position.
- 2** As screenings collect and the bar rack blinds, the upstream water level rises which initiates a cleaning cycle.
- 3** One of the multiple rakes engages the bar rack, clearing up the debris and transporting it up the dead plate toward the discharge point.
- 4** When the rake reaches the discharge point, a wiper assembly cleans the rake and directs the screenings to a receiving device (i.e. conveyor, screenings press, dumpster).

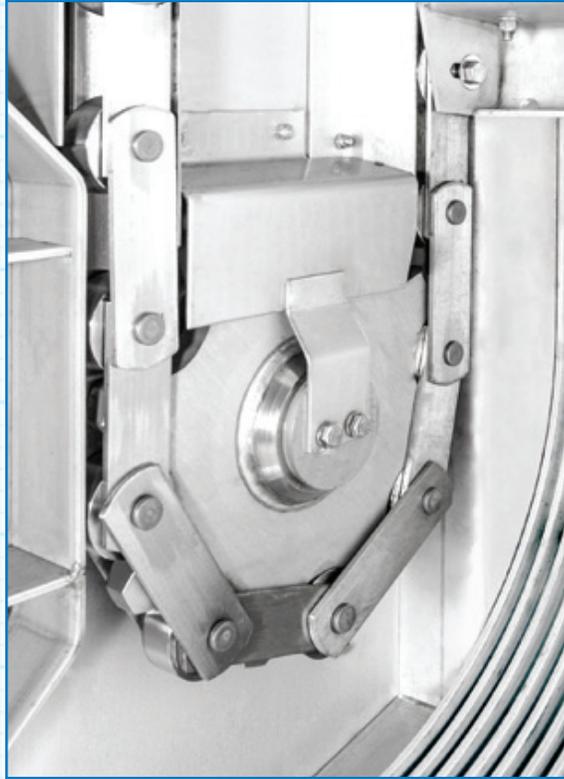


# Model VMR Multi-Rake Screen



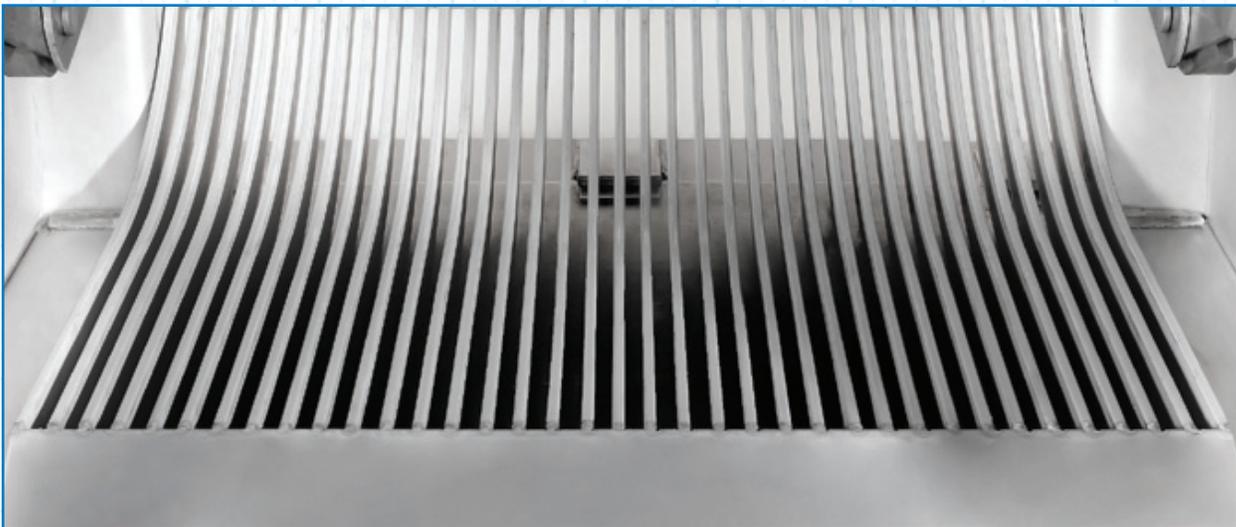
## ▲ Option 1

Heavy-duty stainless steel chain and lower guide rail engagement system



## ▲ Option 2

Heavy-duty stainless steel chain and lower sprocket engagement system



## ▲ Lower Curved Bar Rack

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