MELGIN

Mega-G 412TM

Heavy-Duty, High-Capacity, Turn-Key Scalping Shaker

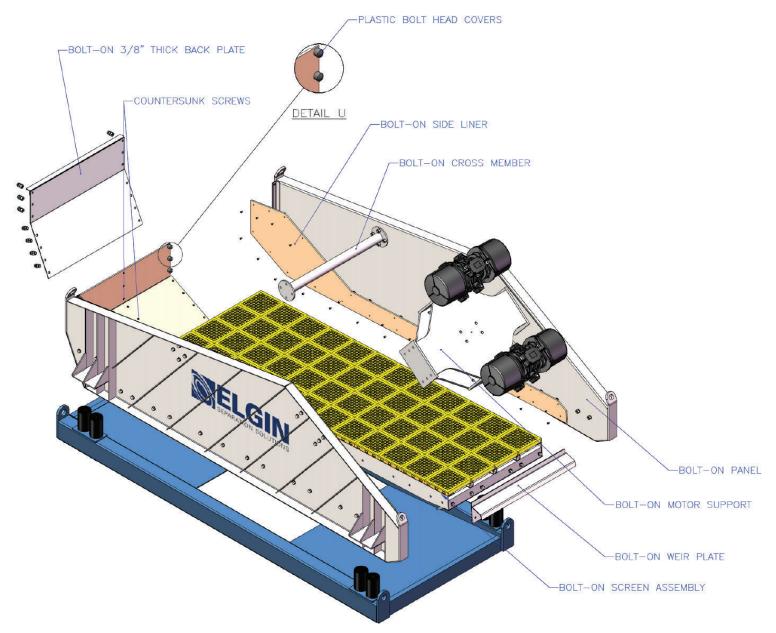


The First Heavy-Duty, High-Capacity, Turn-Key Scalping Shaker Specifically Designed for the **Hydrovac Waste**, **Microtunneling** and **Dredging Industries**

Elgin's Mega- G^{TM} Scalping Shaker provides power, performance and a new standard in practical design. Capable of producing up to 6.0 G's of force and coupled with an optional variable frequency drive, the Mega- G^{TM} provides power when you need it.

Proprietary Modular Construction

By utilizing a modular design that allows for each component to be optimized relative to the dynamic stresses applied, Elgin's Mega- G^{TM} optimizes strength, flexibility, and durability. This also provides users the ability to easily





customize the scalping shaker. Instead, as applications change, modified components can be integrated.

Optional Variable-G VFD Control System

High G-force can be detrimental to the drying efficiency of fine, reactive or sticky solids. As such, Elgin has incorporated an optional user-friendly, variable frequency drive system that allows the shaker to achieve three different preset G-force levels. This allows the G-force & conveyance dynamics of Elgin's Mega-G™ Shaker to be adjusted with the simple twist of the wrist at the control panel. This can be done without adjusting the motor weight settings, reducing additional operational headaches and eliminating unnecessary downtime.

Mounting and Installation

Elgin's Mega-G™ Scalping Shaker incorporates four top-side lifting eyes on each corner of the shaker basket. The Mega-G™ can be easily moved using the basket-mounted lifting eyes. The control panel is capable of being installed on either side of the shaker for easy access (Or can be provided as a free-standing panel), depending on final placement of the equipment.

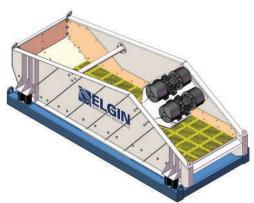
Abrasion-Resistant Panels

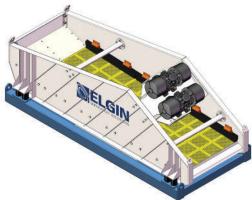
Elgin's Mega-G™ Scalping Shaker incorporates proprietary Tabor-Thane high-density polyure-thane wear protection panels. These panels can be found within the shaker interior walls, the inlet impact plate, discharge plate / dam, and discharge tray.



Multiple Deck Configurations

Elgin's Mega-G[™] Scalping Shaker can be provided in any one of three configurations, including "incline", "reverse-incline", and "horizontal". Any one of these configurations can be incorporated into the Mega-G™ Scalping Shaker, at the time of manufacture, for no additional cost.







Reverse-Incline Scalping Shaker

Incline Scalping Shaker

Horizontal Scalping Shaker

Variety of Screen Media Options

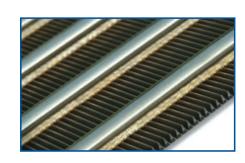
By using a modular screen deck, both 4' x 12" stainless-steel wedge-wire screens and Elgin's 12" x 12" pinless polyurethane screen media can be deployed. This combination allows for a multitude of applications with target cut points as low as 250 microns or as high as 5 cm.



Modular Polyurethane Screen Panels with Optional Hybrid Decking Available with Woven Wire



Double Locking-Pin Dams with **Optional Pin Strips**



Customizable Profile Wire with **Optional Chrome Hard-Facing**













Vibration Isolation

Elgin's Mega-G™ Scalping Shaker is fitted with eight (8) Firestone™ Marsh Mellow™ rubber isolator springs. The Marsh Mellow™ spring includes a solid rubber core with a hollow center and fabric reinforced body. The variable spring rate allows for a nearly constant natural frequency with changing loads. This results in consistent vibration isolation with variable loading. Due to the rubber construction, Marsh Mellow™ springs do not bottom-out like coil springs. Bottomingout, under overload or surge load, sends a large amount of stress to all of the machine's components.

Combine with Elgin's CSI-D4 Cyclone Pro™ Turn-Key Waste Management System for Maximum Fluid Recovery and Solids Dryness



Elgin's Mega-G™ Scalping Shaker can be provided as a stand-alone product or as part of a turn-key system that includes a variety of hoppers and feed systems, all of which can be customized to fit your particular needs.

Optional Feed Hoppers

Various feed hopper configurations are available. Each is designed to support the means in which the Mega-G™ Scalping Shaker is to be fed. Hoppers are traditionally lined with abrasion resistant high-density polyurethane and may include integrated spray bars for enhanced slurry feed and washing of incoming solids.

Optional Spray Bars

Various spray bar configurations are available. Each spray bar package is design to support the application and the nature of the material being fed to the Mega-G™ Scalping Shaker. Modular nozzle construction allows for various stem lengths to allow for adjustment of the discharge elevation, as well as, a multitude of spray nozzle tips to provide for varying levels of discharge pressure and volume.



Spray bar feed pumps can also be integrated to provide the necessary flow and pressure for each application. Elgin can provide a host of pumps including centrifugal, self-priming centrifugal, rubber-lined centrifugal, progressive-cavity and submersible.

Optional Discharge / Collection Hoppers and Transfer Pumps

Elgin's Mega-G™ Scalping Shakers can be provided with a standard "Tank-Mount" Carriage or be integrated with a double-V bottom collection tank to allow the shaker filtrate to be directed to any number of slurry transfer options, including specialized positive-displacement progressive-cavity pumps or Elgin's abrasion-resistant rubber-lined centrifugal pumps. Both pumps have been specifically designed to effectively transfer high solids slurries depending on the operating conditions and desired output parameters.



Optional OSHA-Compliant Operator Platforms, Stands and Skids

Depending on the application, Elgin's Engineering and Fabrication Team can integrate a variety of custom platforms, stands and skids. Each platform will be provided with OSHA-complaint walk-ways and handrails and can be provided both staircase and/or ladder access. Skids can be modified to accommodate site needs and can include secondary containment, dual pipe-bollard ends, lifting eyes, forklift pockets and toolboxes.



	Mega-G™ 412	
Cut Size (Varies per Screen Mesh / Media Size)		
250 microns to 5 cm		
Maximum Flow Rate		
4,000 gpm	252.4 lps	
Screen Decks	Screens per Deck	
1	12 (For 4' x 12" Media) 48 (For 12" x 12" Media)	
Screen Surface Area		
48 ft² (4.5 m²)		
Adjustable deck angle		
N/A – Deck Angle Fixed		
Dimensions (L x W x H)		
172" x 68" x 52"	437cm x 173cm x 132cm	

2 Scalping Shaker			
	"G" Force:		
	5.5 G's Fixed (Variable with Optional VFD)		
	Vibrator Motors (Standard Configuration)		
	(2) 5.0 HP	3.7 kW	
	Starter		
	One (1) Across-The-Line		
	Screen Model		
	Elgin's Tabor-Thane™ Polyurethane or Elgin's Norris™ Profile Wire		
	Electrical Rating		
	460V / 60Hz or 380 V / 50hz – 3 Phase		
	Weight		
	7,000 lb	3,175 kg	





Solids Auger Integrated Progressive Cavity VFD Driven Pump with Run Dry Thermal Protection and Onboard Spray Bar Pump.



MELGIN

