MELGIN

Hyper-G[™] Shale Shaker Product Overview

2021 – Revision M

Natural Resource Recycling • Product Classification • Fluid Recovery Dewatering • Waste Management • Material Handling • Liquid/Solid Separation



Full-Service OEM

Engineering, Design, Manufacturing, Commissioning and Servicing



As a division of the Elgin Equipment Group, Elgin Separation Solutions is able to tackle both the small and the big projects, regardless of location or well complexity.



Organizational Footprint

And Key Customers



Hyper-G[™] Shale Shaker

Multiple Configurations for Operational Needs





3-Panel Drying Shaker



4-Panel Drying Shaker



6-Panel Drying Shaker



Hyper-G[™] Shale Shaker

Product Innovation – Dual Motion, Multi-G, Progressive G' Shaker



Motor Setting	Dual Motion Balanced Elliptical Motion	Dual Motion Linear Motion	Fixed Motion High-G	
Low G	4.5	5.0	N/A	
Mid G	5.5	6.0	N/A	
High G	6.0	6.5	7.5	

Elgin Separation Solutions' Dual Motion Hyper-G[™] allows operators to select both the G-force and the excitation pattern (linear motion or balanced elliptical motion) with a single on-board NEMA 7X explosion-proof VFD system.



Shaker Screen Performance

Improved Liquid/Solid Separation with Composite Screens



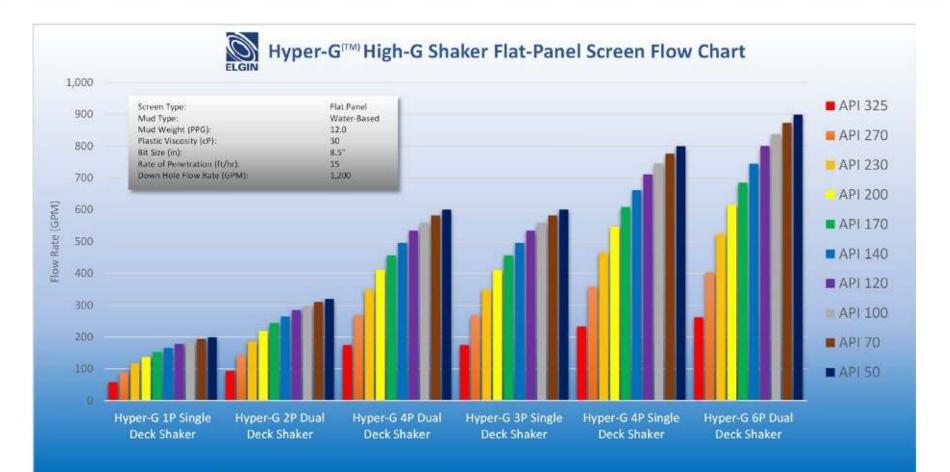
Composite screens optimize solids control efficiency to reduce costs and waste volumes, regardless of the targeted formations and drilling applications.

- **Performance** Elgin's Composite screens provide higher surface tension.
- **Quality** Composite screens inherently have a higher quality control.
- **Resists Premature Delamination** Composite screens are not laminated. As such, there is no ability for the perforated plate or the wire mesh to prematurely separate from the frame.
- **Composite Polyurethane Technology** New manufacturing technology has advanced shaker screen construction using composite material with steel reinforcement.
- **Storage Life** Composite screens frames do not dent or warp from mishandling.



Shaker Screen Performance

Improved Liquid/Solid Separation with Composite Screens



Composite screens provide for higher tension of woven wire cloth. As such, they provide for an improved cut point and extended wear life.



Performance

NEMA 7X Class I – Division I VFD Panel provides multiple G-forces in both linear and balance elliptical motion. One-piece Firestone Marshmallow Springs maximize G-force while minimizing carriage vibration.

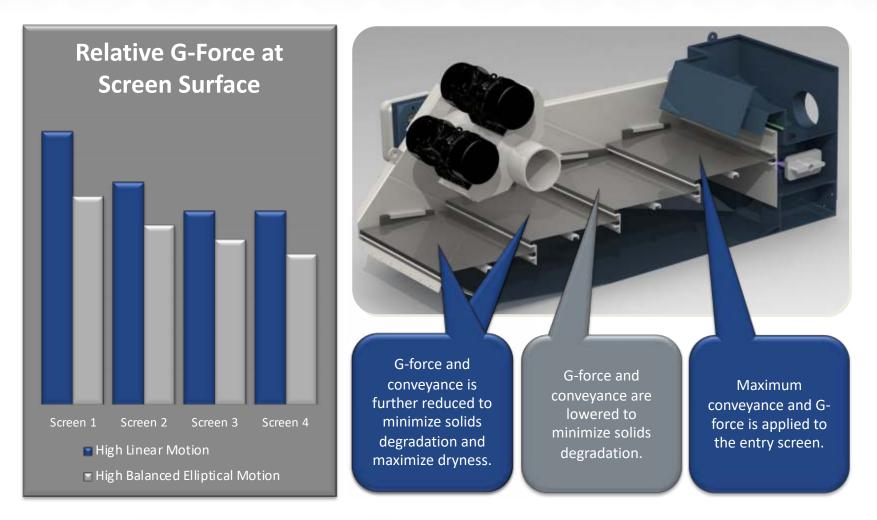
Dual 2.5HP Explosion-Proof High-G motors provide up to 7.5 G's of force. Multi-functional High-G motors generate both linear and balanced elliptical motion.

Fully balanced, adjustable while drilling single-point jacking system.

Elgin's Dual Motion Hyper-G[™] shale shaker allows operators to tune one shaker for any hole or drilling fluid condition experienced.



Proprietary Progressive G-Force Profile



To ensure that excessive G-force is not being applied, when not called for, the on-board VFD allows for optimum system fine-tuning.



Installation Flexibility

Reversible control panel that can be placed on the left or right side of the shaker. Dual single-piece flow diverters allow for mud to be managed to either side of the shaker. Fully-balanced shaker basket allows for deck angling with minimal effort while drilling.

New conveniently located knife-gate provides for sealtight mud by-pass capability. 10" inlet flange provided directly on rear of onepiece possum-belly / gumbo tray.

The Hyper-G[™] Shaker was designed for maximum installation flexibility, regardless of the rig or the current assets utilized.



Ergonomics and Durability

Rated lifting eyes located at the top of the shaker basket improves handling. Single-piece tubular steel for maximum energy translation & lower weld stress. Single-piece rigid motor mount truss maximizing energy translation & lowers weld stress. "" ASTM A36 plate steel construction, full seam welded for maximum equipment life. Fully integrated "gumbo tray" and "possum belly" ensures strength and stability.

Ensuring Operator Safety Remains a Fundamental Commitment to Elgin's Design Philosophy.



Hyper-G[™] Shaker Mud Management

Integrated "gumbo tray" and "possum belly" eliminate possibility of mud by-pass into the carriage. "Gumbo tray" designed with integrated flow diffusion device to minimize physical wear on the screens.

New single piece wedge ensures that sufficient pressure is applied to seal the screens to the basket.

Elgin's proprietary "water-fall" staggered screens eliminate solids bypass between screens. Integrated mud skirt lip allows for smooth discharge of solids directly into a conveyor or tank.

By significantly improving the design, Elgin has been able to extend a three-year warranty with its Hyper-G[™] Shaker.



Lower Total Cost of Ownership

"Crown rubbers" have been eliminated within Elgin's Hyper-G, replaced by durable polyurethane strips. Firestone™ Marshmallow Springs provide for a one-piece design. Does not corrode or require repainting. Fully powdercoated construction provides for excellent wear and abrasion resistance.

Dual single-point jacks have been designed with a performance factor of 4 to ensure maximum life. Low pressure water knife gate with radial seals will ensure a tight seat and minimal maintenance.

Most importantly, Elgin's new Hyper-G shaker comes with an unbeatable, industry leading, 3-Year Limited Warranty.



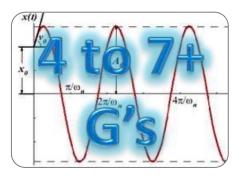
Hyper-G[™] Specifications

Shaker Designs for Operational Needs

Model Number:	Hyper-G 4-Panel	Hγper-G™ 3-Panel	Hyper-G™ 6-Panel	Hyper-G™ Drying Shaker 3-Panel	Hyper-G™ Drying Shaker 4-Panel	Hyper-G™ Drying Shaker 6-Panel
Equipment Image:						-
Screen Type:	KPT26-HD2	KPT28-COM	KPT28-COM	KPT28-HD2	KPT26-HD2	KPT28-COM
	Pretensioned	Composite	Composite	Composite	Pretensioned	Composite
Vibratory Motors:	(2) 2.5HP	(2) 2.0HP	(2) 2.5HP	(2) 2.0HP	(2) 2.5HP	(2) 2.5HP
	(1.86kW)	(1.49kW)	(1.86kW)	(1.47kW)	(1.86kW)	(1.86kW)
Number of Screen Panels:	Four (4) Panels	Three (3) Panels	Six (6) Panels	Three (3) Panels	Four (4) Panels	Six (6) Panels
Screen Surface Area:	35 sq. ft.	28 sq. ft.	56 sq. ft.	28 sq. ft.	35 sq. ft.	56 sq. ft.
	(3.25 m²)	(2.6 m²)	(5.2 m²)	(2.6 m²)	(3.25 m²)	(5.2 m²)
Maximum Flow Rate:	750 gpm	650 gpm	1250 gpm	650 gpm	750 gpm	1250 gpm
	(48 lps)	(41 lps)	(79 lps)	(41 lps)	(48 lps)	(79 lps)
Weir Height:	33″ (83 cm)	30″ (76 cm)	40″ (102 cm)	N/A	N/A	N/A
Length:	127″	117″	112″	96″	108"	108″
	(322 cm)	(297 cm)	(284 cm)	(244 cm)	(274 cm)	(274 cm)
Width:	79"	79"	79″	69″	79"	82″
	(200 cm)	(200 cm)	(201 cm)	(175 cm)	(200 cm)	(208 cm)
Maximum Height:	58″	54"	65″	52"	58″	65″
	(147 cm)	(137 cm)	(165 cm)	(132 cm)	(147 cm)	(165 cm)
Weight:	4,850 lbs	4,586 lbs	5,300 lbs	3,000 lbs	4,500 lbs	4,200 lbs
	(2,200 kgs)	(2,080 kgs)	(2,404 kgs)	(1,361 kgs)	(2,041 kgs)	(1,905 kgs)

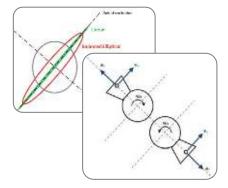


Key Features



Power On-Demand Power

With a redesigned basket & motors, the Hyper-G[™] is Elgin Separation Solution's most powerful variable G shaker, therefore allowing the operator to tune the shaker to the drilling program.





By the simple turn of a switch the Hyper-G[™] can generate either linear motion or balanced elliptical motion, therefore allowing the operator to tune the shaker to the cuttings.



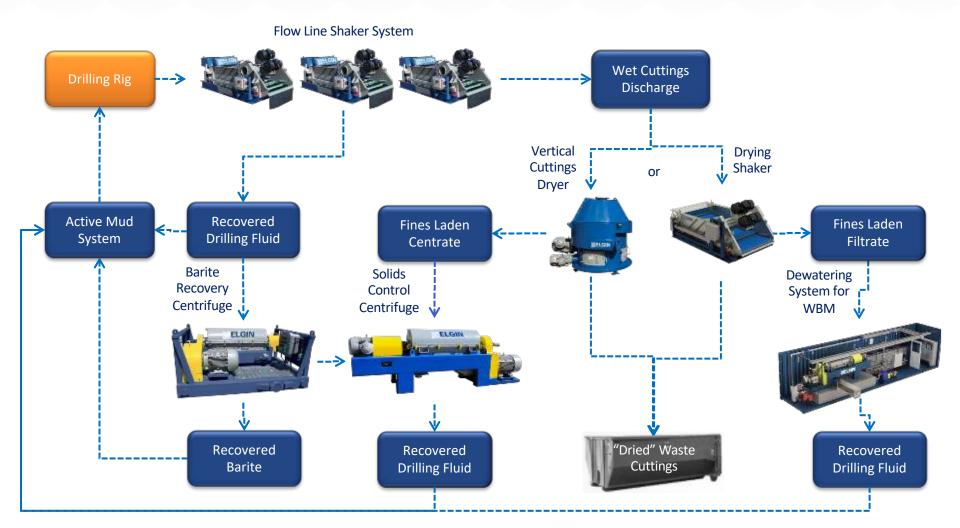
Durability Three-Year Warranty

By focusing on quality and value, Elgin Separation Solution's Hyper-G™ maintains the industry's most aggressive three-year warranty.



Closing the WBM & OBM Loop

Integrated Solids Control and Waste Management Products.



Elgin's product portfolio provides a "one-stop" shop for any solids control management or waste management challenge.



Elgin Value

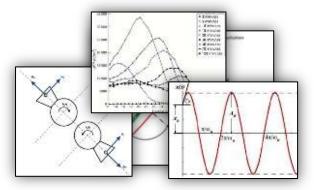
Definitive Value Proposition in Utilizing Elgin Shakers



Unsurpassed Experience

Elgin Separation Solutions has shipped shakers to over 40 different countries over the last 25 years and continues to provide local support and maintenance in 16 different countries.





Unsurpassed Durability

With more than 30 years of experience building shakers for the oil and gas industry, Elgin Separation Solutions has developed a reputation for the most durable systems in the market. The average asset life exceeds 10 years with proper preventative maintenance.

Engineering Support

Elgin's dedicated Engineering team evaluates system hydraulics, frictional losses, predictive reliability, and failure mode evaluation analysis ("FMEA") for each shaker designed. Months of product validation testing is performed prior to the release of any Elgin shaker.

Elgin manufactures its own spare parts and consumables ensuring 100% integrated accountability for the entire shaker.



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