



# **HYPER-G™**

**DUAL-MOTION, VARIABLE-SPEED SHAKER**



Elgin's Hyper-G™ Shaker provides power, performance and a new standard in practical design. Capable of producing up to 8 G's of force and coupled with a variable frequency drive, the Hyper-G™ provides power when you need it. By adding a single point jacking system and an improved screen fastening system, you now have a shaker that is as easy to operate, as it is powerful.



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## Variable-G VFD Control System

Operating a shaker at high G's on a consistent basis does not provide the operational flexibility needed when managing solids. High G-force can be detrimental to the drying efficiency of fine, reactive or sticky solids. As such, Elgin has incorporated a user-friendly, intelligent, variable frequency drive system that allows the shaker to consistently achieve three different preset G-force levels in both linear motion and balanced elliptical motion. This allows the G-force and conveyance dynamics of Elgin's Hyper-G™ Shaker to be adjusted with the simple twist of the wrist at the control panel.

## G-Force Response System

To further enhance the Hyper-G™'s capabilities, a G-Force response system that automatically manages the G-Force to meet pre-set levels can be added as an optional feature. As solids loading increases, the Hyper-G™ will respond by increasing the shaker's energy input, therefore maintaining a constant G-Force, regardless of the solids loading.

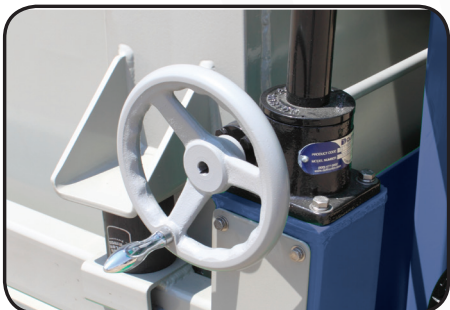
## Bypass Flow Control System

By using 10" (25.4 mm) fully enclosed knife-gate valve to ensure a tight seal, the Hyper-G™ accommodates easy by-pass of fluids. A valve stem is provided along with a hand-wheel mounted conveniently near the rear side of the possum belly.



## Adjustable While Operating Single Point Jacking System

By utilizing two tethered, 2,000-pound gear jacks, the Hyper-G™'s basket can be adjusted by the rotation of a conveniently mounted hand-wheel near the rear side of the possum belly. With minimal effort, the shaker basket angle can be adjusted allowing for better separation of the liquid from solids as it passes over the screening area during operation.



Hyper-G Shaker Screen	API 13C Designation	API 13C D100 Cut Point Microns	API 13C Conductance (kd/mm)
KPT26-HD2-API-10	API 10	1900	40.0
KPT26-HD2-API-14	API 14	1400	30.0
KPT26-HD2-API-16	API 16	1100	22.0
KPT26-HD2-API-20	API 20	870	17.0
KPT26-HD2-API-25	API 25	757	13.0
KPT26-HD2-API-30	API 30	600	10.3
KPT26-HD2-API-35	API 35	491	9.2
KPT26-HD2-API-40	API 40	450	6.0
KPT26-HD2-API-50	API 50	315	5.0
KPT26-HD2-API-60	API 60	275	4.0
KPT26-HD2-API-70	API 70	205	2.9
KPT26-HD2-API-80	API 80	182	2.8
KPT26-HD2-API-100	API 100	146	2.5
KPT26-HD2-API-120	API 120	120	1.8
KPT26-HD2-API-140	API 140	114	1.7
KPT26-HD2-API-170	API 170	97	1.1
KPT26-HD2-API-200	API 200	73	1.0
KPT26-HD2-API-230	API 230	62	.7
KPT26-HD2-API-270	API 270	43	0.5

## OEM Performance Shaker Screens

Elgin is an original manufacturer of pretensioned, polyester, powder-coated shaker screens. Elgin's screens are third party tested and conform to API 13C RP standards for cut point and conductance.

## Mounting and Installation

Elgin's Hyper-G™ incorporates four top-side lifting eyes on each corner of the shaker basket. By installing the shipping brackets, the Hyper-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, depending on final placement of the equipment at the rig site.

### Vibration Isolation

Elgin's Hyper-G™ is fitted with 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. Bottoming-out under overload or surge load sends a large amount of stress to all of the machine's components.

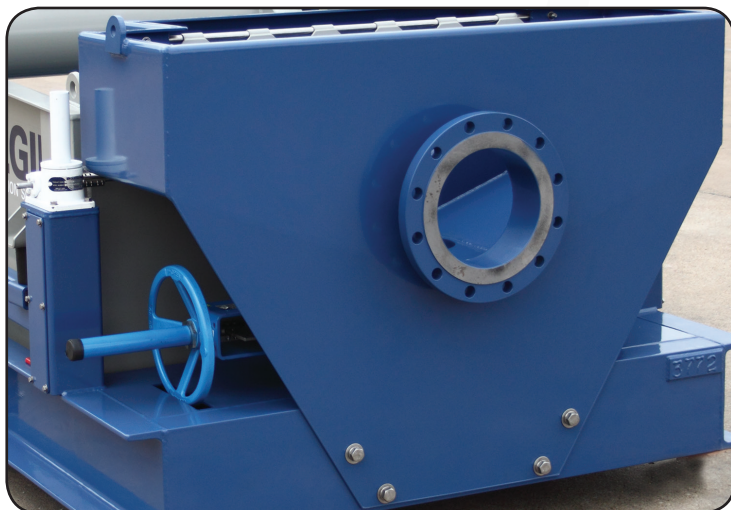


### “Water-fall” Screen System

Elgin's Hyper-G™ shaker incorporates a “water-fall” screen system that dramatically reduces the potential for solids bypass typically encountered by damaged screen gaskets, improper installation, and flooding of the rear gasket by fluid. By having the discharge of each screen fall to the top of the next screen, the rear gasket area's exposure to fluids is significantly reduced. This maximizes that performance of the shaker.

### Side Outlet Doors

Further flexibility is provided in the side-outlet doors. As



a standard feature, the side discharge doors incorporate mounting faces. The mounting configuration also allows for a host of standard discharge adapters to be mated to the shaker side outlets.

### Operator Friendly

Elgin's shakers are designed with your team in mind. Screen replacement is made easy using simple wedge block technology with limited downtime. By using readily available electrical components and standard fastening assemblies, maintenance concerns are eliminated.

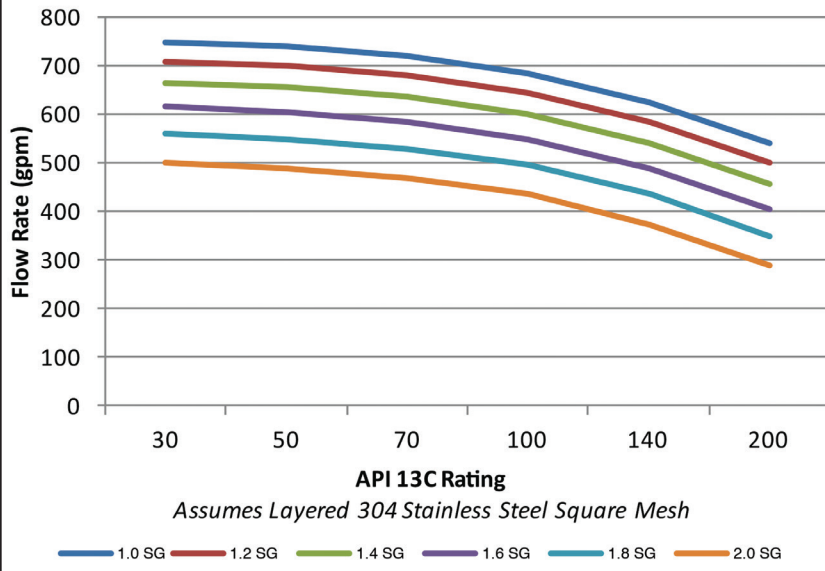
Combined with our international field service team and regional spare part distribution centers, you will never be left without the support you need.

### Hyper-G Drying Shaker



## Hyper-G Dual-Motion Shaker Hydraulic Performance (High-G Linear Motion Setting)

Hydraulic Capacity as a Function of Rated Screen Mesh & Fluid Weight (Specific Gravity (sg))



### Proven History

From the snows of Siberia to the sands of Abu Dhabi, from the outback of Australia to the jungles of Brazil, Elgin shakers can be found in some of the harshest environments.



With over 25 years of experience, our engineers have the insight and technical capability to support your project needs. With thousands of installations worldwide, Elgin has built a proven product history.

### Durability

All Elgin shakers are given a two-part epoxy powder coating to maximize equipment life. Three-part marine coatings are also available for offshore applications.

Spare parts and consumables have been designed to ensure the lowest replacement cost and long-term product durability. By using hydrocarbon-resistant polyurethane and stainless steel wear parts, Elgin's shakers are designed for long-term performance.

Elgin's shakers are manufactured from ASTM A-36 quarter-inch (6.35 mm) plate steel and are full seam welded. Depending on the application and desired cleaning efficiency, Elgin has a host of vibrator motor options that allow each shaker to achieve 4 to 8 G's of output. In Elgin's newest shaker, the Hyper G™, operators can achieve variable G-force with both linear and balanced elliptical motion through the integrated variable frequency drive. All Elgin shakers are available for integration with existing assets and are typically available for delivery within 30 days of order placement.

Shaker Model Number:	Hyper-G Flow Line	Hyper-G Drying Shaker
Equipment Image:		
Screen Type:	KPT26-HD2	KPT26-HD2
Vibratory Motors:	(2) 2.5HP (1.86kW)	(2) 2.5HP (1.86kW)
Number of Screen Panels:	4 Panels	4 Panels
Screen Surface Area:	35 sq. ft. (3.25 m²)	35 sq. ft. (3.25 m²)
Maximum Flow Rate:	750 gpm (48 lps)	750 gpm (48 lps)
Weir Height:	33" (83 cm)	N/A
Length:	127" (322 cm)	104" (264 cm)
Width:	79" (200 cm)	79" (200 cm)
Maximum Height:	58" (147 cm)	60" (154 cm)
Weight:	4,673 lbs (2,120 kgs)	3,476 lbs (1,577 kgs)

Motor Setting	Balanced Elliptical Motion	Linear Motion	Fixed Motion High-G
Low G	5.0	4.5	N/A
Mid G	6.0	5.5	N/A
High G	7.0	6.5	7.5

Elgin's Hyper-G™ features Progressive-G technology. The g-force imparted on the shaker decreases as the solids travel across the screen yielding better cut results and solid integrity for disposal.

[www.elginseparationsolutions.com](http://www.elginseparationsolutions.com)



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