



FINE SCREENING SOLUTIONS

LETTER FROM THE FAMILY

Founded by H. William Derrick Jr. in 1951, Derrick® Corporation was created to solve some of the most challenging mechanical separation needs of the Mining Industry. At the heart of our present-day offering resides the Integrated Vibratory Motor which was invented by our founder and gave life to an entire line of innovative separation technology. To this day, our pioneering spirit pulses through the organization and inspires development of our leading-edge solutions.

Over the years, we have experienced exponential growth, expanding from our Mining roots to Oil & Gas Drilling, Civil Construction, Industrial, and other challenging industries worldwide. Our robust installed base and expansive network of thousands of cohesive individuals are located across the globe.

Our success is fully dependent on people. Priority one is to serve our global families; our tenured employees, multi-national partners, and surrounding communities. Our unique, close-knit culture and shared, long-term outlook is not only paramount to our success, but to the success of all integral stakeholders.

We thank you for expressing interest in our organization and look forward to being of service to you in the future.



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GLOBAL FAMILY®



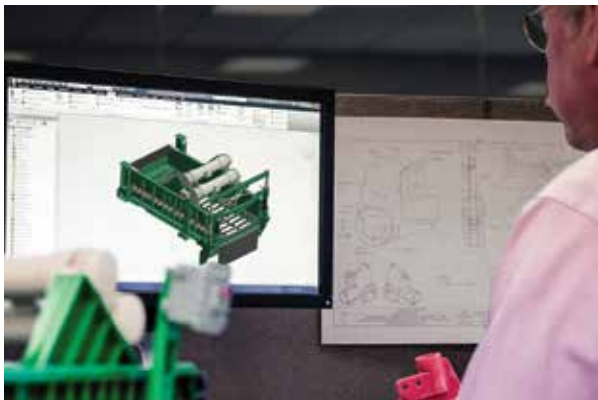
The Derrick Family

Derrick is a community which consists of co-workers, distributors, sales representatives, and customers. Our universal presence is comprised of thousands of individuals in countries around the globe. As our business continues to expand, we maintain the tight-knit corporate culture established by our founder.



Community Enrichment

We see our surrounding communities as an extension of our family, and we share a collective interest in giving back. This is exemplified by our avid support of industry associations and numerous charitable organizations.



World-Class Technologists

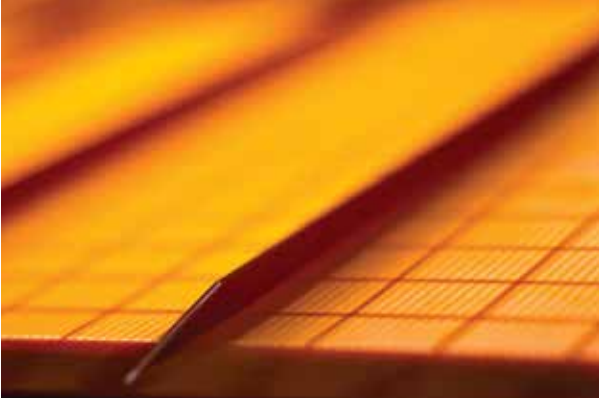
From field-trained personnel to advanced-degreed engineers, our diverse development team collaborates to build technologically superior solutions. Whether offshore or onshore, in a mill or on a rig - they represent the most knowledgeable world-class separation technologists in the industry.



Quality Commitment

Our vertically integrated approach allows for the complete control of all aspects of product design and manufacturing. This comprehensive process ensures product dependability and enables us to offer long-lasting products which require minimal maintenance.

PIONEERING TECHNOLOGY®



Continuous Innovation

Our pioneering spirit is best demonstrated by our research and development team's long-term commitment to continuous innovation. This mindset dates back to our founder's invention of the first Integrated Vibratory Motor and Sandwich Screen® Technology. Our quest to perpetually reinvent ourselves is exemplified by our ever-growing portfolio of U.S. and foreign patents.



Leading-Edge Solutions

Our customers partner with us to overcome their most difficult fine-separation challenges. Design and Applications Engineers combine their mechanical and industry knowledge with our innovative Separation Technology to provide customers with state-of-the-art solutions to meet their ever-changing needs.



Global Sustainability

We support the recovery of natural resources in the most energy-efficient manner, placing vital importance on waste reduction and energy conservation. Our objective to increase our clients' operational performance within a smaller environmental footprint is evident throughout our offering.



Award-Winning Service

We understand the importance of supporting our family. Our dedicated service team provides unparalleled global support. Numerous industry awards substantiate this heightened commitment to meeting our customers' evolving needs.



Maximizing Efficiency in Resource Recovery

Derrick® Corporation has once again redefined high capacity, high efficiency, fine particle wet screening with the introduction of the SuperStack®. With 8 decks operating in parallel and innovative Front-to-Back (FTB) tensioning system, the SuperStack has a demonstrated **capacity up to 3 times that of the best fine screens currently available**. All of this added capacity comes with only a slight increase in the space required per machine, significantly reducing the total capital and installation cost as well as OPEX for any screening installation.

The Derrick SuperStack is built to last and backed by a worldwide support team.



8-Deck
SuperStack®

Solutions to your most challenging fine sizing problems:

- Improve efficiency and capacity in closed grinding circuits
- Improve final concentrate grade and recovery
- Improve size classification and product quality of mineral concentrates
- Reduce impurities in fine iron concentrates (e.g. silica, alumina)
- Pumping and pipeline protection by removing coarse and abrasive particles
- Fine coal de-sliming to reduce ash content
- High-capacity trash removal

Contact your Derrick representative for more information!

FEATURES & BENEFITS



Feeders

1. Flo-Divider™

- Equalizes feed flow from source(s) to each deck for optimal separation efficiency
- Dart valves allow flow to be stopped to one or more outlets

2. Feeders

- Urethane pockets built into each feeder distribute feed slurry uniformly across the entire width of the screen
- Easily removed front cover facilitates maintenance and debris removal
- Interior lining options available for different feed characteristics



Optional Repulp Spray System

3. Derrick Integrated Vibratory Motors

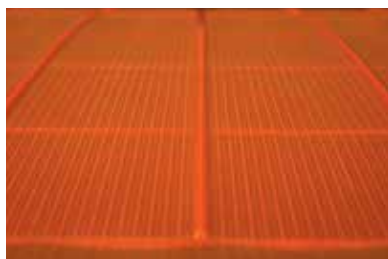
- Low sound production
- Internal oil lubrication system provides many years of maintenance-free operation



Easy Access Screen Decks

4. Repulp Spray System

- Increase screening efficiency without increasing deck length
- Spray bars designed to dispense water into repulp wash troughs
- Added free water helps undersize material pass through screen panels
- Replaceable rubber repulp wash troughs



Polyweb Urethane Screens



Optional Oversize Launder Vibrators

5. Screen Decks

- Screen beds crowned in the direction of flow rather than side to side, resulting in increased capacity with more effective utilization of the entire screen width
- Time required to replace screen panels is significantly reduced with innovative Front-to-Back (FTB) screen panel tensioning system
- Robust design with abrasion-resistant urethane screen frame coating for extended useful life
- Accepts Derrick long-life, high-open-area, anti-blinding Polyweb® urethane screen surfaces
- Unique, patented technology available only from Derrick

6. Polyweb® Urethane Screen Panels

- Full range of polyurethane panels with apertures ranging from 53 micron to 6.2mm
- Specialized formulations to cope with various temperature and chemical environments
- Unique non-blinding design for optimal efficiency and capacity
- Long lasting—commonly 4 to 12 months
- Long slot and short slot designs with up to 45 percent open area

7. Optional Oversize Launder Vibrators

- Dual oversize launders (one per side)
- Oversize conveyance assisted by push water or optional vibrators
- Easily accessible for inspection and maintenance

LINEAR MOTION MACHINES

Derrick Linear Motion machines have a long history of performing in trash screening and wet scalping applications. They are designed for high volumetric capacity when fed dilute slurry with a low percentage of oversize solids. This performance characteristic is achieved by the use of Derrick vibratory motors rotating in opposite directions creating high G-force, true linear motion causing forward, uphill conveyance of solids out of the fluid pool that forms near the feed end of the machine. Head or pressure from the liquid pool enhances the fluid throughput through the screen panels. The high G-force acceleration and uphill movement of the solids promote the production of an oversize fraction that is consistently stackable and conveyable.

When fitted with high G-force Derrick vibratory motors and fed thickened slurry, typically from hydrocyclone underflow, the Linear Motion machines perform a dewatering function that enhances the removal of free liquid from the oversize solids.

Four sizes of Linear Motion machines are available to meet the variable screening capacity needs of the industrial minerals, precious metals, industrial wastewater and municipal wastewater industries. Abrasion resistant urethane coatings and sealed-for-life Derrick vibratory motors assure long-life, low maintenance operation. The machines' versatile design allows for the use of both traditional wire and Derrick anti-blinding, high open area Polyweb urethane screen panels. The combination of these features ensure outstanding wet screening and dewatering performance with minimal operator involvement.



W56 Linear Motion Machine

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Easy screen panel inspection, removal and installation
- Light-weight screen panels for easy installation

2. Multiple Machine Sizes & Configurations

- Available in 3 ft x 8 ft (0.9 x 2.4 m), 4 ft x 8 ft (1.2 x 2.4 m), 4 ft x 10 ft (1.2 x 3.0 m) and 5 ft x 14 ft (1.5 x 4.3 m) sizes
- Multiple feed box styles available
- Provides wet screening/dewatering capability for a wide range of mass and volumetric feed capacities
- Open design allows visual inspection of screen panels

3. Spray Wash Water System

- Wash water spray bars with multiple nozzle styles
- Enhances removal of fines from oversize fraction

4. Traditional Convex Screen Bed

- Allows use of both Derrick Polyweb urethane screen panels and traditional wire screen panels, as fine as 325 mesh (45 microns)
- Fast, easy screen panel installation and tensioning with sealing, rapid change bolt assemblies

5. Derrick Integrated Vibratory Motors

- Zero maintenance
- Low sound level
- Three options available – Super G, Super G2, or W vibratory motors
- Powerful, quiet and low energy consumption
- Super G has greased-for-life bearings (Two-year warranty)
- Optional Super G2 has continuous recirculating internal oil lubrication system (Three-year warranty)

6. Coatings & Linings

- Zinc Rich Enamel Primer with Enamel Top Coat exterior/interior coating for low abrasion applications
- 100% solids urethane coating for vibrating screen frame for high abrasion applications
- Bonded rubber, nitrile rubber and 100% solids urethane linings for feed boxes and discharge hoppers for high abrasion applications



4x10 Linear Motion Trash Screen

HI-G[®] DEWATERING MACHINE

The Derrick HI-G[®] Dewatering machine provides the most cost-effective solution to handling fine solids separation. Derrick HI-G Dewatering machines utilize a combination of small diameter hydrocyclones mounted over a Linear Motion machine to recover and dewater solids as fine as 325 mesh (45 microns). Numerous HI-G Dewatering machines can be found operating in sand, aggregate, coal, concrete, and graphite dewatering applications worldwide.

FEATURES & BENEFITS

Hydrocyclones

- Up to twenty 4" hydrocyclones
- Designed to remove silt-sized solids (20-74 microns)
- Optional individual shutoff valve for each 4" hydrocyclone

Super G Integrated Vibratory Motors

- Zero maintenance
- Powerful, quiet, dual vibratory motors apply high G performance
- Standard Super G has greased-for-life bearings (Two-year warranty)

Polyweb Urethane Screens Panels

- High open area for maximum flow capacity
- Unique non-blinding design for optimum efficiency and performance
- Long lasting – 10 to 15 times longer than woven wire panels



Rubber Lined Manifold



HI-G Dewatering Machine

FLO-DIVIDER SYSTEM

An installation of multiple screening machines or a single screening machine with multiple feed points, such as Derrick Stack Sizer, requires a well-designed flow distribution system. Custom engineered to suit customer's requirement, Derrick flow distributors are designed to split slurry flows into various numbers of equivalent streams having identical material in terms of mass flow, volumetric flow, slurry density, and particle size distribution.

Typical round flow distributor consists of an open cylindrical tank design with a center feed well surrounded by multiple discharge compartments around the circumference. These flow distributors are available from 2-way to 15-way in 24", 30", 42", 50", 60", 72" and 84" diameters, whereas rectangular shape flow splitters are available in 3 ft x 9 ft and 4 ft x12 ft

FEATURES & BENEFITS

- Equalizes feed flow from source to each deck for optimal separation efficiency
- Custom-designed to meet process and layout requirements
- Available in wide range of discharge outlets from 2-way to 15-way
- Equipped with dart valves to stop the flow to one or more outlets
- Optional low profile inline Flo-Divider is available to accommodate height restrictions
- Top or bottom feed
- Non-pressurized



42" 5-Way Flo-Divider – Vulcanized Rubber



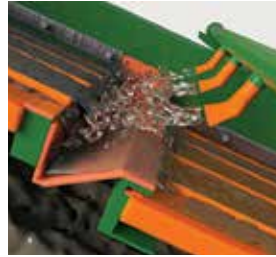
72" 5-Way Flo-Divider – Cold-Bonded Rubber



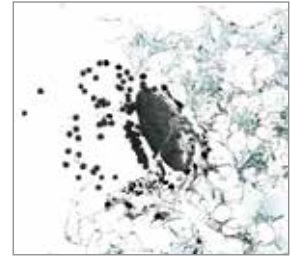
Flo-Divider Dart Valves

REPULP WET SIZING SCREEN

The Derrick Repulp Wet Sizing Screen is the solution for difficult to screen materials that require the oversize product fraction to meet tight quality specifications. The Repulp machine's high speed, low amplitude motion coupled with its countercurrent spray wash water system effectively removes fine particles. It has a long history of producing high value products for numerous industrial mineral and metal industries. Numerous machines can be found worldwide screening silica sand, feldspar, coal, iron ore, gold ore and many other materials.



Repulp wash water system



Three sizes of Repulp Wet Sizing Screens are available to meet the variable screening capacity needs of both the industrial mineral and precious metal industries. Abrasion resistant urethane coatings and sealed-for-life Derrick vibratory motors assure long-life, low maintenance operation. The machines' versatile design allows for the use of both traditional wire and Derrick anti-blinding, high open area Polyweb urethane screen panels. The combination of these features ensure outstanding wet screening performance with minimal operator involvement.



Repulp Wet Sizing Screen

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Easy screen inspection, removal and installation
- Light-weight screen panels for easy installation

2. Multiple Machine Sizes & Configurations

- Available in 3 ft x 8 ft (0.9 x 2.4 m), 4 ft x 10 ft (1.2 x 3.0 m) and 5 ft x 14 ft (1.5 x 4.3 m) sizes
- Single, double and triple undersize discharge hoppers available
- Multiple feed box styles available
- Provides wet screening capability for a wide range of mass and volumetric feed capacities
- Open design allows visual inspection of screen panels

3. Repulp Wash Water System

- Rubber lined troughs between each screen panel
- Wash water spray bars with multiple nozzle styles
- Enhances removal of fines from oversize fraction

4. Traditional Convex Screen Bed

- Allows use of both Derrick Polyweb urethane and traditional wire screen panels as fine as 325 mesh (45 microns)
- Fast, easy screen panel installation and tensioning with sealing, rapid change bolt assemblies

5. Derrick Integrated Vibratory Motors

- Zero maintenance
- Three options available – E3, Super G, or W vibratory motors
- Powerful, quiet and low energy consumption
- Super G has greased-for-life bearings (Two year warranty)
- Linear motion mount available for use with Super G vibratory motors

6. Coatings & Linings

- Zinc Rich Enamel Primer with Enamel Top Coat exterior/interior coating for low abrasion applications
- 100% solids urethane coating for vibrating screen frame for high abrasion applications
- Bonded rubber, nitrile rubber and 100% solids urethane linings for feed boxes and discharge hoppers for high abrasion applications

HIGH SHEAR SCREENER



Derrick Corporation wet screening machines include a specialized unit for processing light, flaky, hard to convey solids. The Derrick Model 48-120W-4M High Shear Screener is a custom designed, open single-deck machine that can be operated in both non-hazardous and hazardous environments. This machine is typically used in wet sizing applications as fine as 325 mesh (45 microns) using Derrick Polyweb urethane screens for kaolin clay, mica and fly ash.



High Shear Screener

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Easy screen inspection, removal and installation
- Light-weight screen panels for easy installation

2. Machine Design

- 304 Stainless steel construction option
- 37.5 degree machine angle with screen panel sections set at multiple downhill angles promoting thin, uniform slurry layer for positive conveyance of light and plate-like particles
- Wash water spray bar system
- Abrasion resistant bonded rubber lining option for feeder and discharge hoppers
- Abrasion resistant urethane exterior coating option for vibrating screen frame and discharge hopper lining
- Open design allows visual inspection of screen panels

3. Traditional Convex Screen Bed

- Convex crown promotes consistent screen panel tension, increases screen panel life
- Perpendicular-to-flow screen panel tensioning allows for use of Derrick Polyweb urethane and traditional wire screen panels
- Rubber float mounts effectively isolate support frame from vibration of screen frame
- Rapid change draw bolt/draw bar assemblies provides fast and easy screen panel changes
- Derrick Polyweb urethane screens as fine as 325 mesh (45 microns)
- Wire screens produce efficient fines removal from 40 mesh (425 microns) to 400 mesh (38 microns)

4. Derrick Integrated Vibratory Motor

- Zero maintenance
- E3 vibratory motor promotes positive conveyance of oversize particles
- Powerful, quiet and low energy consumption
- Greased-for-life bearings

TRADITIONAL DRY SCREENING

Derrick Dry Sizing machines have been providing the industrial minerals industry solutions for fine dry screening application for over 60 years. Traditional Derrick Dry Sizing machines have utilized high speed, low amplitude, vertical elliptical motion to solve countless difficult mineral sizing challenges. Derrick's commitment to pioneering technology has resulted in the recent evolution of dry screening technology to include a new series of Derrick Polyweb dry urethane screen panels to provide long life, and anti-blinding surfaces. Numerous machines can be found worldwide screening silica sand, iron powder, nickel powder, crushed glass, coal, polyethylene pellets/resins and many other materials.

Derrick dry screening technology includes a combination of features that ensures outstanding dry screening performance for applications that require separations from approximately ½ inch (12.7 mm) to 400 mesh (38 microns). Each machine is manufactured with Derrick's core principle – manufacture of a robust machine with operator-friendly operation that reduces operating costs through the use of long lasting, low-maintenance components.

Derrick now proudly introduces the advanced technology of Polyweb screens to the high temperature dry screening market. These unique Polyweb screens offer exceptional abrasion resistance, high open area, and minimal blinding in a high temperature screen that can safely handle materials up to 260°F (126°C)! The broad array of available dry panel openings—down to 140 mesh (104 µm)—and high temperature composition of our screens can meet the needs of most applications.



Double-Deck Dry Machine

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Full enclosures with hinged and clamped top covers and side access doors for dust suppression
- Easy screen inspection, removal and installation
- Light-weight screen panels for easy installation

2. Multiple Machine Sizes & Configurations

- Traditional Single-Deck available in 3 ft x 8 ft (0.9 x 2.4 m), 4 ft x 10 ft (1.2 x 3.0 m), 4 ft x 12 ft (1.2 x 3.6 m), and 5 ft x 14 ft (1.5 x 4.3 m) sizes
- Traditional Double-Decks available in 3 ft x 10 ft (0.9 x 3.0 m) 5 ft x 12 ft (1.5 x 3.6 m) and 5 ft x 14 ft (1.5 x 4.3 m) sizes
- Multi-Deck machines are available with one, two, three or four 4 ft x 10 ft (1.2 x 3.0 m)
- Single, double and triple Undersize discharge hoppers available
- Multiple feed box styles available
- Provides dry screening capability for a wide range of mass and volumetric feed capacities

3. Traditional Convex Screen Frame

- Allows use of both Derrick Polyweb urethane and traditional wire screen panels
- Fast, easy screen panel installation and tensioning with sealing, rapid change bolt assemblies
- Unique non-blinding design for optimum efficiency and performance

4. Derrick Integrated Vibratory Motors

- Zero maintenance
- Multiple options available – E3, Super G, or W vibratory motors
- Powerful, quiet and low energy consumption
- Super G has greased-for-life bearings (Two-year Warranty)



Stainless Dry Pellet Screener

FRONT-TO-BACK

SCREEN TENSIONING

Offering the most innovative hardware available in dry screening equipment, Derrick proudly introduces the latest in dry screening technology, the Front-To-Back (FTB) screen tensioning system. Increased capacity, improved efficiency, and extremely fast panel changes are all features of Derrick's new FTB tensioning system.

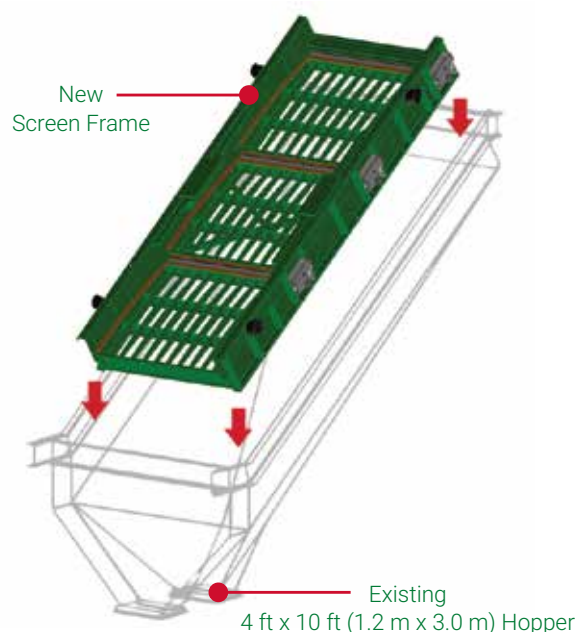
Customers using the Derrick 4 ft x 10 ft FTB screen frame report capacity increases up to 50 percent with improved efficiencies in products ranging from 0.25 in (6.35 mm) down to 400 mesh (38 microns). Increases are attributable to rotating the screen panel tensioning 90 degrees, thereby positioning the crown of the screen parallel to the material flow. This change in crown orientation assures an even distribution of material across the entire width of the screen, increasing capacity and efficiency while reducing panel wear and virtually eliminating blinding.



Single-Deck FTB Dry Machine

RETROFIT

FOR EXISTING DERRICK MACHINES



Easy Conversion, Extraordinary Results

Derrick Front-To-Back screen tensioning systems are not only fast and efficient but also cost effective. A new FTB screen frame is available for retrofit on most standard Derrick 4 ft x 10 ft (1.2 m x 3.0 m) machines. Although the conversion can be completed in less than a day, the resulting dramatic improvement is long-lasting. To upgrade your equipment, contact Derrick Corporation or your local Derrick representative today!

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Full enclosures with hinged and clamped top covers and side access doors for dust suppression
- Easy screen inspection, removal and installation
- Light-weight screen panels for easy installation

2. Multiple Machine Sizes & Configurations

- Traditional Single-Deck and Double Deck available in 4 ft x 10 ft (1.2 x 3.0 m) sizes
- Single, double and triple undersize discharge hoppers available
- Multiple feed box styles available
- Provides dry screening capability for a wide range of mass and volumetric feed capacities

3. “Front-To-Back” Screen Frame

- Convex screen panel sections oriented parallel to material flow
- Extremely fast, easy screen panel installation and tensioning with single tensioning point for each screen panel
- Results in high capacity as a result of full-width dispersion of solids over entire length of vibrating screen frame
- Can be fitted with various Derrick vibratory motors
- Retrofit available for most standard Derrick 4 ft x 10 ft machines

4. Derrick Integrated Vibratory Motors

- Zero maintenance
- Multiple options available – E3 or Super G vibratory motors
- Powerful, quiet and low energy consumption
- Super G has greased-for-life bearings (Two-year warranty)

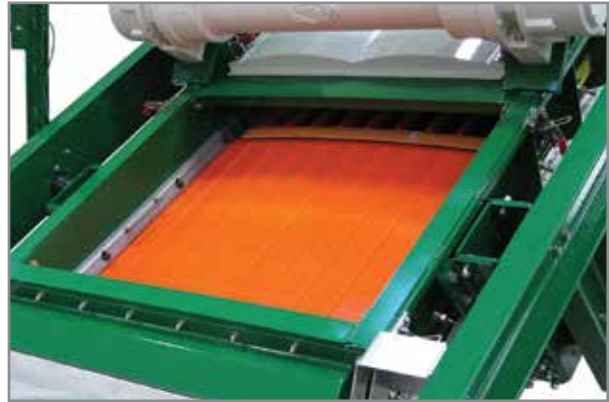
Screen Panel Changes in Four Simple Steps!

1. Hook the panel at the discharge end onto the edge of the screen bed section.
2. Hook the opposite end of the panel onto the tension bar at the feed end.
3. Rotate the tensioning nut to apply desired tension.
4. Tighten the locking nut to secure panel tension.



MULTI-DECK DRY SCREENING

Derrick's newly developed Multi-Deck Dry Screen is the high capacity, highly efficient dry fine screening machine in the world. Consisting of up to four decks, the Multi-Deck screening machine – with linear motion action produced by dual SG3 high speed low amplitude vibratory motors – and with Derrick's high open area, non-blinding dry urethane screen surface technology, which is available in the size range from 4 mm down to 104 micron, has redefined the concept of dry fine screening. With ever-growing demand of high capacity and efficient dry screen, Multi-Deck Screening machine, coupled with highly innovative Polyweb screen technology will be the wave of the future for fine dry screens.



Multi-Deck Screen Bed



Four-Deck Multi-Deck Dry Machine

FEATURES & BENEFITS

1. Health, Safety & Environment (HSE)

- Low sound production
- Full enclosures with hinged and clamped top covers and side access doors for dust suppression
- Easy screen inspection, removal and installation
- Light-weight screen panels for easy installation

2. Multiple Machine Sizes & Configurations

- Machines are available with up to four 4 ft x 10 ft (1.2 x 3.0 m) decks all operating in parallel
- Provides dry screening capability for a wide range of mass and volumetric feed capacities
- Deck can be operated independently to make a different cut on each deck or in parallel to make the same cut on each deck

3. Multi-Deck Dry Sizing Machines

- Latest Derrick dry screening machine technology
- Incorporates dual motor, true-linear motion that allows stacking of multiple single-deck machines
- Designed for exclusive use of Derrick Polyweb urethane screen panels
- Results in high capacity screening with a small floor footprint

4. Derrick Integrated Vibratory Motors

- Zero maintenance
- Super G3 vibratory motors
- Powerful, quiet and low energy consumption
- Sealed oil bath bearings



Double-Deck Multi-Deck Dry Machine

The highest open area urethane screen available – from 0.25 inch (6.2 mm) to 325 mesh (45 microns)*.

The development of fine mesh, high open area, urethane screen surfaces is perhaps one of Derrick's most notable contributions to the science of fine particle separations for both wet and dry applications. While all urethane screen panels are well known for their abrasion resistance, only Derrick Polyweb screens combine long life with high open area, capacity, and performance rivaling that of conventional woven wire screens. Moreover, its anti-blinding properties now make it feasible to screen materials previously considered difficult or even impossible to screen.

Processing plants throughout the world have demonstrated significant cost savings through the use of Polyweb screens. It's not uncommon for Derrick urethane screens to last 6 to 12 months - 10 to 15 times longer than conventional woven wire panels. They are also light-weight and easy to install.

With openings as fine as 325 mesh (45 microns) and open areas ranging from 35 to 45 percent, Polyweb screen surfaces are suited to a wide variety of wet and dry applications.

Derrick has developed this Polyweb screen technology totally in-house. From the design and development of intricate molds, to the unique production equipment needed to manufacture panels on an economic scale, Derrick has again proven itself as the world's leader in fine screening technology.

Derrick now proudly introduces the advanced technology of Polyweb screens to the high temperature dry screening market. These unique Polyweb screens offer exceptional abrasion resistance, high open area, and minimal blinding in a high temperature screen that can safely handle materials up to 260°F (126°C)! The broad array of available dry panel openings—down to 140 mesh (104 μm)—and high temperature composition of our screens can meet the needs of most applications.

A broad range of panel openings are currently available to fit screening machines manufactured by Derrick. Yet, the design and manufacture of custom molds, and even urethane formulations, is an ongoing process. Where a specific opening or preferred panel design is not available, one can be developed. In all cases, a Derrick engineer will work closely with each application to determine the appropriate panel and to address issues such as chemical compatibility or temperature.



Advantages:

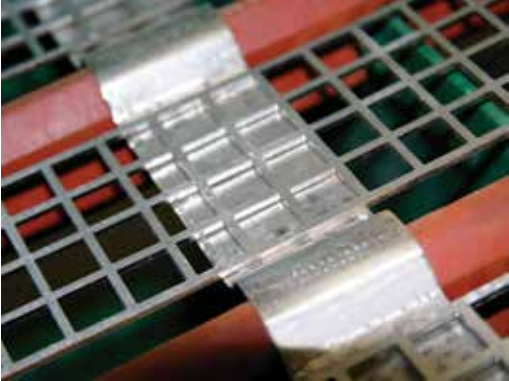
- Superior capacity and performance with high open area of 35 to 45 percent
- Reduced operating and maintenance costs from long life and ease of installation
- Available with openings as fine as 325 mesh (45 microns)
- Practically non-blinding
- Can be repaired or patched in place
- Custom mold designs

* Wet panels as fine as 325 mesh (45 microns)
Dry panels as fine as 140 mesh (104 microns)

WIRE SCREEN SURFACES

Floating Backing Wire

The Derrick Floating Backing Wire system now makes it practical to screen materials that would otherwise be impossible to screen due to their tendency to blind or bridge the screen panel openings. The Floating Backing Wire system consists of trays holding narrow pieces of coarse woven wire just below the screen panel surface. As the screen frame vibrates, the Floating Backing Wire bounces up against the back of the screen panel and knocks loose any particles clinging to screen panel. Used successfully with damp solids and materials that tend to cling to the screen surface, Derrick Floating Backing Wire is the ideal solution for difficult screening problems.



Sandwich Screens®

The Derrick Sandwich Screen®, which consists of two fine mesh screens supported by a coarser backing wire screen, is bound into a double fold, hook strip. Interference in the free openings is created by cross wires of the second screen. This layered effect prevents particles from lodging in the openings of the top sizing surface. The cut point is made by the combination of cross wires from both fine screen surfaces.



Standard Wire Screens

Derrick supplies square or slotted wire screen cloth in all standard meshes and wire diameters. These are designed with double fold, hook strip, box bindings for secure and easy installation.



VIBRATORY MOTORS

Proven to dramatically increase liquid/solids separation, the Super G® series vibratory motors produce superior conveyance due to their high G characteristics. Increased fluid-handling capacities using fewer shakers is only part of the reason for their success on drilling rigs. Screening finer, earlier in the drilling process, significantly reduces mud and disposal costs. The Super G series vibratory motors are built with Derrick's superior electrical components, which are renowned in the industry for durability. High performance and exceptional durability make the Super G series vibratory motors an asset to any drilling program.



Super G3™ and Super G2® Integrated Vibratory Motors

Both the Super G3™ and Super G2® vibratory motors feature a patented continuous, internal recirculation lubrication system that provides long life, reduced repair costs, and robust maintenance free operation. In addition to greatly extending the life of the vibratory motor, the hydrodynamic cushioning effect on bearing surfaces created by this unique lubrication system reduces friction, wear, heat, and sound. Sealed, continuous recirculation of lubricating oil maintains a fresh film of oil on all bearing surfaces at all times and prevents entry of contaminants. Both the Super G3 and Super G2 vibratory motors carry a three-year warranty.



Super G2 Vibratory Motors

Super G® Integrated Vibratory Motors

Featuring permanently lubricated bearings that eliminate the need for a remote lubrication system, Derrick Super G vibratory motors reduce both repair costs and maintenance requirements. These grease-filled bearings also result in significantly lower sound output. Super G vibratory motors carry a two-year warranty.



Super G Vibratory Motors

CENTRIFUGES

DE-7200™ VFD™

The DE-7200 VFD™ (Variable Frequency Drive) centrifuge offers a robust mechanical design coupled with advanced control technology. The stainless steel bowl and conveyor with hardened and replaceable wear parts reduce the total ownership cost and maintenance downtime. With a maximum of 3112 G's at 3200 RPM bowl speed the DE-7200 separates fine solids from fluids, improving fluid rheology and thus performance. The DE-7200 features a 60 HP conveyor drive motor with 88,507 in lb gearbox torque, allowing it to maintain high feed rates while processing fluids with high solids content. With a 21.4" x 72" bowl capable of processing high volumetric flow rates and removing large quantities of solids, the DE-7200 has the capacity needed for efficient solids control in a wide range of applications.

Automatic load sensing and feed pump control dynamically adjusts the pump rate to maintain bowl or conveyor torque set point, enabling automated processing optimization and preventing rotating assembly overload. The DE-7200 is available with remote monitor and control capability, allowing the operator to be located outside of hazardous working environments and enabling offsite technicians to perform process optimization, quality control, and troubleshooting.



DE-7200 VFD with B1 Control Cabinet

CENTRIFUGES

DE-1000™ LP VFD Dual Voltage

Combining the field-proven durability of the DE-1000 series rotating assembly with the same state-of-the-art control system as on the DE-7200, the DE-1000 LP (Low Profile) VFD is Derrick's premium small bowl centrifuge offering. With PLC-controlled variable frequency drives controlling bowl and conveyor speed as well as feed rate, the DE-1000 LP VFD can be rapidly optimized for most efficient solids control in a wide range of applications. The automated control system adjusts feed rate based on centrifuge loading, ensuring the maximum solids removal without operator intervention. The DE-1000 VFD may also be controlled and monitored from a safe location offsite, protecting personnel from hazardous conditions onsite and allowing remotely located experts to assist in operation and maintenance. The unit features 24,782 in-lbs maximum conveyor torque with a 52:1 gearbox and a 20 HP motor driving the conveyor, enabling it to remove a large volume of solids. Reaching a maximum of 2575 G's at 3600 RPM bowl speed, the DE-1000 VFD removes fine solids and improves fluid quality. The Low Profile (LP) is a modular design, allowing the control cabinet to be positioned separately from the centrifuge for the safety of equipment operators and increased flexibility for job site installations. The dual voltage electrical configuration (380-480V 3 phase at 50/60Hz) allows the unit to operate around the world without changing electrical components or motors.



DE-1000 LP VFD
Dual Voltage

DE-1000 FHD™ Dual Voltage

The DE-1000 FHD™ (Full Hydraulic Drive) is engineered and manufactured for performance, flexibility, reliability, and minimal maintenance. The full hydraulic drive control enables independent adjustment of the bowl speed and conveyor differential speed during processing, allowing the operator to adjust the centrifuge parameters for efficient solids removal as feed properties change throughout the process. With maximum centrifugal acceleration of 2300 G's at 3400 RPM bowl speed and conveyor differential speed adjustment from 3-90 RPM, the DE-1000 FHD is effective in a wide range of applications. The DE-1000 FHD has two unique features that protect the rotating assembly from overload: feed pump cycling and conveyor boost system. During feed pump cycling, the centrifuge electrical system automatically shuts down the feed pump if the conveyor becomes overburdened. Should feed pump shut down fail to reduce load on the conveyor, the conveyor boost system automatically increases the conveyor differential speed to clear solids from the bowl. The stainless steel rotating assembly with hardened, replaceable wear parts extends the operating life of the DE-1000 FHD, minimizing repair cost and maintenance downtime. The dual voltage electrical configuration (380-480V 3 phase at 50/60Hz) allows the unit to operate around the world without changing electrical components or motors.



DE-1000 FHD
Dual Voltage

DE-1000 LP GBD

The DE-1000 LP (Low Profile) GBD (Gearbox Drive) offers consistent performance, high reliability, and minimal maintenance at low cost. The gearbox drive system with onboard operator controls ensures ease of use and is best suited for applications with consistent feed properties. Several drive motor sheaves are available to permit bowl speed adjustment up to 4000 RPM at 60Hz or up to 3250 RPM at 50Hz. This version of centrifuge can attain up to 3180 G's. With two available gearbox ratios of 52:1 and 125:1, the gearbox may be changed to provide the best conveyor differential speed for the application. An overload clutch protects the gearbox, preventing costly damage to mechanical parts in event of rotating assembly overload. During startup, the 50 HP bowl motor is protected from damage by a soft start fluid coupling. To prevent equipment damage and protect personnel, the DE-1000 LP GBD has automatic safety shutdown for high vibration, centrifuge motor overload, or feed pump motor overload. Like the other DE-1000 series centrifuges, the DE-1000 LP GBD has excellent durability and low repair costs with a stainless steel rotating assembly and hardened, replaceable wear parts. The low profile design is compact and lightweight, reducing transportation and shipping costs.



DE-1000 Conveyor



DE-1000 Wear Inserts



DE-1000
LP GBD



DE-1000 Effluent Ports

CUSTOMER TESTING LABORATORY

For 70 years—since the company's founding by H. William Derrick Jr. in 1951—the Derrick Testing Laboratory has offered comprehensive testing and thorough reporting. A dedicated and fully equipped facility, the lab permits complete testing of both wet and dry samples under actual field conditions, on full size machines.

The Derrick test facility is an integral part of the applications process. There is no better way to determine machine performance than with the actual process material. It is invaluable for customer application efforts.

Computer modeling cannot account for particle variations like shape, density, and slurry viscosity. Every sample is different. Depending on the origin of the sample and comminution method, some particles may be needle like, while others more spherical still others thin and flat. These variations cause the materials to screen differently. For these reasons, the most reliable way to determine process performance is by testing in Derrick's Testing Laboratory. Derrick's applies state-of-the-art equipment to perform tests. Including magnetic flow meters accurate to 1% of the flow rate, automated control valves to maintain steady flow rates. Automated weigh belt feeders for feed control to dry equipment. In addition, each test is video recorded to document test programs.



Wet testing area



Dry testing area

WEIGHTS & DIMENSIONS

EQUIPMENT		DIMENSIONS				
Model	Width in (mm)	Length in (mm)	Height in (mm)	Maximum Dynamic Load lbs (kg)	Static Load/Weight lbs (kg)	
Eight-Deck SuperStack	73-7/8 (1876)	229-11/16 (5834)	176-1/16 (4472)	300LBf (1.6KN) @ 40 Hz	20000 (9091)	
Model	Diameter	Type	Height in (mm)	Width in (mm)	Weight lbs (kg)	
Flo-Divider	60"	8-Way	52 (1321)	72-1/2 (1816)	2650 (1202)	
	72"	8-Way	59-3/4 (1518)	83-1/2 (2121)	2650 (1202)	
	72"	16-Way	59-3/4 (1518)	83-1/2 (2121)	2650 (1202)	
	84"	16-Way	54-3/4 (1391)	96-3/16 (2443)	4500 (2041)	
Model	Options	Screen Frame Angle Adjustment	Width in (mm)	Length in (mm)	Height in (mm)	Weight lbs (kg)
36-90W-3 Linear Motion Screen	MS Feeder	0°, +3°, +5°	55-1/4 (1403)	125 (3175)	68-7/16 (1738)	4000 (1814)
	Low Weir Feeder			148-5/16 (3767)	58 (1473)	
2SG48-90W-3 Linear Motion Screen	MS Feeder 10"	-1° to +5°	59-3/4 (1518)	127-3/16 (3231)	88 (2235)	3500 (1587)
2SG48-90CP-3 Linear Motion Screen	Low Weir Feeder	-1° to +5°	59-3/4 (1518)	151-15/16 (3859)	88 (2235)	4000 (1814)
2SG48-120W-4 Linear Motion Screen	MS Feeder 10"	-1° to +5°	59-3/4 (1518)	155-1/4 (3943)	88 (2235)	4100 (1860)
2SG48-120CP-4 Linear Motion Screen	Low Weir Feeder	-1° to +5°	59-3/4 (1518)	179-15/16 (4570)	88 (2235)	4600 (2087)
2W56-168W-4 Linear Motion Screen	Chute Feeder	-3° to +3°	83-1/2 (2121)	213-1/2 (5423)	103-7/16 (2627)	10000 (4536)
2W56-168CP-4 Linear Motion Screen	Low Weir Feeder	-3° to +3°	83-1/2 (2121)	239-1/4 (6077)	103-7/16 (2627)	10000 (4536)
HI-G Dewatering Machine	3-Panel 20 - 4" Cones	-	70-9/16 (1792)	115-9/16 (2935)	94-1/16 (2389)	5000 (2268)
	4-Panel (2) 20 - 4" Cones	-	140-1/2 (3569)	137-15/16 (3503)	103-3/16 (2622)	8200 (3719)
HI-G Fines Recovery System	3-Panel 20 - 4" Cones	-	205-7/8 (5229)	152-3/4 (3880)	204-1/2 (5194)	18000 (8165)
	4-Panel (2) 20 - 4" Cones	-	205-7/8 (5229)	220 (5588)	222-5/8 (5654)	35000 (15876)
Model	Width in (mm)	Length in (mm)	Height in (mm)	Weight lbs (kg)		
36-90R-3 Repulp	60 (1524)	122 (3099)	119-3/8 (3032)	4000 (1814)		
48-120R-4M Repulp	60 (1524)	149-15/16 (3808)	135-5/8 (3445)	4600 (2087)		
56-168R-4M Repulp	81-5/8 (2073)	231-1/4 (5873)	180-1/8 (4581)	11000 (4990)		

WEIGHTS & DIMENSIONS

EQUIPMENT	DIMENSIONS				
Model	Width in (mm)	Length in (mm)	Height in (mm)	Weight lbs (kg)	
48-120W-4M High Shear Screener	64-3/4 (1645)	120-1/2 (3061)	89-1/16 (2262)	5350 (2426)	
SGX36-90D-3M Pellet Screener	51 (1276)	126 (2114)	105 (2667)	4000 (1814)	
SGX48-144D-4 Pellet Screener	55 (1387)	162 (4099)	197 (4990)	6500 (2948)	
36-90D-3M Single-Deck Dry Machine	51 (1276)	126 (2114)	105 (2667)	4000 (1814)	
48-126D-3 Single-Deck Dry Machine	64-3/4 (1645)	162-1/4 (4121)	125-1/8 (3178)	4000 (1814)	
48-126D-3M Single-Deck Dry Machine	64-3/4 (1645)	162-1/4 (4121)	125-1/8 (3178)	4000 (1814)	
48-144D-3 Single-Deck Dry Machine	55 (1387)	162 (4099)	197 (4990)	6500 (2948)	
48-168D-4M Single-Deck Dry Machine	64-3/4 (1645)	190 (4818)	154-3/4 (3931)	5000 (2267)	
56-168D-4 Single-Deck Dry Machine	82-1/2 (2096)	212 (5395)	209 (5299)	15000 (6803)	
56-168D-4M Single-Deck Dry Machine	82-1/2 (2096)	212 (5395)	209 (5299)	15000 (6803)	
36-126D-3DD Double-Deck Dry Machine	51 (1286)	169-13/16 (4314)	141-1/2 (3595)	4300 (1950)	
56-144D-3DD Double-Deck Dry Machine	82-1/2 (2096)	205-13/16 (5228)	197-1/8 (5006)	14000 (6350)	
56-168D-4DD Double-Deck Dry Machine	82-1/2 (2096)	212 (5395)	209 (5299)	15000 (6803)	
48-120DL-3 Front-To-Back Screen Frame Only	48-1/4 (1226)	125-1/2 (3188)	-	1300 (590)	
48-120DL-3 Front-To-Back Single-Deck Dry Machine	60-3/8 (1534)	162-1/4 (4121)	125-1/8 (3178)	4400 (1996)	
48-120DL-3DD Front-To-Back Double-Deck Dry Machine	60-3/8 (1534)	176-5/16 (4478)	159-5/8 (4054)	6500 (2948)	
2SG/48-120D-1STK Multi-Deck Dry Machine	64-3/4 (1645)	100-1/2 (2553)	88-11/16 (2252)	2500 (1136)	
2SG/48-120D-2STK Multi-Deck Dry Machine	64-3/4 (1645)	125-13/16 (3195)	130-7/16 (3314)	6100 (2773)	
2SG/48-120D-3STK Multi-Deck Dry Machine	64-3/4 (1645)	149-1/4 (3791)	143-11/16 (3650)	7500 (2948)	
2SG/48-120D-4STK Multi-Deck Dry Machine	64-3/4 (1645)	177-1/2 (4509)	159-5/8 (4054)	9000 (4082)	
Model	Options	Width in (mm)	Length in (mm)	Height in (mm)	Weight lbs (kg)
DE-7200 VFD (Variable Frequency Drive)	Centrifuge	62-1/4 (1581)	162-3/4 (4121)	84-15/16 (2157) [†]	14200 (6441)
	Electrical Control Cabinet A1	37-9/16 (954)	77 (1956)	67 (1702)	2500 (1134)
	Electrical Control Cabinet B1/B2	35 (889)	70 (1778)	84 (2134)	1940 (880)
DE-1000 LP VFD (Variable Frequency Drive)	Low Profile Centrifuge/Cabinet	67-1/16 (1703) [†]	159-13/16 (4059)	66-3/4 (1695) [†]	7300 (3311)
	Electrical Control Cabinet A1	54-11/16 (1389)	40 (1016)	50-1/16 (1272)	1500 (680)
	Electrical Control Cabinet B1/B2	35 (889)	70 (1778)	84 (2134)	1940 (880)
DE-1000 FHD (Full Hydraulic Drive)	Dual Voltage Centrifuge	83-1/2 (2121) [†]	115-3/8 (2931)	70 (1778) [†]	8925 (4048)
DE-1000 LP GBD (Gearbox Drive)	Low Profile Centrifuge	69-15/16 (1776) [†]	110 (2794)	66-1/8 (1680) [†]	5200 (2359)

[†] Centrifuge Bowl Cover Open

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The Derrick Family is a community comprised of thousands of individuals in countries around the globe. We share a collective interest in **Community Enrichment** through our avid support of industry associations and charitable organizations. Aware of our worldwide impact, we support the recovery of natural resources in the most energy-efficient manner, placing vital importance on **Global Sustainability**. Our **Award-Winning Service** department works around-the-clock to provide unparalleled support to customers around the world.

Our pioneering spirit is best demonstrated by our long-term commitment to **Continuous Innovation** which drives manufacturing of our **Leading-Edge Solutions**. Clients partner with us to overcome their most difficult fine-separation challenges and we deliver with our team of **World-Class Technologists**, many of whom have been with us for well over two decades. Our vertically integrated approach ensures product dependability and reinforces our **Quality Commitment**.

We are a **Global Family**® focused on **Pioneering Technology**®.



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