



Size Screen

Size Screen

Harden's size separation equipment, including disc and vibrating screens, is designed to separate materials by size and shape.

Ideal for municipal solid waste, industrial and commercial waste, biomass, electronic waste, and scrap metal, these screens offer high throughput, superior screening efficiency, stable performance, and low energy consumption.



Triangle Disc Screen

Benefits & Applications

Efficiently handles high-moisture materials with strong adaptability. Triangular disc design boosts durability and extends service life.

















and high efficiency.

Hexagon

Disc Screen



The hexagon disc screen is ideal for low-mois-

ture materials, offering fast screening speed

Benefits & Applications







Multi-Star Disc Screen

Benefits & Applications

Designed for sorting scrap tires and 3D plastics, its unique sieve layout ensures high screening efficiency by size/shape separation.





Step **Vibrating Screen**

Benefits & Applications

The step vibrating screen is equipped with various screen plates for precise separation of materials by size and shape.













Flip-Flow **Vibrating Screen**

Benefits & Applications

Its flexible screen plates offer excellent screening efficiency and prevent clogging with wet, sticky, or challenging materials.











Combined **Vibrating Screen**

Benefits & Applications

It handles complex materials with high capacity and precision, ensuring energy efficiency, low dust, and strong adaptability.















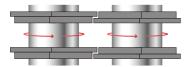




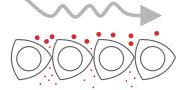
Disc Screen Working Principle

Triangle

The triangle disc screen rotates using a motor



Generating mechanical force that tumbles and advances materials



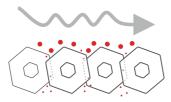
Allowing particles smaller than the screen apertures to fall through thus achieving efficient classification

Hexagon

Hexagon discs rotate with the roller shaft, allowing materials to slide



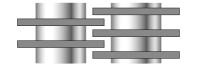
Vertical motion aids in separation Screened materials pass through gaps



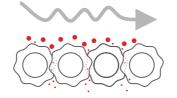
While oversized materials move to the screen's end for further use

Multi-Star

The Multi-Star disc screen's screening surface consists



multiple roller shafts fitted with plum blossom-shaped discs

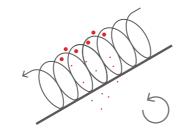


Classifying materials by size through the gaps between the discs as the shafts rotate

Vibrating Screen Working Principle

Step Screen

Step vibrating screen employs mechanical vibration principles with an exciter generating strong vibrations causing vertical material movement



Allowing particles smaller than the apertures to separate and fall for efficient classification and transport

Flip-flow Screen

The flip-flow vibrating screen utilizes mechanical vibration principles

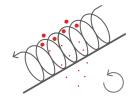
• . •. • • . • . • . • .

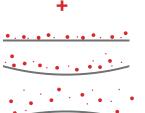
••••••

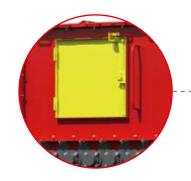
with a single drive generating dual vibrations to achieve high acceleration through tension and relaxation.

Combined Screen

The combined vibrating screen is an efficient and versatile screening device that integrates both step screen and flip-flow screen designs to achieve dual screening effects







Safety Maintenance Device

Users can easily perform maintenance by opening the access door, ensuring safety and convenience.



High-Capacity Design

The triangular disc screen enhances screening efficiency with a high material jumping amplitude.



Efficient Screening

The unique motion trajectory and large jumping amplitude ensure excellent screening performance, preventing blockages, especially for high-moisture materials.



Arc Design for Precise Screening

The arc-shaped structure at the feed end effectively disperses materials, ensuring a more uniform and precise screening process.



Automatic Lubrication System

Bearings and chain drives are equipped with an automatic lubrication system, reducing maintenance costs and extending equipment lifespan.



The triangular disc screen features a compact structure, occupying less space than drum screens, meeting diverse process requirements.





equipment lifespan.









Automatic Lubrication System

Bearings and chain drives equipped with auto-lubrication, reducing maintenance costs and extending equipment lifespan.



Stable Drive System

Wear-resistant sprocket-chain mechanism with chain-link design enhances operational stability and minimizes equipment vibration.



Modular Design

Configurable module quantity to meet diverse customer requirements for size, capacity, and process needs.

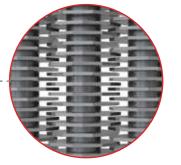


Sealed inspection system reduces dust and noise while improving maintenance safety and convenience.



Anti-Wrap Design

Special spacer design prevents flexible materials from wrapping and hard materials from jamming, ensuring continuous and stable operation.



Efficient Screening

Hexagonal disc design enables high-frequency vertical material movement, enhancing screening efficiency with a capacity of up to 300 m³/h.

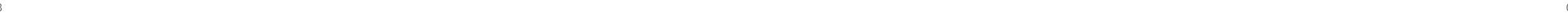


Compact Footprint

Compared to drum screens, hexagonal disc screens require less space, saving investment costs.



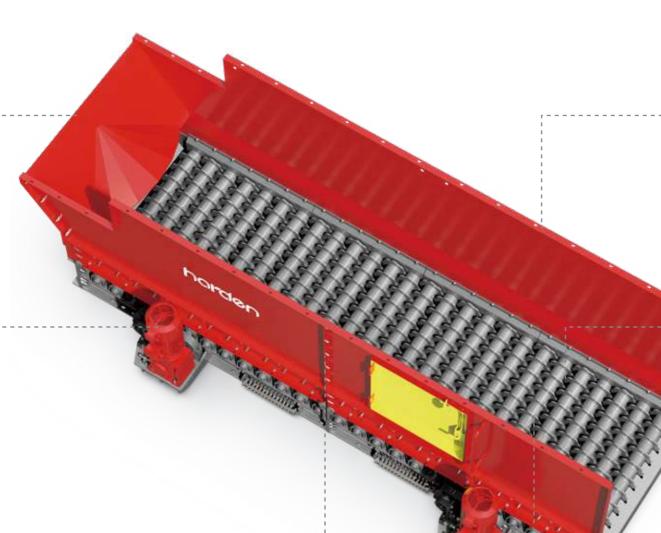






Intelligent Control System

Equipped with digital frequency control and automatic lubrication, boosting efficiency and reducing maintenance costs.



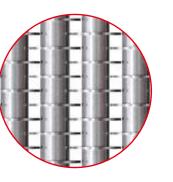
Lightweight Structure

Optimized design facilitates transport and installation, suits various process applications, and minimizes footprint.



Efficient Screening

Star-shaped apertures in a staggered arrangement increase material-screen contact area, improving screening efficiency and yield.



Reliable Drive System

Utilizes proven chain transmission for efficient, stable, and robust operation, significantly boosting production efficiency.



Modular Design

Configurable module quantity to meet diverse size, capacity, and process requirements.



Ensures continuous lubrication of bearings and chain drives, reducing maintenance frequency and simplifying upkeep.

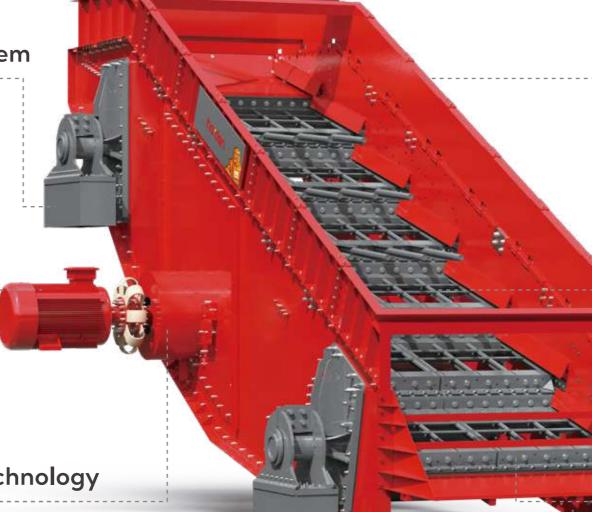


Multi-Star Disc Screen (MDS Series)



Vibration Isolation System

Reduces impact on equipment and ground, extending service life and lowering noise.



Robust Frame Structure

Scientifically optimized design using high-strength steel prevents resonance, ensuring long-term stable operation and consistent production.



Independent Drive System

Equipped with an independent power system and flexible transmission structure, delivering stable and robust driving force for efficient operation and high-capacity production.



Vibration Excitation Technology

High-performance vibrator drives high-frequency circular vibration, boosting screening efficiency and material qualification rate for high-capacity output.

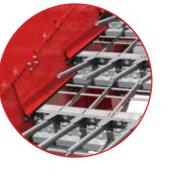


Bar-type screen with wide openings protects equipment from large material impacts, enabling effective tumbling and improving screening efficiency.



Modular Screen Structure

Utilizes 3D screens of varying specifications for precise multi-size classification, enhancing output efficiency and yield. Modular screen design simplifies replacement.

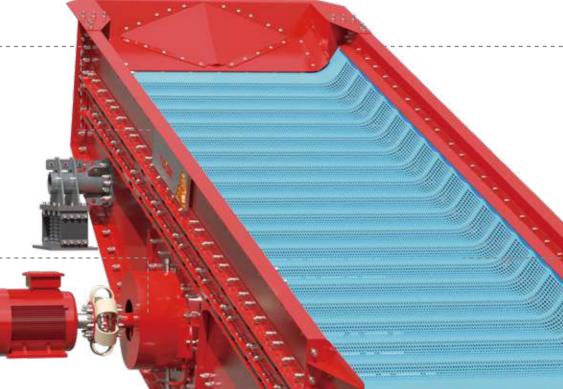






Independent Drive System

Equipped with an independent power system and flexible transmission structure, delivering stable and robust driving force for efficient operation and high-capacity production.



Intelligent Control System

User-friendly interface allows rapid parameter adjustments based on material properties, significantly reducing labor and time costs.

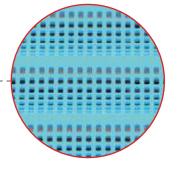


Vibration Excitation Technology

High-performance vibrator drives high-frequency circular vibration, boosting screening efficiency and material qualification rate for high-capacity output.



operation and consistent high capacity.

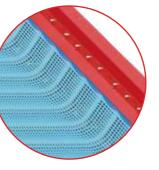


Robust Frame Structure

Scientifically optimized design using high-strength steel prevents resonance, ensuring long-term stable operation and consistent production.

Modular Design

Screwless screen fixation enables efficient maintenance and flexible adaptation to diverse customers' size, capacity, and process requirements.





1 λ



Fully Enclosed Structure

Enclosed design minimizes dust emissions, meets environmental standards, and prevents material loss, ideal for high-value material screening.



Intelligent Control System

User-friendly interface allows rapid parameter adjustments based on material properties, significantly reducing labor and time costs.



Dual Screening Effect

Integrated step and flip-flow screen design achieves two screening effects in one unit, reducing conveyor and structural space needs, significantly cutting investment costs.



Shared Drive System

Single power system drives dual screening functions, lowering energy consumption and per-ton operating costs while balancing economy and efficiency.



Secondary Vibration Isolation System

Dual isolation reduces equipment and ground impact, extends service life, lowers noise, and suits urban or enclosed environments.

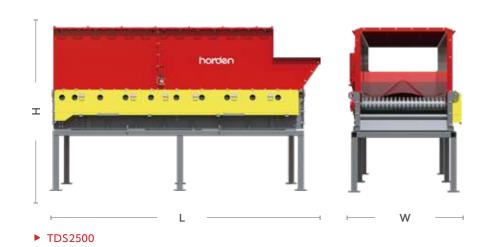


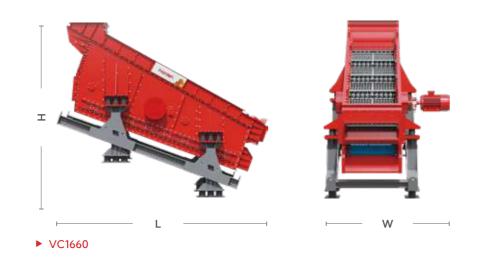
Vibration Excitation Technology

High-performance vibrator drives high-frequency circular vibration, boosting screening efficiency and material qualification rate for high-capacity output.



Combined Vibrating Screen (VC Series)



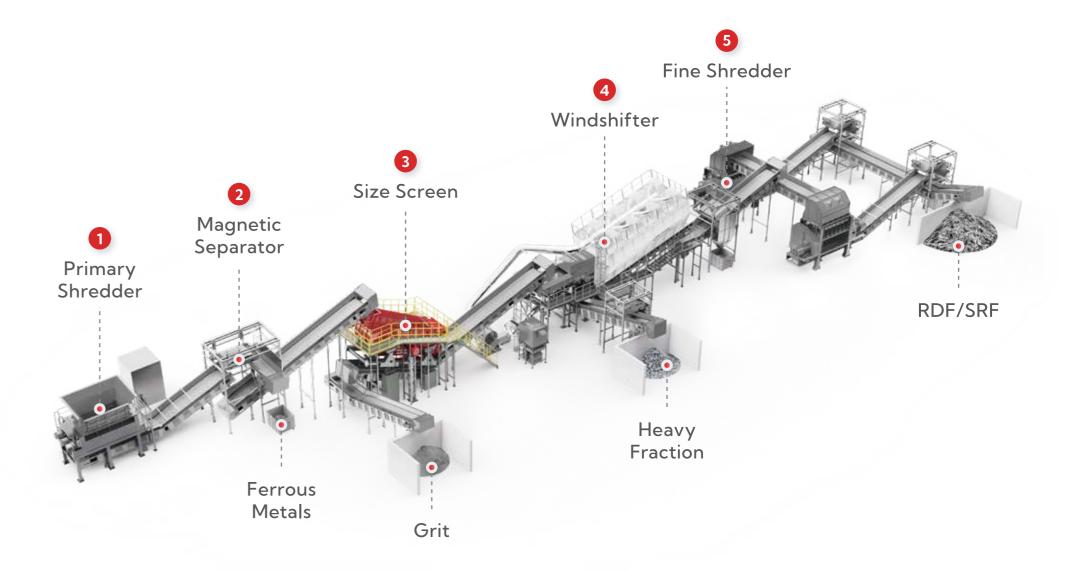


Disc Screen Product Model		TDS3500	TDS4500	HDS2000	HDS3000	MDS4000
Working Width	mm	1500	1500	1600	1600	1200
Working Length	mm	3500	4500	2000	3000	4000
Power	kW	5.5	7.5	7.5	7.5	5.5
Screening Size	mm	<100	<100	10~350	10~350	10~50
Weight	kg	4300	5500	3600	4800	3000
Dimensions (L*W*H)	mm	3846*2156*1845	4739*2195*1825	1962*2323*1277	2931*2323*1277	4643*2086*1005

Vibrating Screen Product Mo	del	VF2060	VC1660	
Screening Area	mm	2000*6000	1600*5700	
Screening Size	mm	10~50	10~300	
Drive Power	kW	30	45	
Weight	kg	8700	15000	
Throughput	m³/h	28~35	60~80	
Dimensions (L*W*H)	mm	7298*3997*3354	7184*4043*5930	

^{*}The above are standard model parameters and are subject to modification.

DSWS Solution



Why Choose Harden



15 Years of Technical Expertise in Innovation



1,500+ Global Success Stories Across 30+ Countries



Rigorous Quality Control for Reliable Equipment



Customized Solutions to Optimize Client Value



24/7 Rapid-response After-sales Support

Contact Us

Harden China

Harden Machinery Ltd.

Building 8, No. 6 Jingye Road, Torch Development Zone, Zhongshan City, Guangdong, China

Tel: +86 760 8993 5422

Email: info@hardenmachinery.com

www.hardenshredder.com





Harden Singapore

Harden Machinery Pte. Ltd.

138 Cecil Street, #13-02 Cecil Court, Singapore 069538

Tel: +65 9117 5487

Email: arthur.zhang@hardenmachinery.com

www.hardenshredder.com

Harden Machinery Ltd.











SN-202508

Subject to technical changes, revisions, and printing errors. Illustrations are for reference only and may differ from the actual product.