



Single Shaft Shredder

harden

JUST SHRED IT

harden



Contact Harden for professional shredding and recycling solutions.

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About Us

Harden Machinery Ltd. is a leading manufacturer of industrial shredder and waste disposal equipment in China. With a growing market and hundreds of successful cases we had built, Harden had became the most trustworthy brand in China, also it's being more popular worldwide. Thanks to rich experience and our strong R&D team, Harden always keeps advance in technologies.

Harden supplies competitive shredding machines worldwide, including single shaft shredder, double shaft shredder, quad shaft shredder, primary shredder and mobile shredder. We also offer a wide range of one-step solutions such as MRF system for MSW, SMP system for hazardous waste, shredding disposal system for organic waste, paper mill waste and bulky waste, etc.

Core Advantages of Harden

Professional Technologies

Focus on shredding technologies from beginning to now

High Reliability

All parts in world brands / Advanced and mature designs

Trustworthy Brand

900+ successful projects / Wide recognition in market

Aims the best ROI for customers

Batch production saves cost / High Durability Proven

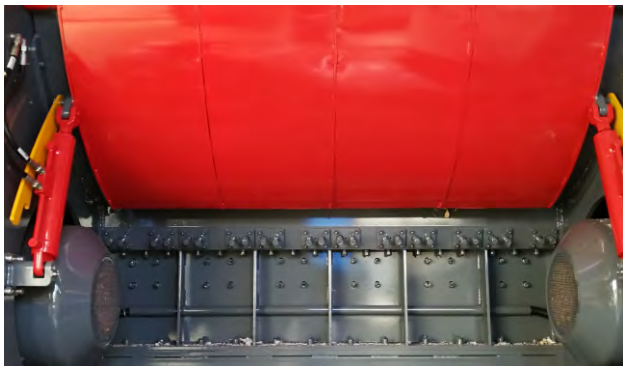
Single Shaft Shredder

Harden SM series large-scale single shaft shredder integrates a number of patented technologies such as intelligent built-in arc pressing, gap shearing, dense arrangement blades on cutter shaft, rapid gap adjustment. Based on the advanced European design and concepts, Harden has been focusing on providing equipment with higher throughput, lower operating cost, less maintenance time, safer and more user-friendly.

Harden has accumulated rich shredding experience of single shaft shredder, with specialized parameters in torque, speed, action program, blades for different material to be shredded. Whether it is flexible and high strength leather cloth or low density light material and other raw material, SM series large-scale single shaft shredder will process the material with excellent performance.



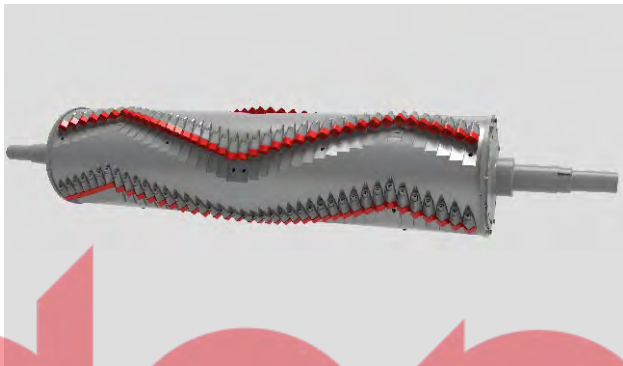
Features of Single Shaft Shredder



External Hydraulic Driven Maintenance Door

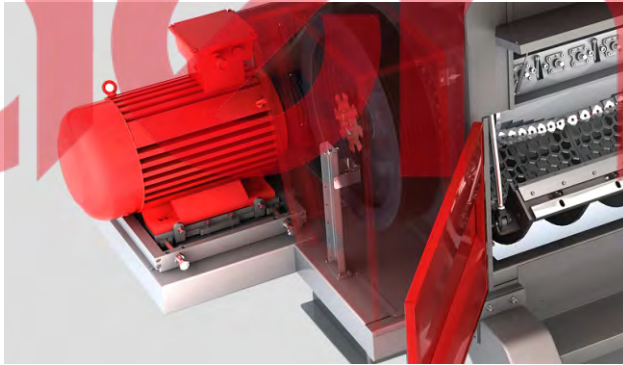
The maintenance door can be used for blades replacement, removal of unbreakable foreign objects and cleaning work inside the cutting chamber, with the advantages as follow:

- High security:Hydraulic safety valve + double mechanical safety support.
- Easy maintenance: Fully-open operating space + maintenance pedal, easy to access maintenance parts such as shaft and blades.
- Time & labor saving: Hydraulic driven more efficient.



Patented Structure of Dense Arrangement Blades on Shaft

To meet the needs of large-volume production for low-density light material, Harden has developed a patented technology of dense arrangement blades for cutting process, which increase the cutting efficiency by 50%.



Efficient and Reliable Power Transmission

Excellent power performance bases on high efficient belt transmission and stable imported planetary reducer, advantages as follow:

- Combined belt: high transmission power, stable operation
- Interchangeability: standardized accessories, high interchangeability, short cycle

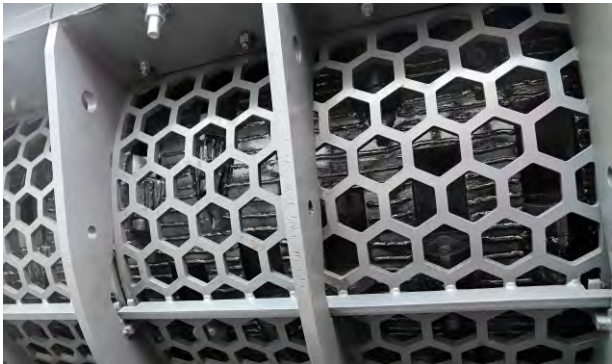


Patented Technology of Intelligent Built-in Arc Pressing

Pressing technology plays a important role in single shaft shredder. Harden has developed intelligent built-in are pressing technology based on several years experience, advantages as follow:

- Force arm driven, no guide rail, convenient and efficient.
- Intelligent adjustment of the pressing speed according to the spindle load
- Intelligent judgement of material condition to decide if cut down the pressing distance
- With a material distribution structure, to maximum the utilization of the cutter shaft
- Anti-stuck devices are mounted at the front and back to avoid presser getting stuck.

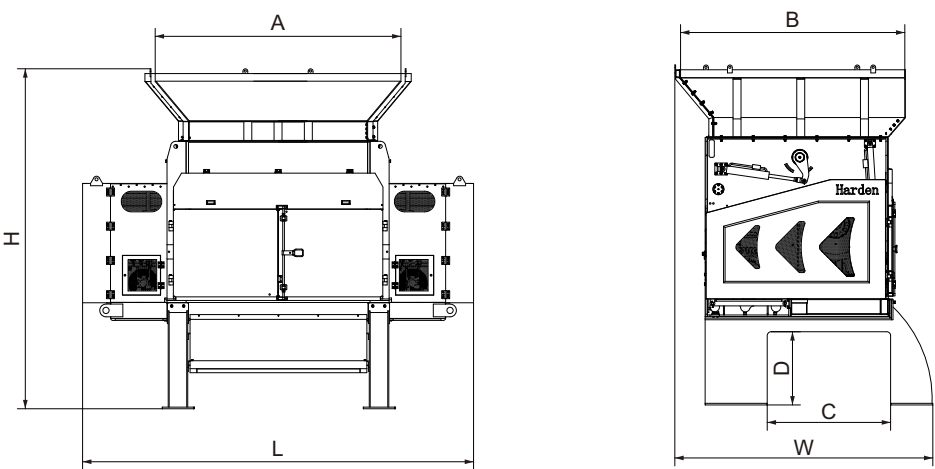
Features of Single Shaft Shredder



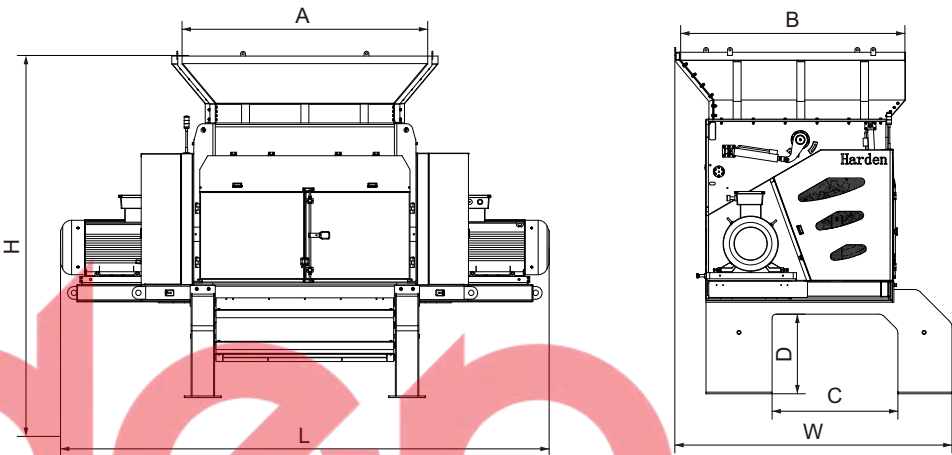
- Special Hexagonal Screen guarantees the discharge size
The single shaft shredder is equipped with screen to control the discharged size, the advantages as follow:
- Hydraulic driven, time and labor saving
 - Multi-piece screen structure, single unit screen in light weight, easy to installation and disassembly
 - Hexagonal screen mesh maximizes the passing area.



- CE Certificated Safety Protection Function
Single shaft shredder has passed CE safety certification and has a variety of function as follow:
- Automatic protection for foreign objects: Self-reset safety clutch cooperates with high precision sensor , once the unbreakable foreign objects occur, the safety clutch will automatically disengage and shut down for protection.
 - Safety switches: All doors are equipped with safety switches, which are interlocked with the spindle. Once opened, shredder stops operation.



SM2200/SM3000 Outline Drawing



SM2200R/SM3000R Outline Drawing

Applications of Single Shaft Shredder



Clothes, Leather scraps



RDF



Untreated MSW



Paper mill waste



Bulky & Decoration waste



Garden waste



Construction waste



Plastics & Films

Technical Parameters

Model	SM2200	SM3000	SM2200R	SM3000R
Motor Power (KW)	264-320	320-400	400	500
Hydraulic Power Unit (KW)	15			
Cutting Chamber(AxB)(MM)	3085x2820	3815x2820	3085x2820	3815x2820
Dimension(LxWxH)(MM)	4910x3240x4250	5640x3225x4550	6135x3480x4350	6870x3470x4290
Size of Discharge Outlet C (MM)	1550	1580	1580	1550
Size of Discharge Outlet D (MM)	1000	1000	1000	1000
Overall weight (T)	21	26	22	27
Options: automatic fire fighting system, frequency conversion driven				