



harden

harden



Contact Harden for professional shredding and recycling solutions.

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JUST SHRED IT, THUS SORT IT.

About Us

Founded in 2010, HARDEN MACHINERY LTD. is the expert in design and manufacturing of industry shredders, sorting machines and processing lines for various types of solid waste disposal. With its advanced technology, R&D capability, quality products and excellent after-sale service, HARDEN has become one of the leading companies in solid waste recycling industry in Asia and globally.

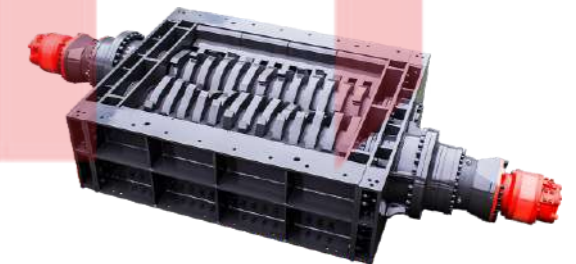


Our Advantages

- Leading enterprise for solid waste processing in China
- Cooperates with European companies
- Full ranges of products
- Famous brand configuration for core components
- The largest R&D scale for solid waste processing in China
- More than 10 years experience in waste industry
- Perfect solutions for solid waste
- More than 1,400 cases domestic and overseas



Single Shaft Shredder



Double Shaft Shredder



Four Shaft Shredder



Primary Shredder

Manufacturing



Selected Customers



Our Footprint

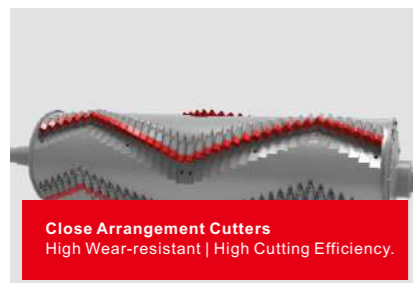


Certifications





Features of Single Shaft Shredder



Close Arrangement Cutters
High Wear-resistant | High Cutting Efficiency.

- Patented blades types and arrangement with efficiency cutting
- Optimized mesh design ensures the maximum through rate of the material
- Efficient and reliable power system which equips with automatic overload protection
- Compact hydraulic feeder push realizes intelligent feeding according to waste stream
- Hydraulic discharge door reduces the working intensity of cleaning and maintenance



High Qualified Rate of Particle Size
Size Control | Quick replacement



Power Transmission
Standardized Accessories | Planetary Reducer



Intelligent Built-in Arc Pressing Technology
Anti-blocking | Intelligent Operation

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 abundant 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.

Model	SL1500	SL2000	SL2500
Motor Power(kW)	90 / 110	132 / 160	160
Cutting Chamber(A*B)(mm)	1300*1500	1300*2000	1300*2500
Overall Dimension (L*W*H)(mm)	3200*2400*2420	3700*2400*2420	4200*2400*2420
Weight (Kg)	13000	15000	20000

Model	SG2200	SG2200R	SG3000	SG3000R
Motor Power(kW)	132+132 / 160+160	160+160	200+200	200+200
Cutting Chamber(A*B)(mm)	2330*1600	2330*1600	3030*1600	3030*1600
Overall Dimension (L*W*H)(mm)	5630*3430*5312	6100*3430*5312	6330*3430*5312	6800*3430*5312
Weight (Kg)	27000	28000	32600	33700

Applications of Single Shaft Shredder



Textile & Leather Scraps



Plastics



MSW



Paper Mill Waste



Bulky & Decoration Waste



Garden Waste



Construction Waste

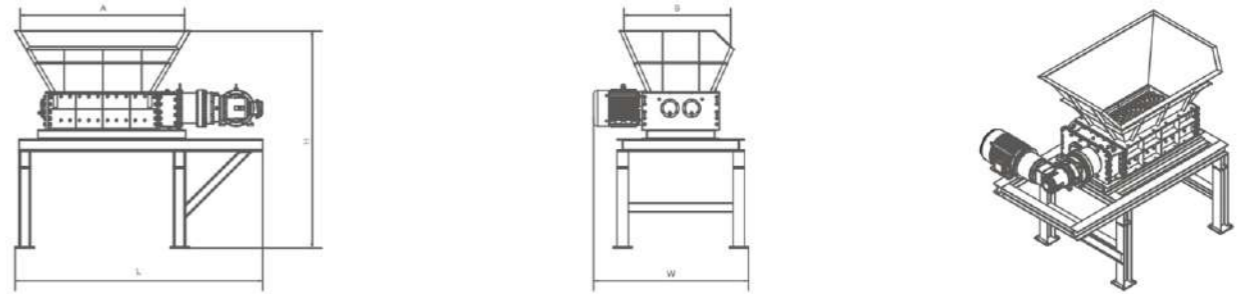


Plastics & Films



Double Shaft Shredder - Middle Duty

TS series double shaft shredder is mainly used in light-loading crushing and coarse crushing occasions. Two sets of shafts with blades run relatively to form shearing force. This series shredder has a compact structure and the cutting chamber is driven by one set of motor and a reducer which drive two sets of shafts to run simultaneously.



Model	TS505	TS508	TS612
Motor Power(kW)	15	30	45
Cutting Chamber(A*B)(mm)	500*550	500*840	670*1200
Overall Dimension (L*W*H)(mm)	2215*1005*490	2830*1095*580	2946*1692*641
Weight (Kg)	1200	2070	3570

Features of Double Shaft Shredder



High Hardness Cutters
Stable Quality | Welding Repair.

- One set of power drive and two shafts with compact structure
- Imported blades material from Europe and it is not easy to be broken
- The shaft which is processed by multiple heating treatment and fine grinding
- Bearing adopts automatic lubrication and multiple sealing, shreds the material which contains high dust or high moisture content
- Automatic overload protection to realize positive and negative rotation



Professional Design of Cutting Chamber
Stable Operation | Strong Loading Capacity



Dynamic Speed Control System
Variable Speed Torque | Automatic Matching



Transmission Parts Protection
Dustproof maze | Isolation Protection

Applications of Double Shaft Shredder



Organic Waste



Paper & Cardboard



Construction Waste



Unqualified Product



WEEE



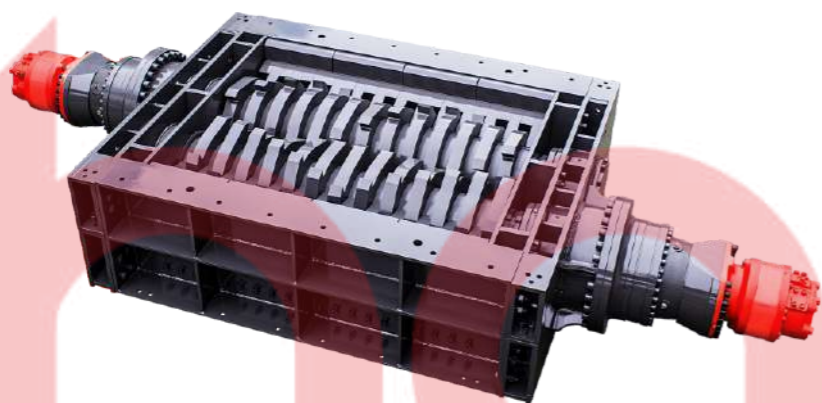
Medical Waste



Household Appliances



Confidential Destruction



Features of Double Shaft Shredder



High Hardness Cutters
High Wear-resistant | High Cutting Efficiency.

- The shaft offers large torque to break a variety of complex material
- Imported blades material from Europe and it is not easy to be broken
- The shaft which is processed by multiple heating treatment and fine grinding
- Bearing adopts automatic lubrication and multiple sealing, shreds the material which contains high dust or high moisture content
- Automatic overload protection to realize positive and negative rotation



Professional Design of Cutting Chamber
Stable Working | Internal Stress Decomposition



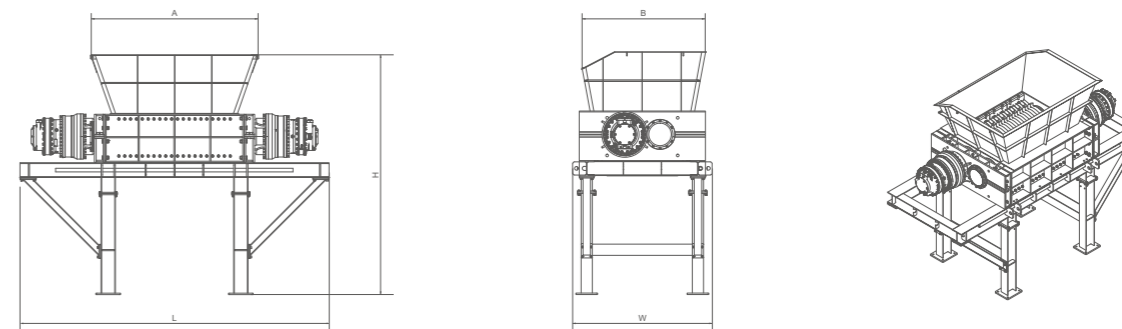
Professional Hydraulic System
Automatic Control | Strong Power



Transmission Protection Struction
Labyrinth Dust Prevention | Oil Isolation

Double Shaft Shredder - Heavy Duty

TD series double shaft shredder is mainly used in high-loading crushing and coarse crushing occasions. Two sets of shafts with blades run relatively to form shearing force. Each cutting shaft of this series shredder is driven independently by a motor combined with reducer, and the two shafts turned forward or reversed independently.



Model	TD612	TD912 TDH912 (Hydraulic)	TD919	TD1216 TDH1216 (Hydraulic)
Motor Power(kW)	45*2	75*2 132 (Hydraulic)	90*2	132*2 200 (Hydraulic)
Cutting Chamber (A*B)(mm)	670*1200	900*1200	900*1900	1200*1600
Overall Dimension (L*W*H)(mm)	4115*2414*665	4573*2759*808 3456*1440*670(Hydraulic)	5275*2720*807	5118*2758*802 or 5561*3540*1430 4900*1860*710(Hydraulic)
Weight (Kg)	4720	9470 6510(Hydraulic)	11180	14160 or 16870 11230(Hydraulic)

Applications of Double Shaft Shredder



Textile & Leather Scraps



MSW



Household Appliances



Hazardous Waste



Bulky Waste



Paper Mill Waste



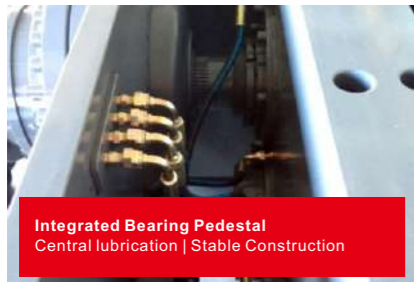
Construction Waste



Tire

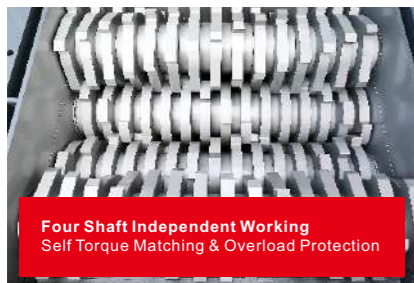


Features of Four Shaft Shredder



Integrated Bearing Pedestal
Central lubrication | Stable Construction

- Strong adaptability to material, one-time shredding to the required particle size
- Specially arrangement designed blades promise high cutting efficiency
- Optimized mesh design ensures the maximum through rate of the material
- The shaft offers large torque to break a variety of complex material
- Imported blades material from Europe and it is not easy to be broken
- The shaft which is processed by multiple heating treatment and fine grinding
- Bearing adopts automatic lubrication and multiple sealing, shreds the material which contains high dust or high moisture content
- Automatic overload protection to realize positive and negative rotation



Four Shaft Independent Working
Self Torque Matching & Overload Protection



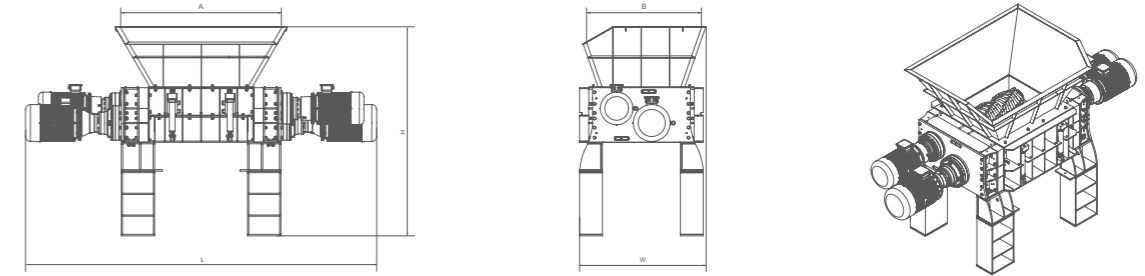
Hexagonal Mesh Screen
Wear-resistant Alloy | Quick Replacement



Quality Reducer or Hydraulic Driven
Compact Structure | High Efficiency

Four Shaft Shredder

QS series four shaft shredder is mainly used in the working condition which has a strict requirement for the particle size of the material. The shredder is equipped with four sets of shafts and blades in total, which two sets of shafts and blades on the top are responsible for catching the material and another two sets of shafts and blades below are responsible for shearing. Screen mesh is mounted under the cutting chamber to ensure qualified discharge size when the material is being shredded for many times.



Model	QS1012
Motor Power(kW)	(45+30)*2
Cutting Chamber(A*B)(mm)	1020*1200
Overall Dimension (L*W*H)(mm)	4530*1730*2200
Weight(Kg)	10510

Applications of Four Shaft Shredder



Iron Drum



Plastic Drum



Household Appliances



Hard Drive



Bulky Waste



Battery



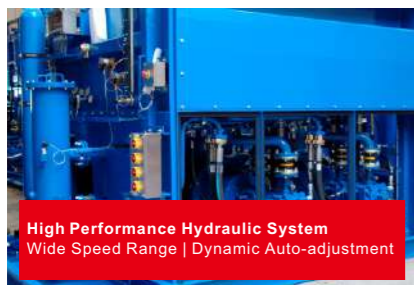
Oil Filter & Ink Cartridge



Tire

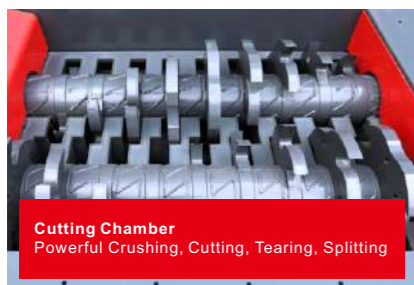


Features of Primary Shredder



High Performance Hydraulic System
Wide Speed Range | Dynamic Auto-adjustment

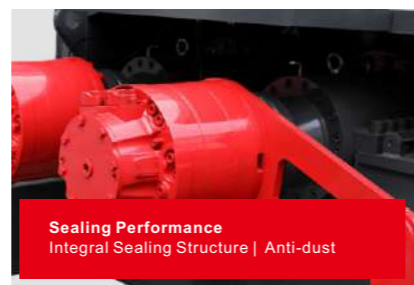
- Strong adaptability to material, one-time shredding to the required particle size
- Strong power provided by hydraulic drive, flexible shredding direction
- Optional shredding mode for different material ensures high cutting efficiency
- Hydraulic motor sets up buffer mechanism ensures fast switch of forward or reverse rotation
- Wear-resistant spindle with long service life and low maintenance cost
- Unique blade design ensures that the spindles will not be wound by flexible material



Cutting Chamber
Powerful Crushing, Cutting, Tearing, Splitting



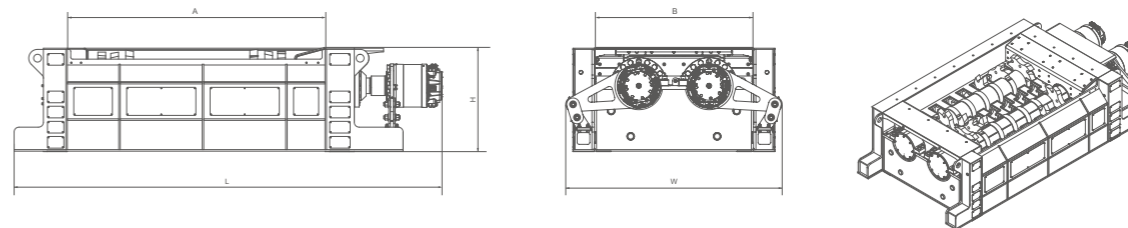
Cutters Welding
Patented Technology | Quick Repair



Sealing Performance
Integral Sealing Structure | Anti-dust

primary Shredder

Harden's primary shredder is mainly used in large output and preliminary shredding occasions. Two sets of shafts and blades are independently driven by hydraulic motor which will not be influenced by each other, and then shearing force is formed through the rotating blades and fixed blades.



Model	TPH1618	TPH1826
Motor Power(KW)	200	250
Cutting Chamber(A*B)(mm)	1660*1800	1900*2600
Overall Dimension(L*W*H)(mm)	3410*2270*1080	5020*2400*1242
Weight(Kg)	10690	17310

Applications of Primary Shredder



MSW



Commercial Waste



Bulky Waste



Biomass Waste



Decoration Waste



Waste Car



Household Appliance



Iron & Aluminum Scraps

TS303 Double Shaft Shredder

TS303 double shaft shredder is multi-purpose, economical and small output shredder, mainly used in enterprises, laboratories, confidential destruction, etc. It has the characteristics of low energy consumption, small volume, low noise and small vibration.



QS450 Four Shaft Shredder

QS450 four shaft shredder is mainly used in small output shredding occasions, e.g. enterprises, laboratories, confidential destruction, etc. It has the characteristics of low energy consumption, small volume, low noise and small vibration.



Model	Motor Power(KW)	Cutting Chamber(mm)	Weight(Kg)	Overall Dimension(L*W*H)(mm)
TS303	7.5	320*325	410	1590*630*410
QS450	11*2	560*300	2230	2000*1500*2600
HDS300	2.2	386*130	650	980*650*1250

HDS300 Hard Drive Shredder

HDS300 hard drive shredder is mainly used for computer hard drive shredding. The feeding position, cutting chamber and discharge position are metal sheet sealing design. In addition, the equipment is equipped with wheels, which is convenient to use. It has the characteristics of simple operation, low noise and low energy consumption.



Applications of Small Size Shredder



Hard Drive



Toner Cartridges



Unqualified Products



Confidential Destruction



Mobile Phone



Expired Foods



Expired Medicines



Seized Goods

MSW Processing System



MSW Processing System



SRF

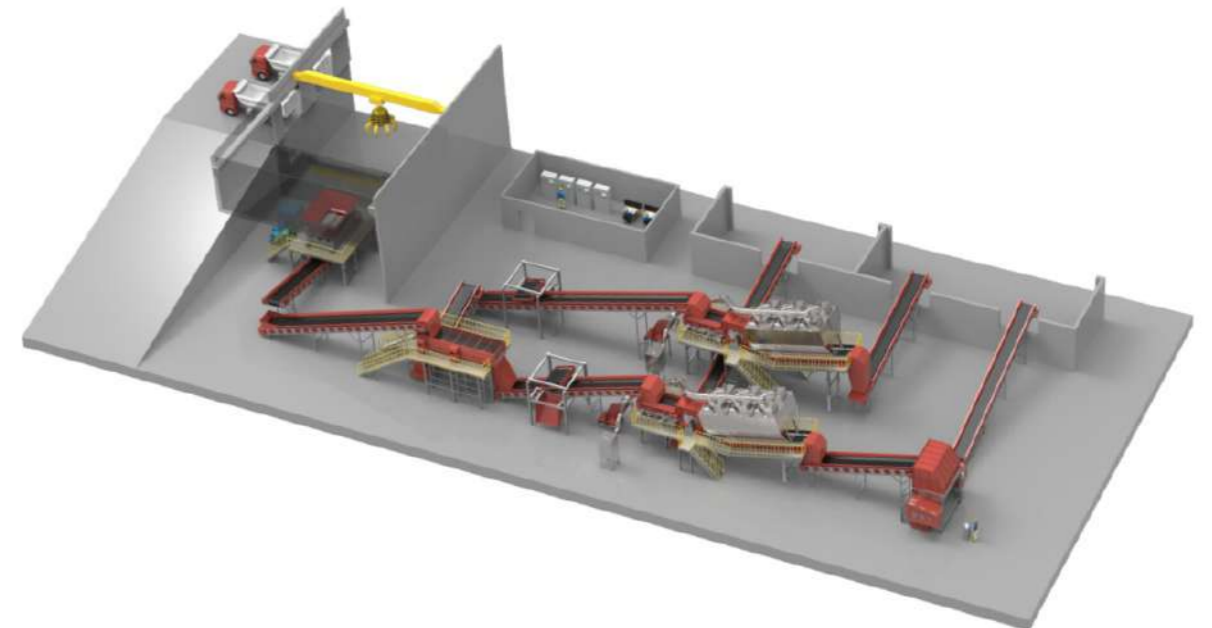


Metal



Plastic

There are only three final products of the processing system, which include high quality alternative fuel SRF with a particle size of 98% less than 60 mm, recyclable metal, and organic mixture. The whole processing does not need manual participation. Shredders and sorting machines as a core equipment have the stable working performance, which guarantee the low cost of SRF preparation.



Bulky Waste Processing System



Bulky Waste Processing System



Discarded Mattresses



Discarded Sofa



SRF

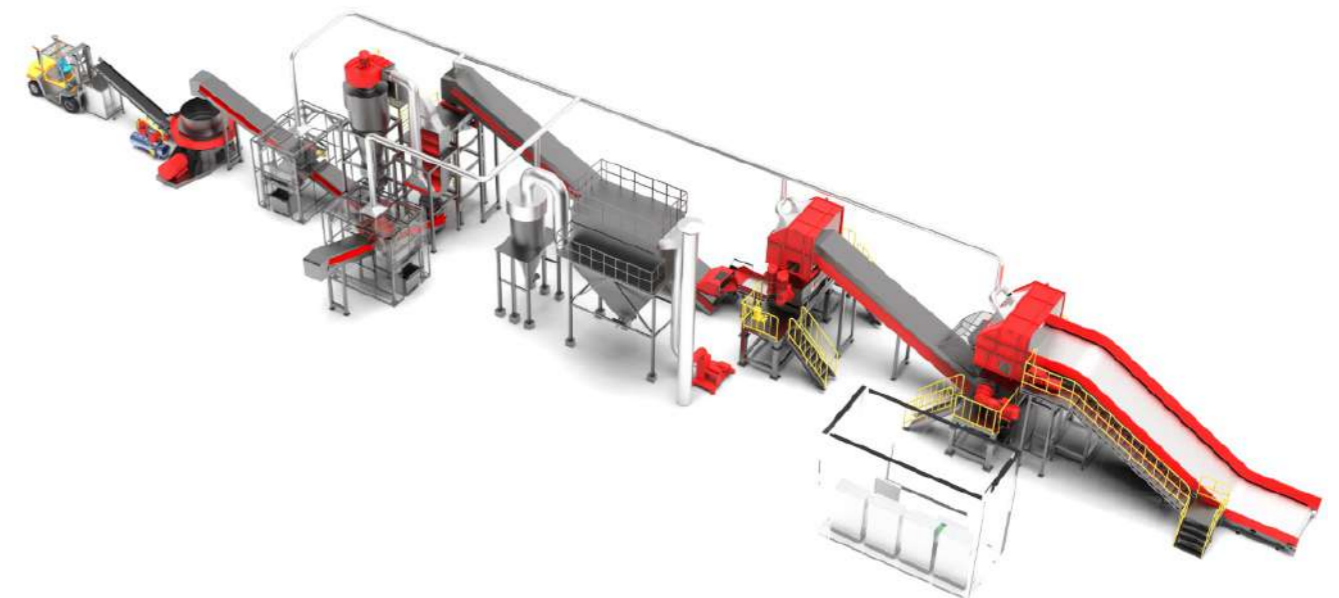


Metal



Timber

The system is mainly suitable for classification and resources utilization process of bulky waste such as mattresses, sofas. Through the two-stage shredding processes of double shaft shredder and four shaft shredder, the discharged material will go through fine processing treatments such as wind separation, magnetic separation and granulation, etc., the metal included in the bulky waste will be separated with the combustible material, the combustible material can be produced into RDF, realizing the maximum utilization of resources.



Industrial Waste Processing System



Industrial Waste Processing System



Textile



SRF



Cloth



SRF

The industrial waste processing system can transform industrial waste into high-quality high calorific value SRF/RDF, which can be used as fuel instead of fire coal, thus realizing the conversion of waste into energy. This processing system is mainly aimed at relatively pure waste leather, commercial waste plastics and other high calorific value solid waste, for more complex waste can be equipped with screen and wind shifter to complete the target to be processed. High torque double shearing shredder and special single shaft shredder for SRF/RDF will be used in the system. After secondary shredding, the material size can reach 30-80 mm (based on the requirement), and the standard-reaching rate is higher than 95%.



Hazardous Waste Processing System



Hazardous Waste Processing System



Oil Drum



Slag Slurry



IBC Tank



Hazardous Waste Mixture



Chemical Waste



Rock Wool Waste

Harden introduced European hazardous waste shredding system in the early stage, and conducted several years of independent research and development according to cases experience. At present, there are nearly 100 successful cases of hazardous waste processing project made by Harden, including reliable hazardous waste shredder, full set of hazardous waste shredding and fire extinguishing system and full set of SMP hazardous waste processing system.



Paper Mill Waste Processing System



Paper Mill Waste Processing System



Paper Mill Waste



SRF



Metal

Harden has cooperated with paper mill customers with many successful cases and created a number of efficiency waste paper processing lines. The metal contained in material can be sorted out after the magnetic separation, and the non-ferrous metal can be sorted out by eddy current sorter. The remaining material can be used as SRF after fine shredding, realizing the resources regeneration and protect the environment.



Waste Tires Processing System



Waste Rubber Tires Processing System



Waste Rubber Tires

The waste rubber tires system processes the waste tires into rubber blocks, rubber particles or rubber powders based on customer's need. Under the operation of shredder and disc screen, the discharge effect of rubber block can be guaranteed. 50mm rubber block can be used as TDF, and rubber particles and rubber powder can also be treated accordingly.



TDF



TDF



Steel Wire



Selected Cases



Selected Cases



Selected Cases

