

Superior recycling technology

handcrafted by ELDAN

From design to installation

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Happy to share our experience

ELDAN Recycling is a leading supplier of modern recycling equipment. We give our customers the best possible tools to succeed with their business, and we are recognised world-wide for it. During the years, we have supplied equipment to some of the largest recycling companies in the world, helping them making recycling a profitable business. We have also assisted companies entering the recycling industry to build up a state of the art recycling facility. Throughout 60 years we have installed more than 1 300 complete systems and 8 000 single machines to customers in 70 countries. That track record is hard to beat!

Our product range cover single machines as well as standard and tailored recycling solutions for processing of tyres, cables, electronic waste (e-waste/WEEE), aluminium, refrigerators, household waste (MSW) and magnesium. We are however not limited to these waste types, but have also solutions for processing of e.g. windmill wings, pocket mattresses and casino coins.

All ELDAN machines are products of years of practical experience and close cooperation between our engineers, sales people, service people and customers. That win-win relationship has been our focus for the past 60 years. The ELDAN equipment is developed and manufactured in-house in Denmark by our highly experienced personnel. ELDAN is one of the few companies delivering equipment to the recycling industry that has its own production facility. This ensure the highest quality of the product and flexibility of the production program.

Part of something bigger

Since 2000 ELDAN Recycling is part of the prominent Swedish business group Lifco including more than 130 companies in 26 countries. The group focus on niched, market leading companies within three business areas; Dental, Demolition and Tools and System Solutions. The group employ more than 3600 people world-wide.

Lifco is listed on the Nasdaq Stockholm Stock Exchange.



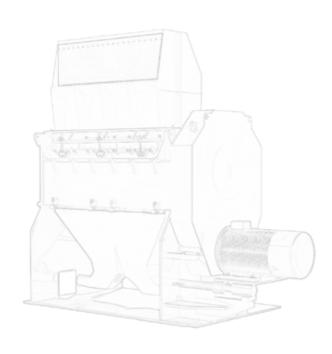


Listen and be inspired

The story about ELDAN Recycling started in 1956 when Ejvind Laursen founded E. Laursens Maskinfabrik A/S, a company making repairs to machinery and equipment within the scrap yard industry. Being in continuous contact with the customers, they got a firsthand update on what was going on in the market. It was through these contacts they realized that there was an interest for finding a way to cut down the scrap iron into smaller pieces than before. That is how ELDAN first entered the recycling industry. During the oil crisis in 1970's, two gardeners contacted ELDAN to find an alternative solution for oil as a fuel for heating the green houses. Since more tyres than ever were discarded, the idea was to reuse them. Together, the companies developed a machine which could downsize tyres into a suitable size, steel not being a problem. This is how ELDAN entered tyre recycling, which today is our largest area for recycling equipment.

"The success of ELDAN is based upon us having a close, mutual relationship with the customers and actually listening to what they are saying. By always being available, and by paying attention to what the customer's problems and concerns are, we keep one step ahead of the competition" said son of Ejvind Laursen and former Managing Director of ELDAN Recycling Steen Laursen, when he retired.

This was the focus when the company was founded - and it still is. All product development or desisions to enter new recycling areas are results of feedback or discussions with customers.







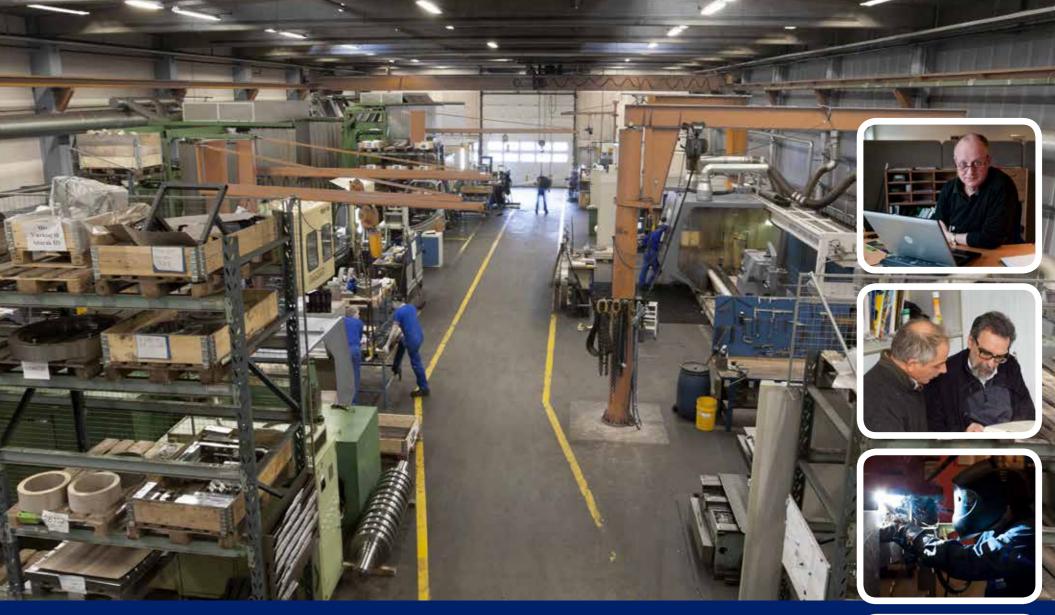




Equipment for profitable recycling - made by ELDAN

During the past 60 years, we have been working hard to supply the best equipment to the recycling industry. We are proud to present a track record of more than 1.300 complete systems and 8.000 individual machines installed world-wide. There are many reasons as to why ELDAN is the first choice in recycling equipment. The main reason is our high-quality, flexible equipment developed and manufactured by our own experienced, service-minded personnel. ELDAN is one of few companies supplying equipment to the recycling industry produced in-house. This enables information to be communicated quickly and accurately between different departments. Short communication paths ensure product quality and flexibility in production.

ELDAN delivers a turn-key solution to you. This includes total control of the project from design and manufacturing to delivery, installation and after-sales services. As we are total supplier of the equipment, we personally take care of all steps of the project - from the first sales meeting to the moment you start production.



Our production facility is located at our head office in beautiful Faaborg, Denmark. The production facilities include the latest technology and production equipment such as CNC controlled machinery as an integral part of our production environment. All ELDAN equipment is manufactured in accordance with EC standards.

Electrical control panels to the recycling lines are also produced in-house, which is much appreciated by our customers. By using these control panels, the user can control the power consumption and production of the entire plant, making production highly power-efficient.



Video of our production facility





We manufacture your equipment in-house

The ELDAN team consist of more than 100 highly trained and experienced colleagues. For us it is important to keep the experience gained within the company, and we are proud to say that most of our employees have been with us for 20-40 years.

The product managers are our experts on recycling solutions for a specific recycling area. The sales department is run by our area sales managers who are assisted by our sales coordinators and a strong world-wide network of representatives and distributors.

The project and engineering department includes our experienced project managers who follow up on all our projects and collaborate regularly with the customer throughout the engineering, installation and running-in phases of the equipment.

Our technical and service departments provide fast and efficient after-sales service, including any technical support that might be required. In the production department modern machinery is used in the manufacture of our high-quality equipment. These processes involve the machining department, the welding department, the assembly department, as well as our own in-house electrical department.

Our experienced travelling teams are available to install and commission new equipment as well as to train your personnel in its operation, adjustment and maintenance.

The research and development department works closely with our customers. They constantly adapt, develop and design machines and complete plants to meet specific new requirements







A win-win relationship

We have sold and commisioned thousands of recycling systems and machines to several hundred satisfied customers world-wide. We encourage new customers to visit one of our reference customers when placing an order. As with any other large investment it is important to see the equipment in action before signing the papers. You will notice the difference - the ELDAN equipment speaks for itself. We have customers with machines which have been up and running for more than 30 years, and still process like a clock-work.

Our customers are often used as external research and development departments. We cooperate to optimize recycling technology and machines or to develop new plant solutions. It is a win-win situation as we get our ideas tested and the customer ends up with a better production. Without the strong win-win relationship we would not have the customer based solutions that we are able to offer today. Our customers are the most important factor of our success. Also, many of our product developments have been solutions to customer problems - like recycling of mining tyres or processing of casino tokens.

Since the ELDAN plants are modularly built, it is easy for our customers to simply change some equipment in the plant or add on to it if production needs to be increased or nisched in the future. The production will never be too small or limited, since the system can grow with your needs.





on our website













































































TYRE RECYCLING

Used tyres are among the largest and most problematic sources of waste today due to the increasing volume produced and the tyres durability. Stockpiles of whole tyres are a large health and safety risk. Tyre fires are hard to extinguish and can burn for years. Also, the smoke contains toxic chemicals. Further more tyres are the perfect place to provide shelter for vermin and a breeding ground for mosquitoes that may carry diseases.

The same characteristics which make waste tyres a waste problem also make them one of the most re-used waste materials. Rubber is a dependable material: strong, flexible, elastic, durable and waterproof. The most important use of rubber is in tyres – almost half of all the world's rubber ends up as tyres! Other uses are e.g. erasers, balloons protective gloves, waterproof clothes and paints.

World leading supplier of tyre recycling equipment

ELDAN Recycling has more than 30 years' experience from designing, manufacturing and installing tyre recycling equipment. Since the first system was installed in 1992, we have built an impressive track record including more than 1 000 tyre recycling installations in 49 countries world-wide. We know tyre recycling equipment!

No tyre is too large or small for our systems. We have recycling solutions for processing of all types of tyres; passenger car tyres, truck tyres and off-the-road (OTR) tyres including mining tyres and super singles. The capacity of the standard systems range from 500-10 000 kg/production hour. These systems are the starting point when tailoring a solution to fit your needs.

We know that what you need today, is probably not the same as what you need when your business is blooming. Therefore, the standard ELDAN tyre recycling plants are of modular design. That means that if you need to upgrade your system, it is only a matter of adding an extension to the system or changing one machine to a larger one.

During production of rubber granules, flexibility is a very important factor since the market demand for various fraction sizes will vary. Therefore, the ELDAN tyre recycling plants are "multi-size", which means the size of rubber granulate produced is easily changed simply by altering the screen combination.

Additional modules are also available to customize the solution to your requirements - e.g. powder production, tyre cleaning and washing or steel wire upgrading.

There is no substitute for experience!



- Car tyres
- Truck tyres
- Off-the-road (OTR) tyres incl. mining tires and super singles



Depending on your requirements

- Tyre shreds
- Tyre chips
- Rubber granules/mulch
- Rubber powder (<99,99% clean)
- Steel wire (<99% clean)
- Textile

ELDAN benefits

- Durability: our equipment is designed to last and to cope under tough circumstances and weather conditions
- High performance
- Superior quality of output fractions attractive homogenous material which is a very attractive reusable material
- Flexibility to process different input materials
- Flexibility to produce different output fractions
 - Low processing costs including low power consumption and low maintenance costs
- No permanent operator control needed

 only occasional monitoring and
 adjustments
- Unbeatable after-sales support
- Tailored solutions let the recycling system grow with your business



Customer stories on website



Videos on YouTube



1: Super Chopper, 2: Tumble Back Feeder, 3: Multi Purpose Rasper, 4: Silo V4, 5: Fine Granulator, 6: Classifier PC10T, 7: Fine Granulator, 8: The Classifier PC15 and 9: Aspirator.

Layout example: tyre recycling

























CABLE RECYCLING

There are many incentives to recycle waste cables. Like many other metals, aluminum, copper and steel can be recycled indefinitely. The energy required to extract these metals from an ore is up to 10 times higher than from extracting it from recycling. Adding the fact that there is not an unlimited amout of copper resources, there is no reason why it should not be recycled.

World's largest manufacturer

ELDAN Recycling is a world leading manufacturer of cable recycling equipment. Including REDOMA Recycling, we have by far the best range of equipment for small, medium and large capacity facilities.

ELDAN has been active within cable recycling for more than 60 years. What started with cable cutters has expanded into including cable strippers, alligator shears and ACSR shears as well as machines and complete plants for processing of cables. Since copper and aluminium is 100% recyclable without loss of quality, recycling of cable has always been a popular field.

We offer cable recycling equipment and solutions for processing of dry cables, jelly filled telecommunication cables and greasy underground cables. Depending on type of cable processed, a final separation of at least 99.5% clean metal fraction of either aluminium or copper is obtained. We can also offer solutions for separation of cables with mixed metal fractions - for instance aluminium and copper. For further cleaning of plastics ELDAN can offer wet or dry solutions.

Standard plants are offered with capacities ranging from 200-4 000 kg/production hour. These standard plants are the starting point when systems are tailored to suit specific customer requirements - e.g. production capacities from 6 000 to 10 000 kg/production hour, processing of ACSR cable or further reduction of metal losses. The plants/machines are based on ambient mechanical technique for size reduction and separation. No melting or chemical treatment is required.



- Dry cables incl. hairwire, harness wire, communication wire, installation wire, power cables with copper and/or aluminium conductors, copper wire, ACSR-wire and mixed household wire.
- Jelly filled cables
- Underground cables



Depending on your requirements

- Copper
- AluminiumSteel
- Lead
- Plastic

ELDAN benefits

- Extensive experience
- Recycling solutions for all kinds of cable capacities up to 10 000 kg/h
- Superior solutions for recycling of cables with low copper content (<40%)
- High performance
- Low processing costs, power consumption and maintenance costs
- Minimum loss of metals
- Minimum 99.5% metal purity
- All ELDAN systems are tailored to suit your requirements and facilities



1: Multi Purpose Rasper, 2: Overband magnet, 3: Fine Granulator and 4: Separation Table.

Layout example: E3000C



Customer stories on website



Videos on YouTube







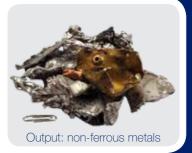














E-WASTE/WEEE RECYCLING

The content of e-waste/WEEE (Waste Electrical and Electronic Equipment) gives recyclers various initiatives for recycling. It contains hazardous substances such as lead, mercury or certain flame retardants, as well as precious metals like gold and silver. In 2012, approximately 64 900 000 tonnes electronic goods where produced and 49 000 000 ton WEEE was generated. As the amount of sold electronic goods rises, so does the amount of WEEE. It is vital that this waste is taken care of properly.

Smart, smooth and tough

The ELDAN WEEE recycling plants are smart solutions for processing of electrical and electronic waste. Our intelligent electrical control makes production flexible, enabling processing of different materials at the same time. The ELDAN Ring Shredder gives a high degree of liberation of the material composed in WEEE, thereby enabling a better final separation and higher metal purity. For further cleaning of plastics ELDAN can offer wet or dry solutions for your requirements. We can also offer a solution for sorting out PCB (Printer Circut Boards).

ELDAN Recycling offers standard and special systems depending on customer requirements in regards to production capacity, input material and output fraction and purity. The systems have capacities ranging from 800-10 000 kg/production hour. These systems are also the starting point when tailoring solutions to customers.



Items in the EU WEEE Directive Annex 1B (except refrigerators/freezers which instead are processed in ELDAN Refrigerator Systems). For example:

Computer scrap

- Small home appliances
- Handheld tools
- Electrical scrap
- Electronic and telegraphic scrap
- Small electrical motors

Output

Depending on your requirements

- Ferrous and/or Stainless Steel
- Non-ferrous metals (from Eddy Current Separator) including Aluminium, Copper, Brass and Printed Circuit Board (PCB)
- Refining material (from Separation Table) containing Copper, Brass, Zinc, Lead and Platinum Group Metals (PGM)
- Organic fraction with plastic, rubber, tree, textile etc.
- Dust

ELDAN benefits

- High performance
- Low processing costs
- Low power consumption
- Low maintenance costs
- Metal fraction suitable for selling to copper smelters and precious metal refineries
- Minimum loss of metals
- Ambient mechanical technique for size reduction and separation
- Efficient material liberation ensures superior final separation
- Minimal dust and fines
- Eldan plants are tailored to suit your requirements and facilities



Customer stories on website



Videos on YouTube



Shredder, 2: Electro Magnet, 3: Eddy Current Separator (ECS), 4: Tumble Back Feeder,
 Multi Purpose Rasper, 6: Overband Magnet, 7: Heavy Granulator, 8: Air Separation Table and 9: Classifier

Layout example: e-waste recycling





















REFRIGERATOR RECYCLING

Like the other items in the EU WEEE Directive, this waste type is increasing in amount each year. Basically all homes have at least one refrigerator which eventually will stop working.

About 3/4 of a refrigerator consist of metal and plastic which are easily recycable. The insulation made of polyurethane foam can be reused as e.g. fuel. The refrigerants are potent greenhouse gases. Refrigerants in older equipment damage the ozone layer. Therefore, it is vital that refrigerators are recycled properly.

A safe way of recycling refrigerators

The ELDAN refrigerator recycling plant is designed for processing refrigerators operating with CFC (chlorofluorocarbon)/pentane gasses in order to prevent harmful substances to evaporate into the atmosphere and to achieve the most efficient recycling of the solid materials. A complete refrigerator recycling system includes everything from pre-chopping to separation of the material. The standard systems can handle up to 80 refrigerators/production hour.

The system downsizes and separates the refrigerator into ferrous (smaller than 30 mm, ready for re-sale), PUR-pellets (usable for incineration plants, rest gas in the pellets less than 0.2%), organic fraction (mostly plastic smaller than 30 mm, ready for re-sale) and non-ferrous metals (smaller than 30 mm, ready for re-sale).



- Refrigerators with CFC/pentane gasses/fluid <2000x1200x1000 mm).
- Larger refrigerators (>2000x1200x1000 mm) size reduced prior to processing.



Depending on your requirements

- Fe fraction
- PUR-pellets
- Organic fraction Non-ferrous metals
- Oil and CFC/pentane/butane gasses

ELDAN benefits

- Completely closed system
- High recovery rate of CFC, plastic, Fe, Al
- High performance
- Low processing costs
- Low power consumption
- Low maintenance costs
- Ambient mechanical technique for size reduction and separation
- ELDAN plants are tailored to suit your requirements and facilities
- The modular concept behind the ELDAN plants enables you to adapt your production output fraction to specific customer demands



Videos on YouTube

Customer stories on website



Pre-Handling

Layout example: refrigerator recycling

1: Pre-handling, 2: CFC/Oil Suction Unit (de-gasification), 3: Super Chopper and 4. Multi Purpose Rasper, 5: Zig-Zag Wind Separator, 6: Pelletizer and Pellet Press (PUR), 7: Overband magnet, 8: Eddy Current Separator and 9: CFC/Pentane Liquefaction System (de-gasification).























ALUMINIUM/ MAGNESIUM RECYCLING

Aluminium and magnesium items are eminently suited for recycling. Aluminium can be recycled infinitely without losing quality, and recycling an aluminium beverage can saves 95% of the energy used for making an aluminium can compared to making it from raw bauxite. If not recycled, it takes 80-100 years for an aluminium can to break down in a landfill. Rejected die cast magnesium parts can be size reduced into a homogeneous fraction size suitable for logistics tasks or for direct re-melting of rejected castings (to increase the yield and reduce the energy consumption).

Aluminium can be recycled infinitely

ELDAN Recycling offers aluminium and magnesium recycling solutions with capacities ranging from 1 000-12 000 kg/production hour. Typical input material is soft or hard aluminium material, clean as well as contaminated material. The output material will be clean-cut aluminium.

Leading smelters of aluminium and magnesium testify that the output fractions from the ELDAN recycling systems are of the highest standards and quality.

MInput

- Soft and hard aluminium items clean as well as contaminated material e.g.
 - Sheets
 - Blanks Profiles Litho
 - Castings
 - Turnings
 - Foils
 - UBC (used beverage can)
 - › Old rolled aluminium
- Rejected die cast magnesium parts

Output

- Clean-cut Al-material as shreds, chips and various size granulate
- Clean-cut Mg-material as shreds, chips and various size granulate

ELDAN benefits

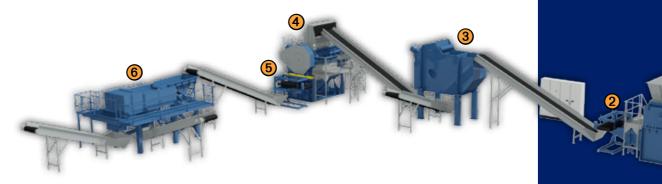
- High performance
- Low processing costs
- Low power consumption
- Low maintenance costs
- ELDAN plants are tailored to suit your requirements and facilities
- The modular concept behind the ELDAN plants enables you to adapt your production output fraction to specific customer demands
- Homogeneous output



Customer stories on website



Videos on YouTube



- 1: Super Chopper, 2: Overband Magnet; 3: Airvib separator; 4: Multi Purpose Rasper,
- 5: Overband Magnet and 6: Eddy Current Separator













MUNICIPAL SOLID WASTE / MSW RECYCLING

During recent years, the importance of alternative energy sources has become increasingly apparent. With the ELDAN Recycling System for MSW (Municipal Solid Waste), you can turn loose, baled or bagged waste like non-recyclable plastics, paper cardboard, mattresses, carpets, etc. into energy in the form of RDF (Residual Derived Fuel). RDF exploits the energy content of the traditional household waste (MSW) to substitute traditional fuels, thus posing an alternative that is attractive both environmentally and economically. Before the waste can be used as fuel however, it must be sorted and volume reduced into a homogenous fraction size of e.g. <50mm / <2 in.

From waste to energi

By downsizing the waste in the ELDAN MSW Recycling System, liberated ferrous metals, heavy materials (stone, brick, iron) and wet material with low calorific value (<13 MJ/kg) can be removed. The final product (approx. 75% of input material) is RDF with a high calorific value at approx. 26-28 MJ/kg, perfect as fuel for e.g. producing electricity, firing cement kilns, etc. Depending on the specific customer requirements, the ELDAN MSW Recycling System can be tailored to fit the demand. The modular build enables the possibility of upscaling production in the future.



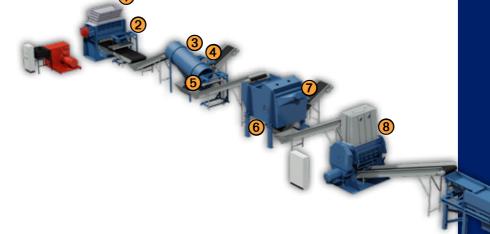
- Municipal solid waste e.g.
 - Plastic wrappings
 - Plastic film
 - Paper
 - Madresses
 - Carpets



- High calorie material (26-28 MJ/kg)
- Low calorie material (<13 MJ/kg (WET))
- Aluminium
- Ferrous
- Heavy material (stones, bricks, iron etc.)



- High performance
- Low processing costs
- Low power consumption
- Low maintenance costs
- ELDAN plants are tailored to suit your requirements and facilities
- The modular concept behind the ELDAN plants enables you to adapt your production output fraction to specific customer demands
- Homogeneous output which reduces your energy costs in the melting process





Customer stories on website



Videos on YouTube

1: Super Chopper, 2: Magnet, 3: Drum screen, 4: Magnet, 5: Magnet, 6: Airvib separator,

7: Magnet, 8: Heavy Granulator and 9: Eddy current separator.

Layout example: MSW recycling



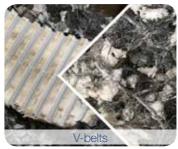














RECYCLING OF VARIOUS **MATERIALS**

Recycling is not about trash, but about valuable commodities being saved from going to to waste. With the increasing consumption habits of the global population and their steadily increasing amount of waste, we need to get creative about what is recycled and

From waste to fortune

Where some see waste or scrap, others see opportunities. The recycling equipment from ELDAN has converted millions of tonnes of industrial and consumer waste and scrap into valuable resources, thus helping both business and environment. We have the know-how, the experience, the equipment and the capability to help with your specific projects - from small to large scale projects, from designing the recycling system to commissioning, we are there for

All recycling systems developed at ELDAN are designed to meet market requirements and with the customer in focus. ELDAN technology is proven technology. During the years our systems have been developed together with customers located on all continents. From small casino coins and cartridge cases to large wind turbine blades, plaster boards, V-belts and compressors from refrigerators, to name a few - ELDAN has helped develop the solution to meet the challenge!

Depending on the specific customer requirements, the ELDAN recycling systems can be tailored to fit the demand. The modular system design enables the possibility of upscaling production in the future.



- Wind turbine wings
- Rubber thermal lists
- Plaster boards
- Pocket mattresses
- Casino coins/chips/tokens
- Compressors from refrigerators
- Titanium
- V-belts (thermoplastic with steel reinforcement)
- Iron slag from smeltery



Depending on material and your requirements

customer demands Long recycling experience from various

- Multi-size, flexible machines
- High performance
- Low processing costs
- Low power consumption
- Low maintenance costs
- Eldan plants are tailored to suit your requirements and facilities.

ELDAN benefits

Tough and well proven machines

plants enables you to adapt your

The modular concept behind the ELDAN

production output fraction to specific



Customer stories



Videos on YouTube

on website

ELDAN SUPER CHOPPER

Heavy duty pre-choppers designed as first step in any recycling process. Available as single or dual rotor.



- RefrigeratorsMSW (municipal solid waste)

















ELDAN MULTI CHOPPER

Electronic and electrical waste (i.e. WEEE)
 Municipal solid waste (i.e. MSW)

MInput

ELDAN RING SHREDDER

Optimum solution for size reduction of light scrap - open material and liberate metals.















ELDAN TWIN SHAFT

Manager 1985 | Input







ELDAN MULTI PURPOSE RASPER

Heavy duty rasper for initial size reduction. Also available with hydraulic drive.



- Industrial wasteOil filters



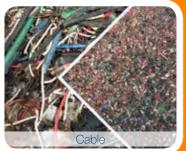














ELDAN RASPER



- WEEE (electronic and electrical waste)







ELDAN FINE GRANULATOR

ELDAN HEAVY GRANULATOR

MInput

Ideally suited for the initial stage of granulation. Screens with different hole sizes available to

Aluminium scrap (all types)
Shredder light fraction (SLF/ASR)
Municipal solid waste (i.e. MSW)

Optimal solution for the final granulation step. Screens with different hole sizes available to











Time is money - reduce downtime!

During the past 60 years, we have sold thousands of systems and machines to companies worldwide. One thing which they all have in common is that they do not like unnessesary downtime. And we don't like unhappy customers, which is why we do everything we can to help you prevent that. The ELDAN after-sales team is your reliable partner.

- service on new and existing equipment planned or ad hoc
- service contracts to keep your production running without sudden interruptions.
- spare and wear part contracts avoid loosing valuable production time on waiting for spare parts you know you will need.

In 2016 we delivered more than 25.000 knives and 200 screens to customers in 47 countries. By dealing in these large quantities we are able to offer you original high quality spare and wear parts at a highly competitive price - always in stock. That is not too good to be true.

Why Eldan After-Sales Services?

- We know your equipment! Since we designed, built and installed your equipment, we know what you need and when. Why make it harder than it has to be?
- We always have your parts in stock. Since we always have your spare and wear parts in stock, we can ship day to day, and you do not have to wait for months to start production again. If you want to ensure minimal downtime, we offer you flexible spare part
- We can offer you competitive prices. Since we are ready to serve all our customers with nessesary parts, we order larger quantities, and therefore are able to keep prices down.
- We supply you the original, highest quality. Like with any other investment, regular maintenance is the key to keep up quality long term. Always go for original quality.





