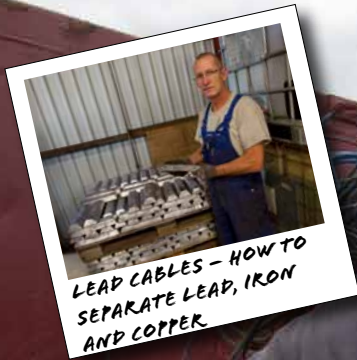
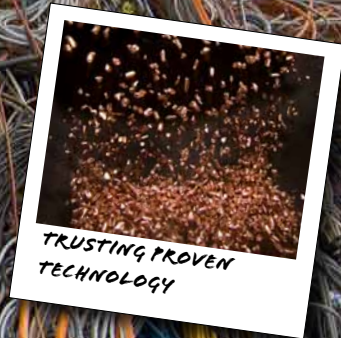


THE ELDAN RECYCLING *ScrapBook*

Autumn 2010



LEAD CABLES - HOW TO
SEPARATE LEAD, IRON
AND COPPER



TRUSTING PROVEN
TECHNOLOGY



A LOOK IN THE
REARVIEW MIRROR



PIONEERS WITHIN
WEEE RECYCLING



INTELLIGENT RECYCLING
- MODERN TECHNOLOGY



PURE RUBBER,
- CLEAN STEEL

 **ELDAN**
RECYCLING



Toni Talks

Recycling machines for demanding materials is very challenging both for the manufacturer and for the processor. Eldan Recycling has been in the global market of recycling machinery for many years and we have learned the lesson and gained the experience on how to manufacture, sell and commission heavy duty machinery for the demanding scrap processing industry.

Eldan Recycling is today present in the entire world and during the last 12 months we have sold Eldan equipment/ parts to more than 70 countries and our technicians have in the same period of time been on all continents installing and servicing Eldan equipment.

In order to service our customers and to support the several hundreds of machines that are running all around the world Eldan need to have a growing organization. We are constantly growing and developing our organization. Our mission is to be there for our users when they need us to be there.

A stylized, handwritten signature in white ink, consisting of a large 'T' and 'R' with a horizontal line extending to the right.

Toni Reftman
Managing Director

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or if you have any suggestions for upcoming issues please
mail us at newsletter@eldan-sr.com

ELDAN *In Brief*

WWW

New homepage

Eldan has finally changed its design on the homepage. During the autumn additional features will be added. To give you a teaser there will for example be exciting videos, interesting case stories and a lot more. Visit us at:

www.eldan-recycling.com

You Tube

Updating video archive

The new marketing department has begun the work to update the video archive. To see the videos visit Youtube.com (and search for Eldan Recycling) or visit our homepage (and see the specific recycling area).

New Eldan Test Centre

If you are curious to know what kind of output you would get if processing casino coins, wings of a wind mill or the material of your choice, in one of our machines, or plants, you are now able to try it out in our Test Center in Faaborg, Denmark. To find out more, and to book a date for the testing, please contact our head office.

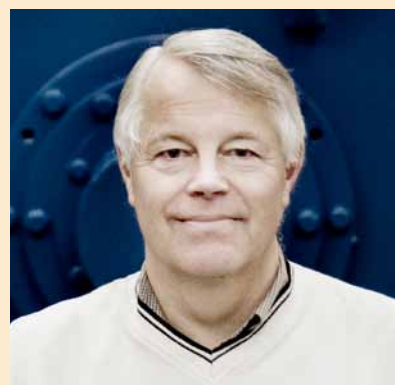
Retirements

Unfortunately some employees with invaluable experience will retire this year. We would like to wish the best to:

Mr Steen Laursen, was the managing director at Eldan for 25 years. In the end of 2009 he retired from Eldan. Read more about his years at Eldan and some important milestones for the company in the article "A Look In The Rear View Mirror" (page 34).

Mr Kaj Hansen, who worked as blacksmith in our production facility at Eldan Recycling. He has done an impeccable job for more then 38 years. On the 30th of April 2010 he retired from this job.

Mr Bertil Eklöv, currently product manager for WEEE and cable recycling will retire after more then 22 years within Eldan Recycling and Scandinavian Recycling. He started his career within recycling in 1983 as a plant manager at STC Recycling in Landskrona, Sweden. STC processed cables, WEEE and mixed industry scrap. In 1988 he became a purchaser at Scandinavian Recycling. He later became both technical administrator as well as technical manager. In 1999 Scandinavian Recycling merged with Eldan Recycling, and Mr Eklöv became Project Engineer and Branch Office Manager of the Swedish Malmö office. Due to restructurings in 2005 he instead became Product Manager for WEEE and cables. He will leave this responsibility to Mr Flemming Hansen when he retires in the end of 2010.



Anniversaries

We are proud to have a large number of long serving staff at Eldan. We would like to congratulate:

10 Years

Mr. Jan Rasmussen, installation and assembly department,
Mrs. Birgitte Waldorff, business administrations department,
Mr. Per Munk Ejlsborg, installation and assembly department,
Mr. Niels Jørgen Knudsen, service department, and
Mr. Torben Birkemose, machine department
for their **10** years at Eldan.

25 Years

Mr Jørgen Pedersen, installation and assembly department,
for his **25** years at Eldan.



Strengthening the marketing department

"We would like to welcome

Mr. Jens Ekberg as Art Director and Marketing Coordinator, based in Sweden and Denmark. Jens has a background within the advertising- and marketingworld. The last five years as a freelancing Art Director prior to that he worked four years as Art Director at Axis Communications. He will be responsible for the graphical design, photography and video.

"We would like to welcome

Ms. Ulrika Persson as Sales- and Marketing Coordinator, based in Sweden and Denmark. Ulrika has a background with marketing and project management in the toy, clothing and concrete industry. She will be responsible for our presence at exhibitions, on internet and in media, as well as sending out the newsletters and the Eldan ScrapBook



Eldan reinforces in the DACH-region

Eldan has appointed **Mr. Dieter**

Jersch as Sales Manager for Germany, Austria and Switzerland. "The new sales office in Düsseldorf, Germany, is the logical next step due to the rising inquiries from this region" says Toni Reftman, managing director at Eldan Recycling.

Due to the increasing demand in the German speaking recycling market Eldan has reinforced its sales activities. Dieter Jersch joined Eldan on 1st April and will head up the new sales office in Düsseldorf. In conjunction with our existing sales partner Erich Niebuhr GmbH in Rheinland-Pfalz, Dieter Jersch will coordinate all international sales activities in the DACH-region.

Toni Reftman, Managing Director of Eldan Recycling A/S advises "We are pleased that Dieter Jersch has agreed to join our team. He has a successful background within the recycling plant industry at Vecoplan AG, in a leading sales position and brings with him a proven expertise within the recycling industry with many years experience. The establishment of the new sales office in Düsseldorf, Germany is further evidence of Eldan's development program to enable it to meet the increasing demand for our products, services and solutions. We look forward to an exiting future together."



US strengthens sales

We would like to welcome

Mr. Scot W. Mountcastle to our North American Sales Department. Located in Texas, Scot will be reporting to John Crowley our North American Sales Director. Scot comes to us with 25 years of sales and marketing experience. Scot is responsible for working with new and existing customers to help build and expand Eldan's presents in North America.

Eldan keeping fit

Our head quarter in Denmark keeps in good shape and in a great mood. During the spring and summer of 2010 the employees has run in three races; Lillebaelt halvmaraton (21,5 km), Eventyrløbet (10 km) and DHL Staffet (5,1 km, 4 teams). In the Lillebaelt halvmaraton the competing gentlemen arrived within the first 1/3 of 10.000 competeters. In the DHL Staffet four Eldan teams (The Super Choppers, The Raspers, The Shredders and The Fine Granulators) competed against each other and other teams.



Introducing the brand new:

Micro Module

Since the beginning (in 1956) Eldan Recycling has produced equipment for recycling of cables. The company started off by producing cable strippers, shears etc and has since then developed machinery and plants for further granulation and separation of cables. During later years we learned that there is an increasing demand for cable recycling equipment for smaller quantities. Eldan is proud to present to you the brand new Micro Module.

Within the range offered for processing of cables there are plant for processing dry cables jelly filled telecommunication cables and greasy underground cables.

We offer standard cable plants with capacities ranging from 400 kgs and up to 4 tons per processing hour. However, we have sold and erected cable plants with capacities of up to 6 – 8 and 10 tons per processing hour. During the years we have delivered several hundreds of plants and single machines for cable recycling.

The standard setup includes a Rasper, a Granulator and a Separation Table. This is also the starting points when plants are tailored to suit specific customer requirements. The standard Eldan equipment is designed to meet market requirements, thus the individual machines can easily be adjusted to various types of dry cables such as hair-wire, harness wire, communication wire, installation wire, power cables, aluminium wire, copper wire and mixed household wire. We have also additional plants for processing of greasy underground cables and jelly filled cables.



The Micro Module

Eldan has been producing recycling equipment for cables for more than 50 years. Over the last few years we have had an increased interest from our customers for cable recycling plants for smaller input capacities.

“To meet the demand for cable processing plants for smaller quantities we have developed the Micro Module. Our customers do not wish to set aside the quality of the output, just because they have a smaller input quantity” says Flemming Hansen, Product Manager for cable recycling at Eldan Recycling.

The Micro Module has an input capacity of 150-200 Kg per production hour. The input material is dry, pre-cut cable without steel and with a maximum diameter of 15-20 mm and a maximum length of 300-400 mm.

The micro module only process dry cables. These cables usually have copper or aluminium conductors and plastic, rubber or paper insulation. The cable types to be processed in a Micro Module are for example communication wire, installation wire, power cables

with copper or aluminium conductors, copper wire and mixed household wire.

The main key machines in an Eldan Micro Module consist of a Granulator, a Separator, and a Filter. Installed power is 22 Kw.

The Micro Module is designed to fit in a 20-foot open top container or on a truck and can easily be handled with a forklift. The Micro Module can achieve a metal purity of approx. 99,5%. With an Eldan Plant, you also get the reliable Eldan backup.

The Micro Module will be presented at the IFAT ENTSORGA exhibition in Munich, Germany. From the 13th to the 17th of September, 2010, you will find us in booth C2-409.

More Information

If you want to know more about cable recycling or the Micro Module in particular, you are welcome to contact product manager Flemming Hansen (flh@eldan-sr.com).



Trusting Proven

Sepchat group specialises in the recovery of ferrous and nonferrous metals by offering a complete solution, containing services and waste recycling, to companies, communities and individuals. During 2005 Sepchat decided to expand its activities to include cable recycling, which was an area that had not been explored by them before.



Technology

Customer Requirements

During 2005 Sepchat decided to expand its activities and acquired the a facility in Bonneval. They decided to invest in cable recycling, which was an area that had not been explored by them before. At this time there where no competition within this field in the area.

The company wanted a flexible plant which also could process other things than just cables. The company wanted to process different kind of copper and aluminium cables, as well as light iron and aluminium scrap. All the material is to be fed with grab. The planned process capacity was about 150-200 tons per month (2,5 tons of input per processing hour). The desired

output size was maximum 1-5 mm. They had heard good things about the Super Chopper, and were very interested in that as well.

Eldan Solution

During the exhibition Pollutec in Lyon, 2005, Sepchat got in contact with Eldan Recycling, and soon after a visit to one of the reference factories in Denmark was arranged. After having seen the reference factory they decided to “upgrade” the line that they first had in mind. They wanted stronger machines (a HPG instead on a Rasper1207), to have the opportunity to process heavier materials. They acquired one Cable Shredding Plant and one Cable Granulation/Separation Plant was ordered.

“Even though we had no experience ourselves from this kind of mechanical processing, it is easy to feel secure with a manufacturer with so much experience. Eldan taught us much about recycling, and recycling equipment”

Mr. Sautier, purchasing manager at Sepchat

These two plants are two stand alone units, but are also built to work together.

The cables are first processed in the Cable Shredding Plant (type A-SC1412) which basically chops the cables down to smaller pieces, shreds. The input material consists of mixed dry copper cables with diameters up to 100 mm. The input load is up to approx. 10 tons per processing hour. The output is cable shreds between 0-300mm. The size reduction makes them easier to process in the Cable Granulation/Separation Plant, and therefore increases the plant capacity.

The cable shreds are then processed in the Cable Granulation/Separation Plant (type E2500C) where the material is downsized in 2 steps into pieces with a approx. size of 4-7 mm. The input capacity is up to an approx. 2,5 tons per processing hour depending type of cables. The plant type E2500C is a standard plant tailored to suite recycling of cables. The plant includes for example a Heavy Pre-Granulator (type HPG125), an over band magnet, a Fine Granulator (type FG952), a Separation

Table (type C22), various conveyors and filters. The Heavy Pre-Granulator is made of wear resistant steel, has screens with different hole sizes and the high inertia gives an even load of the machine. It ensures individual size reduction down to approximately 15-25 mm fraction sizes. The Fine-Granulator is a single shaft Fine-Granulator for final granulation of the cables. Fraction sizes are typically between 4-7 mm granulate. The Separation Table is the equipment for the final separation of material into a 99,5% (or better) clean metal fraction. The plastic fraction contains typically 2-5 % metals and is subject to further cleaning, dry or wet.

Comments

Sepchat chose Eldan as its manufacturer due to the fact that they had equipment which fulfilled their expectations. “I believe that the visit at the reference factory was the deciding factor in this case. They were impressed by their composition of machines, and it had a big influence in their decision making process” says Christian Duffau, commercial director for Eldan France.



“We have felt satisfied with Eldan during the entire project phase” says Mr. Sautier, purchasing manager at Sepchat. “Even though we had no experience ourselves from this kind of mechanical processing, it is easy to feel secure with a manufacturer with so much experience. Eldan taught us much about recycling, and recycling equipment”.

“We are very impressed by the professional attitude that Sepchat has when operating the two Eldan lines. They are careful with the pre-sorting of the input material to secure the quality of end products.” says Bertil Eklöv, product manager for WEEE and Cables at Eldan Recycling. “They have a division of labor where one person handles all tasks in the granulation / separation plant from the weighing and feeding of the input material to weighing of the output fractions. Three people sort all the cables and operate the SC1412 line for preparing the cables going into the granulator/seperator line. Sepchat has well functional routines that secure the quality of the end fractions”

Sepchat

Located in: Bretagne, Centre, Paris regions, France

Founded: 1947

Turn over: € 16,8 M (2003), € 55 M (2008)

Employees: 80 people (2004) and 150 people (2008)

Sepchat group specialises in the recovery of ferrous and nonferrous metals by offering a complete solution, containing services and waste recycling, to companies, communities and individuals.

The company was founded little over 60 years ago. In 2008 the Sepchat Group was dissolved when the SLG recycling-group (Sepchat-Le Gall) was formed. Today SLG recycling (managed by Jean-Philippe and Philippe Le Gall) include seven companies and 17 sites based over three regions in France.



Lead cables – lead,

If you are in the market to find a company authorized to melt lead cables there is only one place to look – Hals Metal A/S in Denmark. They are one of the few companies worldwide with permits to melt lead cables. Getting this permit was however not easy, but with a big patience and an environmental expert anything is possible.

Hals Metal A/S is active within recycling of transformers and casting containing lead, lead production, and trading in a large number of materials. This is one of few companies in the entire world who has the permits to melt lead cables.

Customer Requirements

In 1987 Mr Niels-Christian Nielsen started to investigate how to get a permit for burning cables. Together with an environmental expert, and much administrative paperwork they finally got the governmental permit in 1988. To melt lead permits are mandatory and the company is comprised by the environmental protection act. The authorization was provided by Nordjyllands Amt (Denmark), the environmental authority. Lead overexposure is one

how to separate iron and copper



of the most common overexposures found in industry and is a leading cause of workplace illness. It is also a major potential public health risk. In general populations, lead may be present in hazardous concentrations in food, water, and air. It damages the nervous system and causes brain disorders. Excessive lead also causes blood disorders. Because of its hazardous nature many safety precautions are taken at Hals Metal.

When processing lead cables the cables are first pre-cut into smaller pieces (<1m). The lead is then removed by melting it in a furnace. The lead melt already at 327,5 degrees Celsius (621 degrees Fahrenheit) while iron melt at 1536 degrees Celsius (2797 degrees Fahrenheit) and copper at 1084 degrees Celsius (1983 degrees

Fahrenheit). While the lead melts away the paper burns up, and just the rest of the cable remain. The lead it now ready for sale. It is the remaining of the cable (consisting of copper and iron) which is the problem. The copper and iron was then separated manually with a screen and suction. This was however hard, and time consuming labour.

Hals Metal A/S needed equipment that separates the iron from the copper in a ready to sell quality. The desired input capacity was 3 tons per processing hour. Since Eldan had done a lot of business with the former owners of Hals Metal, it was natural for the Hals Metal to ask Eldan for advice when looking to purchase equipment to expand the capacity.

“...it is important for us to have good service at all times. When we need new spare and ware parts, we know that they are only a few hours away.” John Bjeldbak, manager, Hals Metal A/S

Eldan Solution

Hals Metal A/S had previous knowledge of Eldan and its recycling equipment, which resulted in them initiating contact in 2009 to find a solution. “When Mr John Bjeldbak contacted me I immediately felt that it was a fun and interesting project. We had done business together before, and as far as I know they are the only lead cable melting company in the entire world.” says Jan Kjaer, product manager for various scrap processing at Eldan Recycling.

The idea was to find equipment which would separate the remaining copper and iron. In 2010 an Eldan S1000HammerMill was acquired, to separate these materials. First the cable would be pounded into pieces, and then the iron could be removed with a magnet. Remaining after the magnet was the copper. After being processed in this machine both the iron and copper was in ready to sell quality (size <25mm).

Comments

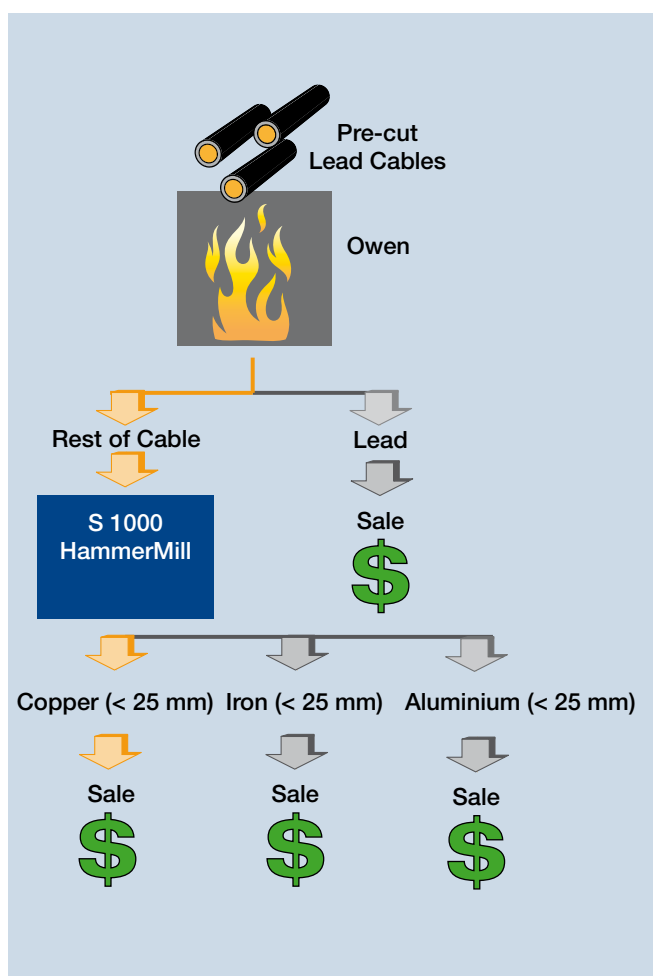
Today Hals Metal mostly purchase lead cables from other companies for own processing and recycling. It is however not uncommon that their services are hired by other companies for processing in Hals Metal’s facilities. Their main office is in Denmark, but they also have a

sub office in Germany. Their main markets for business are Norway, Sweden, Denmark and Germany.

“There were two main reasons for us choosing Eldan as the manufacturer. First of all we knew of them from before. They have a good reputation in the industry, and we also have previous experience from their equipment” says John Bjeldbak. “Second, it is important for us to have good service at all times. When we need new spare and ware parts, we know that they are only a few hours away.”

“Since we are the only authorized lead cable melter in the market, business is going well. We are currently modernizing our furnace system to increase the processing capacity. The modernized furnace system will have a capacity of 3,6-7,2 tons per processing hour. Working seven days a week in three shifts, it can be as much as 27.000 – 54.000 tons a year, which is a huge increase compared with the max 3.600 tons processed in the old system” says John Bjeldbak.

“It is great to see that Hals Metal is doing so well. We have been in contact with them for a long time, and look forward to future contact as well” says Jan Kjaer.



Hals Metal A/S

Located in: Hals, Denmark with an sub office in Süder Lögum, Germany

Founded: 1988

Sales: DKK60-110 millions (depending on the metal price and market situation)

Employees: 13 (3 owners and 10 employees)

Hals Metal A/S was founded in 1988. Today it is a modern recycling company which has strong, collaborative partners in the area of recycling, lead production, and trading in a large number of materials. The company is an environmentally approved recycling company which is able to handle all kinds of iron and metal for recycling purposes. The trading department takes care of the buying and selling of metals etc. They buy e.g.: cables, pure metals, refined metals and electronic scrap. In 1992 the company was sold to NKT. In 2002 the company was bought back by three of the company's managerial member of the staff - John Bjeldbak, Carsten Henriksen and Mogens Mortensen. John Bjeldbak is the son of the founder. Carsten Henriksen is the son in law of the founder.

To melt lead permits are mandatory and the company is comprised by the environmental protection act. The authorization is provided by Nordjyllands Amt (Denmark), the environmental authority.



Pioneer WEEE r

In a scrap yard in Switzerland right in the middle of the beautiful Alps you can find one of Eldan Recycling's most cherished and faithful customers – Cablofer Recycling SA. Cablofer was actually one of the first companies within the WEEE-recycling industry.

Cablofer Recycling SA is a scrap metal processor dealing with ferrous and non-ferrous scrap on a 40'000 m² plot in Switzerland. They collect scrap from companies as well as from the general public.

Customer Requirements

In the beginning of the 1980's Cablofer re-thought the concept of having a scrap yard. Scrap does not have to be worthless just because it already has been used. At this time national telecom-companies started to change from electromechanical switchboards to computerized switchboards. As the old switches were very big and contained a lot of metals such as steel, copper, aluminium, brass and precious metals Cablofer realized that this was going to turn into a gigantic pile of scrap with high value. They knew that they had a large problem, and opportunity, in front of them, but did not know how to solve it.



s within ecycling

This was the first time that they got in contact with Eldan Recycling. Eldan Recycling was also convinced that there was a potential in this market, if it was possible to collect the valuable parts in the electronic equipment. By first crushing the electromechanical equipment into little pieces, and then separating them, it would, at least in theory, be possible to sell the different materials at a higher price. To see if this was actually possible Eldan contacted five interesting companies to try out the idea. Cablofer was one of five companies which were contacted, and naturally they wanted to be a part of this adventure.

Eldan Solution

After the first meeting with Eldan, Cablofer immediately realized that this was the kind of idea they had been looking for.

In 1982 Cablofer ordered a standard WEEE (Waste Electrical and Electronic Equipment) plant to take care of the telegraphic scrap that they had piled up in the yard. This standard WEEE plant included a Ring Shredder (Becker 4800), Overband Magnet, Drum Wind Separator, Granulator and Separator as well as conveyors and filter. The plant first shredded the input material into small pieces (< 8-10 mm) in the Ring Shredder and Granulator. It then separated the material into organic material, and non-ferrous material and precious metals.

For oversize input materials Cablofer used an existing Guillotine Shear to cut down the electromechanical switchboards to a suitable size before feeding the WEEE line.

Three years later they purchased a Super Chopper (SC1412) in order to increase the capacity of their exist-

*“...we’ve had
Super Choppers
continuously
running outdoors,
hassle-free for
over 19 years”*

Theo Gertsch, Plant Manager, Cablofer Recycling SA



ing cable recycling plant. By reducing the size input material before putting it into the cable plant, it is possible to both take in larger cables (which can only be shredded in the Super Chopper), but you can also process higher capacity in the cable plant.

From 1989 to 1990 they added to their cable recycling deposit by acquiring a Rasper (Rasper1200) and a Separator (C22). The Rasper is the ideal solution for preparing for instance cables for granulation. It has adjustable knives and screens with different hole sizes are available. The Separation Table is a key machine in cable (and other metal) recycling, since its well balanced combination of air flow and oscillating movements produce an effective separation of metal and insulation.

Over the next two years two Water Separation Tables (one for cables and one for WEEE) was purchased. The Water Separation tables are a highly efficient solution to recover metal dust and fine wires from the plastic fraction after your metal separation.

The two following years an ACSR shear (M16-2) was purchased for the cable recycling plant as well as a Heavy Granulator (HG122) for the WEEE recycling plant. The ACSR shear (M16-2) is the perfect solution when processing aluminium cables with steel when this type of scrap is coming on reels or drums. (ACSR = Aluminium

Cable Steel Reinforced). The Heavy Granulator is ideally suited for granulation of pre-chopped cables. It has straight block knives in exchangeable cassettes and friction clutches protect the drive system from momentary overload.

In 2001 Cablofer decided to upgrade its recycling equipment and facilities, and a new Eldan WEEE plant was purchased. All together one Ring-Shredder (S1500), one Heavy Pre Granulator (HPG165), two heavy granulators (HG122) and a separation table (C26) was delivered.

Eldan Equipment at Cablofer

- 1982:** WEEE Standard Plant
- 1985:** Super Chopper (SC1412) - Cable
- 1989:** Rasper (1200) - cable
- 1990:** Separation Table (C22)
- 1990:** Water Separation Table (WST) Plant - Cable
- 1991:** Water Separation Table (WST) Plant - WEEE
- 1992:** Aluminium Cable Steel Reinforced Shear (ACSR shear M16-2)
- 1993:** Heavy Granulator (HG122) - WEEE
- 2001:** WEEE Plant (S1500 + HPG165 + 2 x HG + C26)
- 2005:** Aluminium Cable Steel Reinforced Shear (ACSR Shear M16-2)
- 2006:** Fine Granulator (FG952)



“The reason Cablofer upgraded its equipment in 2001 was because they needed to increase their capacity, and wanted to incorporate some new technologies (Eddy Current Separators). The old equipment was sold on the second hand market - almost 20 years after it first was purchased” says Bertil Eklöv, product manager for WEEE and cables at Eldan Recycling.

In 2006 Cablofer purchased yet another ACSR Shear M16-2.

During 2006-2008 the company wanted to increase the capacity of the cable plant and acquired one Fine Granulator (FG952), a Super Chopper (SC1412), a Heavy Pre-Granulator for cables (HPG165) and a Heavy Granulator also for cables (HG129).

During the 30 years since the first contact between Eldan Recycling and Cablofer, equipment for both Cable and WEEE recycling equipment has been delivered by Eldan on a regular basis. This equipment is listed in the table on the opposite side. The table does however not include spare and wear parts.

Comments

Cablofer was one of the first companies in the world to process and recycle what is today known as WEEE. Since the first contact the relationship

between Eldan and Cablofer has flourished. This is demonstrated by the fact that Cablofer continue to install Eldan equipment for the processing of Cable and WEEE scrap.

“We are very happy with the good relationship Eldan Recycling has with Cablofer Recycling, it has been a rewarding and pleasing cooperation for both parties during all these years and we will do our best to maintain this in the future” says Bertil Eklöv.





“It’s like buying a 700-series BMW or a Swiss mechanical watch like say a Rolex or a Breitling. They’ll be with you for a lifetime.”

Theo Gertsch, Plant Manager, Cablofer Recycling SA

Cablofer is very satisfied with their equipment purchased from Eldan Recycling. The quality is good, and with the continuous maintenance, it lasts for a very long time. “The initial investment is perhaps bigger, but we’ve had Super Choppers continuously running outdoors hassle-free for over 19 years” says Theo Gertsch, plant manager at Cablofer Recycling. “Eldan is not expensive, it’s like going to the butchers, you will get a lot of the best meat for your money. Counting by the numbers of kilo — it’s on the contrary, then Eldan is great value for the money”

Cablofer Recycling has continued to purchase equipment from Eldan Recycling even though a number of new machinery manufacturers have entered the market over recent years. “It’s like buying a 700-series BMW or a Swiss Mechanical Watch, say a Rolex or Breitling, build quality is superior and they stay with you for a lifetime” says Theo Gertsch.

Cablofer Recycling SA

Located in: Bex, canton of Vaud, Switzerland

Founded: 1972

Sales: CHF 56 Millions (2008)

Employees: 47

Cablofer Recycling SA is active within non-ferrous and ferrous metals, scraps (scrap shear 800 tons) all over Switzerland, and in western France. The factory (in Bex) is implanted since 1972 on a site of about 40 000 m² well connected to railways and highways. In 2008 the largest materials sold by trading at Cablofer Recycling SA was Iron, Copper, Aluminium and Lead. Potential customers are Chemical, electro-mechanical, electronic, aluminium, building industries, All kinds of merchant (big to small) and privates, Communities, Electrical services and companies and Railway company and some other transport companies.



Pure Rubber, Clean

Tyre recycling plants from Eldan Recycling are all of modular design. Using the modular approach a large number of combinations can be supplied both with regard to the plant capacity as well as the output sizes of the various products.

Eldan Tyre Recycling

The modular approach covers all customer requirements for equipment to process at different levels down the “recycling road”, i.e. production of shreds, chips, granulate and powder – all having their own platform within recycling.

The Eldan Plants are “Multi-Size” Plants giving the customer total control over the production of a various range of output sizes. This is achieved by the simple and quick changing of the screen combination in the machines when you wish to produce a different range of output sizes.

Eldan Recycling delivered and installed its first complete tyre recycling plant back in 1991 and has since then developed and optimised the process to obtain the best possible purity of the rubber granulate. This purity is today very high – up to 99,9% free of liberated steel and textile in the standard plant. This excellent purity is obtained through specially build equipment



Steel

such as classifiers and aspirators that operate by means of the “air flow” principle.

Quality upgrading

Over the years more and more applications for rubber have been developed and concurrently with this the request for a higher purity.

“For this purpose Eldan Recycling has developed the quality upgrading modules enabling an improved purity of both the main fraction and the undersize fraction” says Bjørn Laursen, product manager for tyre recycling at Eldan Recycling.

Pure Rubber

After separation/cleaning in the plant the main fraction is passed through an additional separation process, where pure “black rubber” is separated out and the “light fraction” passes over yet another classifier giving the entire fraction a purity of up to 99,99%.

It is also possible to refine the undersize for possible impurities. In the Eldan quality upgrading module for the undersize, the granulate is passed through an air cleaner, before it proceeds through two further steps of classifiers and aspirators as final treatment giving a purity of up to 99,99%.

Clean Steel

There is also a demand by tyre processors to improve the purity of the steel fraction generated in the recycling of tyres. This involves the reduction of the rubber and textile contamination in the steel fraction which would improve the sales possibilities and at the same time increase the value of the steel fraction.

For this purpose Eldan Recycling has developed 3 different systems enabling purities of respectively 95-97%, 97-98% and 98-99% pure steel. These systems are also of modular design which means that the equipment can be either installed in-line with an existing plant or as a stand-alone system.



The first solution is a very “low-energy” solution, where the steel fraction is passed through a screening system. The oscillating screening system produces a cleaner steel fraction, which is then passed over a magnet system further increasing the purity of the steel.

The second solution has the advantage that it can be installed as a stand-alone unit enabling cleaning of the contaminated steel from a stockpile. The first stage is a Multi Purpose Rasper which size reduces the steel further at the same time liberating more of the rubber content. The Multi Purpose Rasper is fed by a Tumble Back Feeder which ensures optimum feeding of the Rasper. After this initial process the steel is transported to a specially designed magnet system, which “flings” the steel and liberates the impurities during the process. In the final step the steel is passed over a Zig-Zag Separator where the air flow removes the light textile impurities.

The third solution is the “De Lux” version which offers optimum cleaning of the steel fraction. This system also includes the Multi Purpose Rasper for size reduction of the steel as the first stage. After this the steel is passed over the screening system which was mentioned under the first solution. By combining elements from the two first solutions it is possible to obtain the excellent purity of 98-99% pure steel again providing the customers and users with improved and numerous possibilities.


Proven Technology

All the above-mentioned solutions are proven technology as they have all been installed with existing Eldan customers and the results and processes have been tested and developed in co-operation between Eldan and the customers.

If you want to know more about tyre recycling or steel cleaning, you are welcome to contact product manager Bjørn Laursen, (bl@eldan-sr.com).

Imdex A/S

A Win-Win relationship



"Imdex sometimes works like our R & D department. We cooperate with them to optimize our tyre recycling technology and develop new plant solutions. It is a win-win situation as we get our ideas tested, and Imdex always has the latest technology. If we did not have this strong relationship we would not have the customer based solutions that we are able to offer today" says Bjørn Laursen, product manager for tyre recycling at Eldan Recycling.

“It is interesting to see that Imdex has such an innovative vision for the future. The ongoing co-operation between Eldan Recycling and Imdex will be very interesting”

John Hansen, managing director, Imdex

It is not always easy to start up a tyre recycling factory. Sometimes it takes an international professional boxer, and years of legislative lobbying to get it started. At the end of the 1990's Danish international professional boxer Gert Bo worked at a transport company in Jylland, Denmark. At this time there was only one tyre recycler in Denmark, and Mr. Gert Bo saw a large potential in this. Together with his father-in-law Mr. Mogens Tange and the owner of the transport company, Mr. Peter Søndergård, he started to look into this opportunity. The legislations at this time made it harder than they could ever have imagined. In 2002 Imdex A/S was, however, finally established and in September that year was authorized by the Environmental Protection Agency as a receiver of old tyres (Consolidation Act/Lovbekendtgørelse 111 af 20/2 2000).

Customer Requirements

In 2000-2001 Mr. Peter Søndergård (at that time Managing Director) of Imdex contacted Mr. Steen Laursen (at that time Managing Director) of Eldan Recycling to find suitable tyre recycling equipment. IMDEX were finally ready to start the new tyre recycling project, and needed equipment which satisfied their requirements.

Apart from the usual requirements regarding input capacity, output size and quality, Imdex had two major concerns. Firstly the building in which the plant would

be installed already existed – i.e. the plant had to be designed to fit into this building. Secondly, the facility was located in the middle of a city centre area (i.e. not an industry zone). A large supermarket and several apartment buildings were located just 20 m from the factory. Concerns, and demands, from nearby neighbours as well as the Farsø municipality in Denmark regarding noise and vibrations, as well as the small size of the existing buildings, would be a large problem in this case.

Eldan Solution

A close co-operation between Imdex and Eldan resulted in the successful solution with regard to the design of a tailored plant to suit the existing building.

Imdex A/S

Located: Farsø, Denmark

Founded: 2002

Employees: 20

Imdex A/S became in 2002, an authorized receiver of old tyres by the Environmental Protection Agency (Consolidation Act/Lovbekendtgørelse 111 af 20/2 2000).

In 2002 Eldan Recycling delivered a complete E4000T tyre plant together with a complete central filter system. The plant included for example a Super Chopper, a Tumble Back Feeder, a Multi Purpose Rasper, a Silo V4, Fine Granulators and an Aspirator. Since the requirements were very strict with regard to the noise and vibration levels, the main machines were specially vibration reduced. A specially built noise reduction system was fitted around the machines. Instead of filters in relation to the machines, a central filter system was built in a sound proof "cabinet" (12 meter tall and 5 meter wide). Imdex also had to build noise reducing walls around the plant buildings and storage areas. Building the tyre plant took a lot of work, and close co-operation between Eldan and Imdex. The output material was 99.9% free of liberated steel wire and textile.

Comments

Imdex collect the tyres from registered collectors, who in turn collect them from car shops, tyre centres and retreading centres. The collected tyres are sorted, and then processed through the plant into granulate. Today Imdex process about 15.000 tons of tyres each year, which means about 4,0 tons per processing hour, 24 hours a day, 7 days a week. This could be compared with the total amount of old tyres in Denmark a year which is about 40.000 tons.

Imdex is not satisfied being a traditional tyre recycler - they want to be pioneers! In 2009, Mr. John H. Hansen joined IMDEX, for a project to optimize the technical production. In 2010 he took over as managing director. Mr. John H. Hansen aim is to improve the production and optimize product quality. "It is interesting to see that Imdex has such an innovative vision for the future. The ongoing co-operation between Eldan and Imdex will be very interesting" says managing director John Hansen.

Eldan recently used Imdex as a test plant, which mean that the entire plant was at our disposal for tests and interested customers. "This was both an advantage for the visiting customers, as well as for Imdex. The interested customers got an opportunity to see what they are actually investing in" says Henning Nørgaard, territory manager at Eldan Recycling.

"There is a great advantage in the fact that we can try our ideas in reality, scale 1:1. As a result we are able to continually improve our technologies and equipment, as well as to follow the markets increasing demand for performance and product qualities. This ensures that we are always a step ahead of our competition." says Lars Eriksen, technical manager at Eldan Recycling.

"It is a great advantage to have Imdex as a collaboration partner. It is almost like having our own test facility in our back yard" says Henning Nørgaard.

Proven technology (equipment tried out and developed together with the end user) is a "keyword" for Eldan Recycling. Having a collaboration like the one Eldan has with Imdex is then very important. This collaboration with Imdex has given many invaluable advantages. The Imdex plant is often used as a reference and demo plants for new customers. "Since we develop much of our equipment together with them we know for a fact that we have the latest equipment available to show. We also use it as a test plant for both new and current customers. This year we have for example conducted tests for steel cleaning equipment for the largest scrap dealers in Europe. We also develop the machine components (knives, screens etc) together with Imdex. The customer knows what the customer wants. We continuously keep track on the latest production data, and process wear costs" says Bjørn Laursen, product manager for tyre recycling at Eldan Recycling.





Intelligent –Modern

A.T.U Auto-Teile-Unger is a German company specializing in auto retail stores and integrated, brand-independent workshops. Parent company is the A.T.U Auto-Teile-Unger Handels GmbH & Co. KG and for the environmentally friendly disposal of the garage waste

A.T.U has an own subsidiary, the ESTATO Umweltservice GmbH. A.T.U has been active with recycling for almost 20 years.



Recycling Technology

Since 1992 A.T.U has been separating the usable materials from the unusable, and then reusing them in a suitable way. In 2000 ESTATO built up a 50.000 m² big recycling plant with modern recycling technology to make further use of the materials benefits: “Intelligentes Recycling – Modernste Technik” (Intelligent Recycling – Modern Technology). They recycled for example metal scrap (catalysers, brake discs, batteries and so on for sale to scrap dealers), oil filters (for shredding, de-oiling and take out the ferrous-scrap), draining shock absorbers and pressing the package with a baling press to sell the paper to the paper industry. An additional part of the environmental concept was the truck washing machine which works only and solely with rain water. But

definitely the biggest part of the waste ESTATO had to deal with were tyres. They already sorted out the good from the bad ones, and resold the good, and burned the bad in the cement industry. In 2001 they became interested in a better solution and began looking for a way to recycle the bad tyres themselves.

When getting in contact with Eldan Recycling they did not have any special requirements, as they were new within tyre recycling. After discussions they set the input requirement as about 3 tons per processing hour, and the output as different kinds of clean rubber ready to sell. The price level of the equipment should be lower than the larger competitors.



Eldan Solution

Eldan Recycling first got in contact with A.T.U in 2000. It was then owned by Mr. Peter Unger and had about 8.000 employees and 300 shops.

In 2001 A.T.U bought its first tyre recycling plant from Eldan Recycling. It was a standard plant (type E4000T) including among others, a Super Chopper, a Tumble Back Feeder, a Silo V4, two Fine-Granulators and an Aspirator.

In 2002 a second Super Chopper was purchased for the new sorting centre in Werl. The Super Chopper reduced the tyre volume before transport to Weiden, and thereby also reducing transporting costs. During this year the company also purchased a second tyre plant (type D4000T) from Eldan, additional to plant 1. The difference between the first and second plant was basically that they did not need one more Super Chopper, since the first one had the capacity to supply both tyre plants with shredded tyres.

In 2004 the third Eldan tyre recycling plant was purchased. This time they chose the plant including the Super Chopper since the first Super Chopper could only supply two Tyre Plants if maximum capacity was desired.

From 2004-2006 additional cleaning equipment for the plants were purchased. The cleaning equipment consisted of a Gravity Separator (C26), a sorter (PC 1000), a Cyclon cleaner (KIA 20 or 60) and an Aspirator (type 1250). "Since the customer desired higher quality of the rubber granulate we developed additional cleaning equipments (C 26, PC 1000, KIA, ASP) together with A.T.U." says the A.T.U responsible agent at Eldan, Mr Dieter Ickenroth.

In 2006 A.T.U felt that the first tyre recycling facility was becoming overcrowded. A new building was built in close proximity to the first one. In 2006-2007 three new tyre recycling plants (D4000T) were purchased from Eldan for the new building. In 2006 A.T.U

“To be able to run a 24-hour-a-day-business we rely on the guaranteed advice, support and service from Eldan”

Josef Hösl, managing director at Estado Umweltservice GmbH

also purchased wire cleaning equipment (TBF, MPR 120 and Vibro-Separator Magnet) from Eldan. “A.T.U also desired cleaning equipment for wire scrap (TBF, MPR120, Vibro-cleaner, Magnet) which we also developed together with them” says Dieter Ickenroth. “All product development made at Eldan is based in what our customers need. This is the reason why we develop them together with the customers. That way they get exactly what they want and need” says Bjørn Laursen, product manager for tyre recycling at Eldan Recycling.

During 2010 additional wire cleaning equipment will be installed.

From 2001 until 2010 A.T.U has acquired six tyre recycling plants and cleaning equipment from Eldan.

Comments

A.T.U mentions four main reasons for choosing Eldan as the supplier of their tyre recycling equipment.

First A.T.U were convinced that Eldan knew what they talked about when they presented the idea behind the recycling plant. The meeting between A.T.U representative, Mr. Josef Hösl, managing director at Estado Umweltservice GmbH and the agent representing Eldan – Dieter Ickenroth, made A.T.U very interested. The idea behind the plant was intriguing.

Second they were interested in the arrangement of the single parts, i.e. the change between crushing and cleaning.

Third the Eldan machines contain a high number of changeable parts (in for example the Heavy Pre Granulator/Multi Purpose Rasper and the Fine Granulator). Due to the content of the material processed (rubber, steel and textile) and the fact that the steel wear on the knives it is important to keep up the maintenance on the machines in order to maintain the quality of the output. The high number of changeable wear parts keeps up the great output quality. Since the

parts of the machines that suffer the most stress are changeable, the machine will last longer.

Finally the fact that Eldan had a plan for the plant to fit one building / floor, and therefore making the recycling work easier also had a big impact on the decision making.

“To be able to run a 24 hour a day business we rely on the guaranteed advice, support and service from Eldan” says Mr. Josef Hösl, “By using Eldan Recycling equipment we get all equipment from one supplier. Eldan has the competence that we need. We have a personal contact which we always can reach”

“Today A.T.U / Estato is one of the largest tyre recycler in Europe, and Eldan Recycling is proud of being a part of that success story. We feel that our collaboration will be fruitful in the future as well” says Mr. Bjørn Laursen.

Mr. Josef Hösl has noticed a change in demand for recycled steel wires from tyres: “We have noticed a big increase in demand for recycled steel wires. The recession has changed the business for many companies. We have sold a lot more recycled steel wires to steel works. The steel works can not get a hold of the steel in their usual channels, and therefore searched for alternatives. They are very satisfied with the result from the Eldan steel cleaning equipment.”

Eldan Equipment at Estato

- 2001:** Tyre Plant 1 (E4000T)
- 2002:** Super Chopper (SC1412T)
- 2002:** Tyre Plant 2 (D4000T), additional to line 1
- 2004:** Tyre Plant 3 (E 4000T) with special cleaning equipment for rubber crumb
- 2005:** Cleaning equipment for Tyre Plant 1
- 2006:** Cleaning equipment for Tyre Plant 2
- 2006:** Cleaning equipment for wire
- 2006:** New location for tyre recycling, work II
- 2006:** Tyre Plant 4, (D4000T)
- 2006:** Tyre Plant 5, (D4000T)
- 2007:** Tyre Plant 6, (D4000T)
- 2010:** Second plant for wire cleaning

A.T.U Auto-Teile Unger Handels GmbH & Co. KG

Located in: Headquater in Weiden, Germany with 645 branches in Germany, Austria, Netherlands, Czech Republic, Italy and Switzerland

Established: 1985

Employees: 13 000

2009 sales: EUR 1.24 billion

A.T.U Auto-Teile-Unger Handels GmbH & Co. KG, is a German company specializing in auto retail stores and integrated, brand-independent workshops. In addition to this their Subsidiary is also active within tyre recycling. The company operates its own technical and commercial training centres. The company is based in Weiden in der Oberpfalz, Germany.

Eldan Recycling first got in contact with A.T.U in 2000. It was then owned by Peter Unger and had about 8.000 employees and 300 shops. In 2002 it was sold to a private equity investor Doughty Hanson, and then later on to KKR (Kohlberg Kravis Roberts & Co, a global alternative asset manager). In 2005 it had increased the number of shops to 500, and in 2008 there were 600 shops.

ESTATO Umweltservice GmbH

Located in: Weiden and Werl, Germany.

Established in: 1998

Turn over: EUR 38 million (2009),

Employees: 94 (2009)

ESTATO Umweltservice is responsible for each and every kind of waste in the A.T.U garages. They have two recycling centres, one in Weiden and one in Werl. The waste of every A.T.U branch in Germany and Austria and also parts of the waste from branches in other European countries are disposed and above all recycled in these plants (recycle used tires, paper, shock absorbers, oilfilters, batteries, steel and sheet metal parts etc). A.T.U has been active within the recycling industry for almost 20 years by separating the usable materials from the unusable, and then reusing them in a suitable way. Making use of the materials benefits: “Intelligentes Recycling – Modernste Technik” (Intelligent Recycling – Modern Technology).

In 2009 the name was changed from ATU Umweltservice to ESTATO Umweltservice.

Trade Show Report

Nouvelles Matières Premières

10-11 June, Marseille, France

Present from Eldan was Mr. Christian Duffau and Mr. Bertil Eklöv. It was a very interesting exhibition with some very interesting opportunities. Since this exhibition is smaller and a bit more intimate than other larger exhibitions, we got a chance to talk longer with the most interesting visitors. To sum it up it was a great exhibition!

EU Gateway

7-11 June, Seoul, South Korea

Eldan was chosen by the European Union (European Commission External Relations) to participate in the EU Gateway Programme in South Korea. The programme helps companies to succeed in the chosen region, by giving support at the critical first stages of the market penetration strategy. Participating from Eldan was Mr. Henning Nørgaard "We were very proud to be chosen for the European commission mission in Korea. The week in Korea was very interesting since we both had the opportunity to get to know the South Korean market and potential customers, as well as the opportunity to meet both potential agents and customers" says Mr. Nørgaard.

Reifen

01 - 04 June, Essen, Germany

Present from Eldan was Mr. Henning Nørgaard, Mr. Bjørn Laursen, Mr. Dieter Jersch, Mr. Jens Ekberg, Mr. Lutz Dinter and Ms. Ulrika Persson. We were present in the popular galleria, and was visited by many new and existing contacts. Interesting opportunities arose, and we are curious to see what these will lead to. Our popcorn machine was a huge hit, and smelled deliciously in the entire galleria.

BIR Convention

31 May - 2 June, Istanbul, Turkey

Mr. Toni Reftman and Ms. Ulrika Persson visited Istanbul together with approximately 1500 active people within the recycling industry. This is a terrific opportunity to both discuss the market situation, as well as meeting new customers. It was a couple of very interesting days in an amazing city.

ISRI – Institute of Scrap Recycling Industries, Inc.

4-8 May, San Diego, California, USA

Present from Eldan was Mr. Toni Reftman and Mr. John Crowley. Present was also our Mexican agent Mr. Jorge Sanchez. Visitors inquired on a range of applications including tyre recycling, wire and cable systems, WEEE processing, magnesium, aluminum, and much interest in Eldan's processing system for ASR (Automobile Shredder Residue). ISRI was very multi cultural this year with attendees from for example Mexico, Canada, US, Saudi Arabia, UK, Spain, China, Japan, Taiwan, Italy, Greece, Germany, South America and Australia.

IARC – International Automobile Recycling Congress

03 - 05 March, Basel, Switzerland

Mr. Flemming Hansen and Mr. Henning Nørgaard visited International Automobile Recycling Congress in Basel. New for this exhibition was that Eldan presented a solution for recycling of SLF/ASR (shredder light fraction / automobile shredder residue).

IERC – International Electronics Recycling Congress

20 - 22 January, Salzburg, Austria

January 2010. At the 9th International Electronics Recycling Congress in Salzburg Mr. Bertil Eklöv and Mr. Flemming Hansen was present to discuss recycling of WEEE.

World Future Environment

18 - 21 January, Abu Dhabi

At the World Future Environment Eldan had a booth together with our agent Ferrostaal. From Eldan Recycling came Mr. Toni Reftman and Mr. Henning Nørgaard. The crown prince Frederik of Denmark also attended the summit, but unfortunately Mr. Reftman and Mr. Nørgaard did not have the opportunity to meet him. The visit however is a significant sign of the importance of environmental thinking in Europe.

A look in the rear view mirror

For more than 40 years Mr. Steen Laursen was active within Eldan Recycling. To many of the customers he became a personal friend. At the end on 2009 he retired from Eldan. Steen tells us about his years at Eldan, and outlines some of the important milestones for the company

The story about Eldan Recycling started during the spring of 1956. Mr. Ejvind Laursen started 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 first hand update on what was going 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 to maximum 30 cm pieces. The scrap iron would then have a higher value, since it would be easier to use. The EL20 was developed, which would cut scrap iron up to 20 mm in thickness. Later on EL30 and EL40 was also launched. These scrap iron shears were the foundation of what is Eldan Recycling today. The latest one was sold in 1984, and as a total more than 100 shears has been sold mainly in Denmark, Sweden and Norway.

“The success of Eldan is founded upon us having a close 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" says Steen Laursen.

Listen and be inspired

The needs and demands within the recycling industry has always been the source of inspiration for Eldan. It is through continuous customer contact that the majority of the company's products have been developed. "It is like trial and error – if the first idea does not work, try the next. You have to listen to the customer and develop the new products in cooperation with them. It is not unusual for the customer to make suggestions which have proved to have been extremely helpful" says Steen Laursen. "If we did not have this close relationship with our customers, we would not be the innovative, international company that we are today."

In the 1960's legal regulations were introduced which halted the traditional burning of cables to recover met-

als. In the process of burning cables including PVC insulation, hazardous acids (HCl) occurs. The problem would be solved if only the plastic was removed. Eldan researched the problem, and the Cable Strippers (M3 and M6) were developed. Another advantage of stripping the cables is that pure copper is produced, instead of black copper (copper with oxide on it) when burning cables. "I remember that this was the perfect solution to the problem. During the first year the company sold in more than 100 cable strippers around the World. This was the first professional solution to the problem. The company has subsequently manufactured and sold well over 3,000 cable strippers" says Steen Laursen.

Sometimes Eldan was ahead of it's time with product development. "I remember when we realised that there was a huge potential within tyre recycling. It was during the 1970's when more old tyres than ever were being discarded. A machine called the Rasper, which reduced the size of the old tyres, was

developed. However, only six Raspers were sold at this time for recycling tyres.” says Steen Laursen. “Instead it was in the cable recycling industry where the Rasper was widely used for the pre-chopping of voluminous cable waste prior to granulation” The break through for the Rasper within tyre recycling only came many years later, in 1986, when two Danish gardeners contacted Eldan. Every month they used more than 200 tons of oil to heat up their green houses, and they came to think about tyres as an alternative energy source. Eldan suggested that they should try the Rasper. Even though the Rasper was a tough machine, it could not endure the steel in the tyres. Many of the competitors had already given up this difficult market, however, Eldan Recycling refused to give in and a new more robust machine was developed together with the gardeners.

The break through within tyre recycling came on an exhibition in Louisville, USA, in 1990. Those competitors who had not given up on tyre recycling could only offer solutions to the different stages of the tyre processing – for example reducing the size of the tyres or separating the materials. “A complete tyre recycling plant did not exist at this time. For the exhibition in Louisville we

decided to put together a system comprising Eldan machines that would manage the tyres from shredding to separation. A line drawing of the complete plant was put on to a large wall poster on the Eldan exhibition stand and the success was immediate” says Steen Laursen. “I remember one visitor who burst out laughing when he saw the poster. He had been assigned by a Canadian company to research the market and assemble an entire tyre plant from start to finish. Now Eldan Recycling had “stolen” his solution, and he had lost his consultancy fee.”

“Eldan has a mission to always be the industry leader with regards to innovation and the development of machinery and new process technology. At least one new solution should always be in the pipeline. Eldan is at the cutting edge of recycling equipment technology” says Steen Laursen.

Service and trust

Acquiring a recycling plant is a large investment. Feeling the support and competence of the manufacturer during the sale, as well as afterwards, is of paramount importance.



“I remember a customer from Germany in the beginning of the 1980’s. He was interested in starting his own business within recycling, and was getting a hold on a large amount of aluminium cables. For this purpose he ordered equipment from us. Before he received the equipment the market of aluminium cables vanished, and instead he got a hold of aluminium profiles. Aluminium profiles are a more difficult material to process. Instead of leaving the customer, Eldan modified the equipment together with the customer to suit this material instead” says Steen Laursen. “As a result of this collaboration the Heavy Rasper was developed which in turn lead to the development of both the Heavy Granulator and the Multi Purpose Rasper, which are two of our most popular machines.”

Since the company was founded, Eldan has sold approximately 800 plants and 7000 single machines. Some customers whom we have known for many years and with whom we have developed a special relationship allow us to use their facilities as reference factories. This means that we are able to show potential customers how our plants and machines work in reality. They also get the opportunity to ask the plant owner questions directly. By showing them what they get they feel secure in their choice of manufacturer.

International success

When the cable stripper was developed in the 1960’s E. Laursen Maskinfabrik appointed a Danish sales company to look after the international marketing and sales of its products.

In 1980 the founder Mr. Ejvind Laursen passed away unexpectedly and his son, Steen Laursen, took over as managing director.

During this year E. Laursen Maskinfabrik also changed name to Eldan Recycling (Ejvind Laursen **DAN**mark), to be more attractive internationally. It was also decided that Eldan Recycling would go international on its own. The agreement with the old sales partner was terminated, and three agents were tied to the company. Since the success concept of Eldan had always been to be close to the customer, the agents were picked in the three key markets – the US, France and Germany. It was important to know the language, market as well as the culture. For the best possible representation and customer contact, the agents only represented Eldan (i.e. had no other principles)

Eldan have always maintained close contact with its international customers in conjunction with the agents.

The management as well as product and service personnel have always been ready to travel the world to meet the customers. This has always been highly appreciated by the customers, the agents and the employees. “By travelling the world, and meet the potential customers, you get to experience things that you never would if you travelled alone as a tourist. I remember visiting a customer in Japan who took me to an amazing drum festival” says Steen Laursen. “Many of my closest friends abroad, who I visit often, started out to be customers at Eldan” Being active internationally means having to be available for customers in all time zones. The customers can always get in touch with us.

Next to Eldan

“Eldan has come a long way since the beginning. In the 1970’s the largest machine weighed 5 tons, the overall weight of the largest complete plant for cables was 7-8 tons and we had 10 employees. In 2000’s the weight of the largest machine had increased to 55 tons, the largest plant for tyre recycling had an overall weight of 120-130 tons and we had 100 employees” says Steen Laursen.

Eldan has for a long time been a family business. Steen Laursen’s wife, Mrs. Lis Laursen, worked at the company with sales and layout for 25 years. In 1999 Eldan Recycling A/S was sold to the Swedish industrial group, Carl Bennet AB. In 2005 Dr. Toni Reftman was made Managing Director of Eldan Recycling A/S, preparing the company for Steen Laursen’s retirement. Until 2009 Steen Laursen continued his involvement in the company as a business development manager and consultant.

The fact that Steen Laursen has left the company does not mean that the family Laursen has left Eldan Recycling. His son Mr. Bjørn Laursen works as product manager for tyre recycling, and daughter-in-law, and Bjørn’s wife, Mrs. Heidi Laursen, works as a 3D-sketcher and produces the plant layouts.

Eldan Recycling has not been a regular job for Steen – it has been his baby and hobby. When leaving Eldan Steen Laursen’s other passion in life takes over – veteran and classic cars. He owns a Morgan +8, a Porsche 911 and a Mercedes SL Pagoda. “I am a member of the Porsche club in Denmark. My wife and I often join them for events like Hill Climb, Track days and Touring. This summer we for example went to Italy” says Steen Laursen. Another popular activity is to drive up the coast of Jylland in Denmark to the summer house in beautiful Skagen.

Maintenance



Making the decision to purchase a recycling machine, or an entire recycling plant is a large investment. As with all other large investments you make, it is important to take good care of it. Continuous maintenance is a winning strategy in the long run. Some of our customers have had their Eldan equipment for more than 20 years.

When choosing your supplier of any investment, it is important to consider the value of excellent customer service. Imagine not having to call again and again to get an answer. Or imagine being able to talk directly to the engineer in charge of a project. Being easy to contact is one of our most treasured values.

Eldan Recycling is focused on being competent in all areas of customer service. Our employees are very focused on your requirements for equipment and service and we do our utmost to ensure that your requirements are met. A high level of after-sales service will contribute to the profitability of your company.

Maintenance – a profitable strategy

We recommend all our customers to be proactive and make continuous maintenance a routine. By grinding the knives every so often the machines will run longer and smoother. This recommendation has been adapted by most of our customers. As an example we have one customer within tyre recycling who has had their tyre recycling equipment from Eldan for 20 years now, and it is still working smoothly. Maintenance is a profitable strategy.

Saves Money

Reduce downtime

It is recommended that you keep wear parts, such as knives and screens, in storage. Eldan constantly holds an extensive stock of more than 20,000 part numbers. You will however reduce valuable downtime by having them at hand, instead of ordering them when you need them. When you order your spare part from Eldan, you can be sure that it will be sent to you within 24 hours (on bank days). Rush orders appear weekly and as an example a customer calls in the afternoon explaining his need for a specific spare part due to a costly breakdown. Our After Sales Division defines the part, arranges packing and extraordinary transport of the item in order for the European customer to have the parts the same evening.

Eldan provides original and customised parts for machines and plants. Ordering spare and wear parts from Eldan guarantees a perfect fit according to optimum material specifications. If a customised replacement part is needed, Eldan technical specialists will optimise its design to minimize down-time and ensure the longest possible service life. To ensure you the best possible service, wear parts are manufactured continually and can usually be delivered ex stock. Tailored spare part contracts ensure that parts are available for immediate call off. Spare part contracts can be customized in order to meet the customer's need and as an example we have several customer having spare parts contracts on knives and screens with purchases every second month. Such contract is beneficial for both the customer and us as the customer will receive a discount on the spare parts and we will be able to optimize our production.

Service

Eldan is focused on being competent in all areas of customer service. Our processes have been perfected since the company was founded in 1956 and today we are one of the leading companies in developing and supplying solutions for the recycling industry. Eldan Research and Development Department is constantly looking for ways to optimize our equipment. This is just one small part of our company that signifies our innovative culture and our pride in manufacturing.

We offer everything from design and fabrication to delivery, installation and After-Sales-Service. We even have our own in-house Electrical Department who produce and program the electrical control systems for our lines and machines.

Service contract

To further assist our customers we are able to offer service contracts that provide for regular visits by our supervisors to inspect the equipment and to give their recommendations for required maintenance.

Our After-Sales Division (ASD) offers both service and spare parts contracts helping you to reduce both downtime and production losses.

Flexible Service Contracts with Eldan ASD ensure planned, preventive maintenance of your production line. Tailored contracts ensure that parts are available for immediate call off. By contacting one of our parts coordinators you will get the best possible solution for your company.

Flexibility

At Eldan we have all competence in-house – i.e. all product knowledge, project management and actual production is kept in our factory and offices. By having the entire team under one roof, we have a better control over what is happening – i.e. have greater flexibility to react to changes, and new requirements.

We offer ad hoc service on existing as well as new equipment through our trained and experienced service engineers and supervisors.

Our experienced service engineers constantly travel the world to install new equipment and to carry out ad hoc jobs and scheduled maintenance.

Eldan is focused on being competent in all areas of customer service. A high level of after-sales service will contribute to the profitability of your company. Our flexibility and product quality is superb, and are definitely among the reasons why our customers choose us.

Accomplished in 2010

Eldan Recycling does not usually brag about what we do, but we are proud of what we have accomplished during the first half of 2010. We have for example sold:

Two tyre recycling plants (Two Fine Granulators (FG1504), two Silos (V4) and two PMT) to Canada

One tyre recycling plant C (SC1412 + mpr120) to Japan

One tyre recycling plant (E4000T) sold to Israel

One tyre recycling plant (E5000C) to the USA

One tyre recycling plant (D4000T) to Austria

One tyre plant to Italy

One tyre recycling plant (D5000T) and a steel cleaning system to Czech Republic

One tyre recycling plant (E4000T) and a Cracker Mill to Hungary

One cable recycling plant (E2500C) to the United Arab Emirates

One cable line to Austria

One double tyre recycling plant (E8000T) to Chile

One Multiair System to Spain

One Heavy Granulator (HG209) to Spain

One Heavy Granulator (HG209) sold to Italy

One Super Chopper (SC1412T) sold to Japan

One Fine Granulator (FG952) sold to the Canada

One Separation table (C22) to Switzerland

One Classifier (C15) and one Silo (SMV) silo to the Netherlands

One Multi Purpose Rasper (MPR200) sold to the UK

One Fine Granulator (FG1504) sold to the USA

One Aspirator (UP1500) and one Separation Table (C26) to Germany

One used Fine Granulator (FG1504) sold to Mexico

One Cable stripper (M6) sold to Saudi Arabia

One ACSR Shear (M16-2) sold to Finland

Two Cables strippers (M6) to UK

One Cables stripper (M3) to France

Two Fine Granulators (FG1504) sold to Canada

One Cable stripper (M3) to Saudi Arabia

One Fine Granulator (FG952) to the United Kingdom

One Classifier (Pc12) to Hungary

One special Super Chopper for plastic (A-SC1412) to Denmark

One Heavy Granulator (Hg169) to Germany

Two Fine Granulators (FG1504) to Spain



Machines available

Currently we have the following machines available for immediate delivery. For an updated list, and more information, please contact your Eldan representative.

Fine Granulator (FG952)

Fine Granulator (FG1504)

Heavy Pre-Granulator (HPG165)

Micro Module

Multi Purpose Rasper (MPR160)

Pelletizer

Separation Table (C26)

Super Chopper (SC1412)

Tumble Screener

CONTACT DETAILS PRODUCT MANAGERS

Aluminium recycling

Jan Kjaer,
Email: jk@eldan-sr.com

Cable recycling

Flemming Hansen,
Email: flh@eldan-sr.com

Magnesium recycling

Jan Kjaer,
Email: jk@eldan-sr.com

MSW recycling

Jan Kjaer,
Email: jk@eldan-sr.com

Refrigerator recycling

Jan Kjaer,
Email: jk@eldan-sr.com

Recycling of various scrap types

Jan Kjaer,
Email: jk@eldan-sr.com

SLF / ASR recycling

Flemming Hansen,
Email: flh@eldan-sr.com

Tyre recycling

Bjorn Laursen,
Email: bl@eldan-sr.com

WEEE recycling

Flemming Hansen,
Email: flh@eldan-sr.com



MEET US AT

These events are planned to attend during autumn and winter 2010.
An updated version can be found at www.eldan-recycling.com.

IFAT ENTSORGA

13 - 17 September, München, Germany
New Munich Trade Fair Centre. Stand C2-409



Ecomondo

03 - 06 November, Rimini, Italy
Rimini Fiera, Pav. A5. Stand 007



Aluminium 2010

14 - 16 September, Essen, Germany
Exhibition Centre Essen. Stand no. G45



5th World Recycling Forum

15 - 18 November, Kowloon, Hong Kong
Hotel Harbour Grand Kowloon. Stand no 3.

Expo Sucata

28 - 30 September, São Paulo, Brazil
Centro de Exposição Imigrantes. Stand no 13/04



Pollutec 2010

30 November - 3 December, Lyon, France
Parc des Expositions EUREXPO.
Stand: Hall 5, Alley F, Number 309



Green Expo

28 - 30 September
Brazil



CONTACT DETAILS

Europe

Head Office

Eldan Recycling A/S
Værkmestervej 4
5600 Faaborg
Denmark
www.eldan-recycling.com
Phone: +45 63 61 25 45
Fax: +45 63 61 25 40
E-mail: eldan-sr@eldan-sr.com

Bulgaria

Arcon Bulgaria Ltd
Zh. Lagera, Str. Bogovetz
Block 37B, Floor 1
Sofia 1612
Bulgaria
www.arcon-environmental.bg
Phone: +359 2 952 39 33/36 53
Fax: +359 2 954 46 43
E-mail: doxinov@arcon.bg
Contact person: Mr. Tsvetan Doxinov

Croatia, Slovenia & Bosnia Herzegovina

Arcon Overseas Limited
Trnjanska 105
10 000 Zagreb
Croatia
Phone: +385 1 615 45 94
Fax: +385 1 615 45 95
E-mail: dedic@arcon.hr
Contact person: Mr. Zeljko Dedic

Czech Republic

Arcon Machinery a.s
ul. K Arconu 66
251 01 Ricany-Jazlovice
Czech Republic
www.arcon.cz
Phone: +420 323 637 930
Fax: +420 323 637 970
E-mail: sales@arcon.cz
Contact person: Mr. Jaroslav Kvasnica

Finland

Ollila & CO OY
Museokatu 33 B
00100 Helsinki
Finland
Phone: +358 945 48 151
Fax: +358 945 48 153
E-mail: veikko.ollila@saunalahti.fi
Contact person: Mr. Veikko Ollila

France

Eldan France
15 Rue Gerbert
75015 Paris
France
www.eldan-recycling.com
Phone: +33 1 42 50 25 45
Mobile: +33 6 71 20 68 37
E-mail: cd@eldan-sr.com
Contact person: Mr. Christian Duffau

Germany, Austria, Switzerland

Eldan Recycling A/S
Hauptstrasse 21
40597 Düsseldorf
Germany
www.eldan-recycling.de
Phone: +49 211 171 460 56
Fax: +49 211 171 460 57
E-mail: dj@eldan-sr.com
Contact person: Mr. Dieter Jersch

Greece

INDUSTRIA S.A
9 Kilsthenous str.
105 52 Athens
Greece
Phone: +30 210 52 27 914
Fax: +30 210 52 29 487
E-mail: info@industria.gr
Contact person: Mr. Babis Fostiropoulos

Belgium, Netherlands

Recuperma BVBA
Maatheide 76
3920 Lommel
Belgium
Phone: +32 11 552010
Fax: +32 11 552023
E-mail: recuperma@skynet.be
Contact person: Mr. Gerard Nierman
Mr. Marc Hermans

Hungary

Arcon Hungary
Szent István tér 7. III.em.10
H-8000 Székesfehérvár
Hungary
Mobile: +36 30 300 8452
Phone/fax: +36 22 318 789
E-mail: sales@arcon.hu
Contact person: Mr. Domonkos Balázs

Italy

(Cables, Complex and Electronic Scrap)

NME s.r.l.
Via F.dell'Orto 8
24126 Bergamo BG
Italy
www.nmesrl.it
Phone: +39 035 320030
Fax: +39 035 312022
E-mail: nme@nmesrl.it
Contact person: Mr. Alessandro Silvestri

Italy (Tyres, Aluminium, Industrial Scrap)

P.I. Armando Icardi Sas di Maurizio Icardi
Via Edolo 29 A
20125 Milano
Italy
Phone: +39 2669 0926
Fax: +39 2897 74234
E-mail: info@icardisas.it
Contact person: Mr. Maurizio Icardi

Poland

Rub-Met
ul. Krotka 38
05-080 Izabelin
Poland
Phone/fax: +48 22 722 67 68
Mobile: +48 601 35 53 50
E-mail: kajzer@rubmet.com.pl
Contact person: Mr. Tomasz Kajzer

Romania

Arcon Overseas Limited
Bd. Corneliu Coposu no. 3
Bl. 101, Sc. 1, Etaj. 5 App. 9
Sector 3, Bucharest
Romania
Phone: +40 21 322 8451
Fax: +40 21 320 8436
E-mail: usec@arcon.ro
Contact person: Mr. Adrian Usec

Russia

GP Systems LLC
23A
Pryanishnikova str.
127550 Moscow
Russia
www.gpsystems.ru
Phone: +7 495 662 7005
Fax: +7 495 662 7006
Email: kuryachiy@arcon.com.ru
Contact: Mr. Andrey Kuryachiy

Serbia, Montenegro and Macedonia

Arcon Overseas Ltd
Vidikovacki venac no. 83/II/19
11090 Belgrade
Republic of Serbia
Phone: +381 11 265 1769
Mobile: +381 63 366 492
Fax: +381 11 369 2236
E-mail: arcon@sbb.rs
Contact person: Mr. Sasa Zdravkovic

Slovakia

Arcon Slovakia s.r.o
Nakovna 9
821 06 Bratislava
Slovak Republic
www.arcon.sk
Phone: +421 240 208031
Fax: +421 240 208039
E-mail: melo@arcon.sk
Contact person: Mr. Stefan Melo

Spain/Portugal

Recycling Equipos S.L
Poligono Industrial Malpica, calle E. núms.
54-55
50016 Zaragoza
Spain
www.recyclingequipos.com
Phone: +34 976 573 410
Fax: +34 976 572 354
E-mail: recycling@moros.com
Contact person: Mr. Marcos Clavel

United Kingdom and Ireland (Eire)

MMH Recycling Systems Limited
Unit 6, Broomers Hill Park
Codmore Hill, Pulborough
West Sussex, RH20 2RY
England
www.mmhrecsys.com
Phone: +44 1798 874440
Fax: +44 1798 875613
E-mail: keatley@mmhrecsys.com
jones@mmhrecsys.com
Contact persons: Mr. Philip Keatley
Mr. Peter Jones

Africa

Morocco, Algeria and Tunisia

Eldan France
15 Rue Gerbert
75015 Paris
France
www.eldan-recycling.com
Phone: +33 1 42 50 25 45
Mobile: +33 6 71 20 68 37
E-mail: cd@eldan-sr.com
Contact person: Mr. Christian Duffau

South Africa

MMH Recycling Systems (Pty) Ltd
6 Napels Place
Apex Ext 4
Benoni
South Africa
Tel: +27 11 421 1944
Fax: +27 11 421 4015
E-mail: nic@mmhrecsys.co.za
sam@mmhrecsys.co.za or
Contact person: Mr. Nic Potgieter
Mrs. Samantha Watts

North America

USA and Canada

Eldan Inc
6311 Inducon Corporate Drive
Unit 14
Sanborn, N.Y. 14132
USA
www.eldan-recycling.com
Phone: +1 716 731 4900
Fax: +1 716 731 4909
E-mail: jrc@eldan-sr.com
swm@eldan-sr.com
Contact person: Mr. John Crowley
Mr. Scot Mountcastle

South & Central America

Argentina

Ferrostaal Argentina S.A
Lima 3558 - 8° piso
C1073AAG - Buenos Aires
Argentina
www.ferrostaal.com
Direct phone: +54 11 503 153 39
Fax: + 54 11 5031 5301
Email: dario.barbosa@ferrostaal.com
Contact: Mr. Dario C. Barbosa

Brazil

Ferrostaal Equipamentos e Solucoes Ltda
Av. das Nacoes Unidas, 22.351
04795-100 Sao Paulo - SP
Brazil
www.ferrostaal.com
Phone: +55 1155 22 5999
Fax: +55 1155 21 6965
Email: wzander@ferrostaal.com
Contact: Mr. Werner Ingo Zander

Chile

Ferrostaal Chile S.A.C
Equipment Solution
Avda. Santa Maria 2810 - Providencia
Casilla 184 Correo 10
Santiago de Chile
Chile
www.ferrostaal.com
Phone: +56 2 388 7800
Direct: +56 2 388 7833
Fax: +56 2 232 0797
Email: Claudio.romo@ferrostaal.com
Contact: Mr. Claudio Romo

Colombia

Ferrostaal de Colombia Ltda
Carrera 69 No. 25B-44 Of. 501
Apartado Aéreo: 7384
Bogotá D.C
Colombia
www.ferrostaal.com
Phone: +571 401 13 00 / Direct: +571 4011332
Fax: +571 416 54 89
Email: julian.curtidor@ferrostaal.com
Contact: Mr. Julian Esteban Curtidor Quijano

Ecuador

Ferrostaal Ecuador S.A
Toledo N24-750 y Valladolid
La Floresta
Quito - Ecuador
www.ferrostaal.com
Phone: +593 2 2237 715
Fax: +593 2 2566 691
Email: sebastian.rosoero@manferrostaal.com
Contact: Mr. Sebastian Rosero

Mexico and Central America

Ferrostaal México S.A de C.V
Rio Nilo 47 Col. Cuauhtemoc
06500 Mexico City
Mexico
Phone: +52 55 52 42 35 00
Fax: +52 55 55 33 59 08
E-mail: jorge.sanchez@ferrostaal.com
Contact person: Ing. Jorge Sanchez

Venezuela

Ferrostaal de Venezuela, S.A
Equipment Solutions
Edificio La Pirámide 3o Piso,
Oficina 301, Prados del Este
Apartado Postal 80.0056
Caracas 1080-A
Homepage: www.ferrostaal.com
Phone: +58 212 979 7011, Ext. 108
Fax: +58 212 979 9464
Email: Mr. joerg.hausmann@ferrostaal.com
Contact: Jörg Hausmann

Asia

Japan

Correns Corporation
Ark Yagi Hills
1-8-7 Roppongi, Minato-Ku
106-0032 Tokyo
Japan
www.correns.co.jp
Phone: +81 335 80 3729
Fax: + 81 335 01 5309
E-mail: koji.sakamoto@correns.co.jp
Contact person: Mr. Sakamoto,
Mr. Ueno

Australia

Eldan-Westrup South Pacific Pty Ltd
P.O. Box 567, Gordon 2072
N.W.W Australia
www.eldan-recycling.com
Phone: +61 (0) 29844 5430
Mobile: +61 (0) 4000 35326
Fax: +61 (0) 29844 5445
E-mail: jimh@eldan-sr.com
Contact person: Mr. Jim Hole

Middle East

Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates

MAN Middle East FZCO
(Ferrostaal AG, Dubai Office)
Dubai Airport Free Zone (DAFZA)
P.O. Box 29 35 21
Dubai, United Arab Emirates
www.ferrostaal.com
Phone: +971- 4 -299-1991
Mobile: +971- 50 -7083267
Fax: +971- 4 -299-1993
E-mail: rajesh.sivarajan@man-middleeast.com
Contact: Rajesh Sivarajan

