

- a strong solution for the environment



# **ReTec**Machines & Solutions

# **WELCOME TO**

# RETEC

Since 1997 ReTec har delivered machines and equipment to the waste treatment, recycling and biomass industry. We develope, manufacture and sell quality products within biomass processing, shredding, chipping, composting, granulating, compacting and sorting - just as we also build our own ReTec solutions.

We are one of the leading suppliers of gypsum recycling plants in the world. Our bale opener which is used to effectively open waste bales, has a good reputation when it comes to for instance substitue fuels within the cement industry world wide.

There is an increasing focus on circular economy as well as taking better care of the environment. The more we can reuse and recycle, the better. We have a wide range of products and have a constant focus on creating value and profitable solutions for our customers. We have the knowledge and experience with the newest technology within robot and sensor based worting. Also, we can deliver pre-treatment plants to process

organic waste and ready it for biogas production.

With our inhouse construction, production and automation we are able to offer customized machines and plants matching the customer's needs.

We put an honour into finding the right solution, giving the costomer the possibility of making money on a product that initially doesn't seem to have any value. This is important to us as we wish to build credible and long-term relations.

In order to be a reliable and effective partner we have our own service department with educated staff, always ready to help. The most common spare parts are in stock and delivered as fast as possible, and special spare parts can often be delivered with 24 hours.





# STAY UPDATED

On our website you can find information about our products and read the latest news.

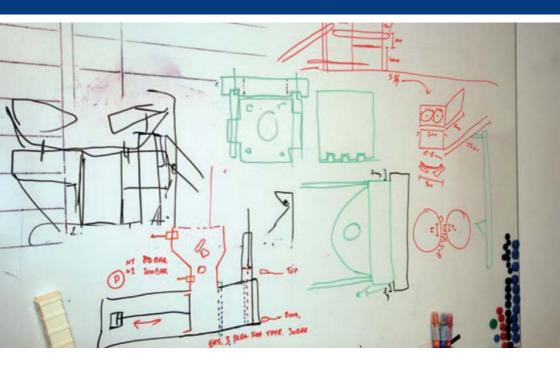
We also send out newsletters with interesting and usefull knowledge.

Besides this, we participate in fairs in Denmark and Europe, entering dialogues and gaining valuable insights, just as we also use the social media.



# **CUSTOMER** RELATIONS

We strive to build long-term customer relationships. We want the customer to contact us the next time there is a need for a new machine or plant. At the same time we also want to maintain contact when the delivery of a machine has taken place. We listen to the customer's needs and try, using our experience and know-how, to offer the most optimal and reliable solution.







# **CONSTRUCTION**

In our design and developement department we work with the latest 3D drawing programmes, so that we can present our solutions as accurate and realistic as possible.

For larger projects we strive to submit a layout together with the offer itself. In most cases, this gives the customer a much better understanding of the structure and composition of the components.

#### Machine safety and CE-certification

We are specially trained in machine safety and CE-certifications - an area we emphasize greatly.

# **SERVICE**

Our service is worldwide and is performed by competent and specially trained employees. In the event of a stoppage, we can often remedy the problem with the help of telephone assistance, otherwise a service fitter will depart from our repair shop as soon as possible.



#### Service agreement

To avoid unnecessary downtime, we recommend a service agreement. With regular reviews, the overall lifetime of the machine is significantly extended. It is also possible to order service, performed per hourly rate.



#### Spare parts

The most common spare parts are in stock and will be delivered as fast as possible. Special spare parts can often be delivered within 24 hours.





# **PRODUCTION**

In our production we have a number of competent employees, all of whom are continuously trained and specialized in various areas.

In addition to machine constructions, we are able to perform a wide range of subcontractor jobs, thanks to our machine fleet.

- Sawing /sawingautomate up to Ø 400 mm
- Cutting 4000 x 18 mm
- Edge pressing 450 t x 4000
- Rolling 3000 x 18 mm
- Turning
- Cutter 1200 x 600 x 500 mm
- Welding in black iron / stainless / aluminum







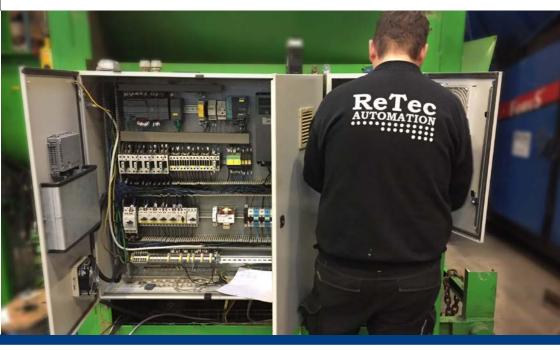


## **AUTOMATION**

Our goal is to be the best supplier of complete automation solutions to the Danish machine builders. We are constantly ensuring being updated according to the latest machine directive, and we want to be leading in development of software for complex machines and machine plants.

We have many years of experience with sensors and PLC solutions from Siemens and IFM electronic. We also use components from other reputable suppliers.

During warranty, remote connection is possible on our own machines and plants. That way ReTec Automation can troubleshoot and remotely program, if necessary. That gives you, as a customer, an extra level of security.



# MACHINE

# **FLEET**

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# **BALE OPENER**

- Opens square/round bales of various types of material like SRF, RDF, PET, plastics and paper/cardboard wrapped with steel/PVC wires/cross-tied, net etc.
- Safe and easy to handle; only one man needed for feeding, ie. costeffective handling
- Stationary or semi-mobile for easy cleaning on-site
- Capacity up to 100 t/h
- Low consumption (22-55 kW)
- Low wear costs and low noise level

# **BOTTLE CRUSHER**

- Volume reduction of bottles and glass 3:1, increasing the amount of glass per bin and decreasing storage needs, handling and transportation costs
- Eases the reuse and sorting of glass
- Fixed or flexible rollers, the latter ensures foreign objects passing through without damaging the bottle crusher
- Capacity 3-5 t/h or 8-12 m³/h
- Customizable capacity, opening and build-up
- Options: Bin lifter, weighing system









# **CAN** BALER

- Reduces volume of aluminium cans and presses them into handable cubes
- Cube size 300x300x300 mm perfect for stacking on EURO-pallets, easying handling and reducing transportation costs
- Pressure up to 550 N/cm<sup>2</sup>
- Capacity approx. 30 cubes/h or 500 kg/h











# **DEWATERING**

# SYSTEM

- Effective dewatering of PET bottles, tetrapak, cartons, metal cans etc.
- 2 fractions: Liquids and compressed packaging
- Heavy duty design
- Optional: Chute to container, specialized hopper and automatic start/stop of the machine, enabling you to continue work elsewhere
- Capacity up to 10 m³/h

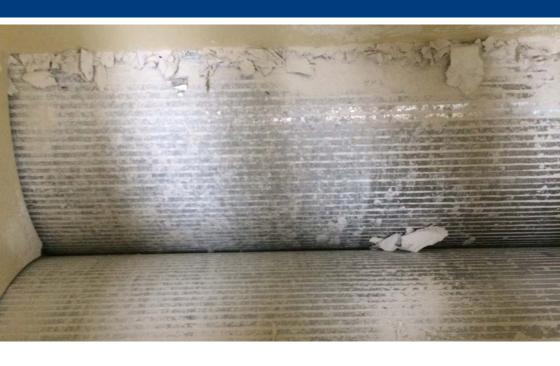
## **GYPSUM** PLANT

- With more than 20 years of experience each gypsum plant is customized to handle different waste streams and contaminants
- Gypsum is crushed and sorted in order to remove impurities
- Output: Up to 99 % pure gypsum powder, ready to be reused, and a waste paper fraction with a very low gypsum content
- Low operating costs
- Capacity to customer requirements









# **GYPSUM** ROLLER MILL

- Prepares gypsum e.g. from old plasterboards for new gypsum production by grinding the gypsum off the paper
- Very high degree of separation between paper and gypsum
- Adjustable pressure (5-10 t) between the rollers
- Movable roller allowing contaminants like wood, hard plastics etc. to pass through the mill
- Very low TOC%
- Capacity 10-15 t/h









# **VIBRATION SIEVE**

- Effectively screens and separates e.g. the gypsum powder from the waste paper and rejects or wood pellets, grain etc.
- Single or double deck vibration screen with rubber balls
- Capacity and screen size to customer requirements







## **MATERIAL DOSER**

# **SYSTEM**

- Pre-defined amount of material unloading by the press of only a button. If smaller amount is required, stop of unloading is possible
- Contains approx. 10 ton
- Options: Coin insertion, electro hydraulic top-door, remote controlled hydraulic door, SMS alarm when container is empty, weighing system and/ or PLC control of various functions





# **MINERAL WOOL**

# RECYCLER

- Capacity 5 t/h (10 mm screen)
- Volume reduction approx. 20:1
- Input: Basic sorted mineral wool waste from building sites, demolition sites, recycling centres etc.
- Output: 3 fractions:
  - Clean, compressed mineral wool
  - Fe-fraction
  - Reject; rocks, stones, wood etc.
- Easy to move, monitor and service







# **MIXER**

- Mixes different materials by the means of 2 screws and gravity
- Saves time and ensures proper and thorough mixing
- Content and capacity to customer requirements
- Also usable as a dosing unit
- Options: Stainless steel AISI 304, weighing cells, hopper and/or RAL colour









# **MOBILE SECURITY**

# SHREDDING

- Security shredding of sensitive data in documents/paper, hard drives, ring binders etc.
- Shredding up to security level P7
- Easy opening of the truck for loading and unloading
- Walking Floor system
- Bin lifting system for 110-660 ltr. bins
- Option: Hard drive shredder







# **ROLLER SCREEN**

- Moves and sorts different materials by the means of eccentric discs fitted on rotating rolls
- · Adjustable accuracy and capacity
- Self-cleaning





# **SPRAY CAN**

# PERFORATOR

- Perforates and reduces volume of spray cans, hence reducing the interval of emptying as well as saving on transportation costs
- Is built around customer's ventilation system
- Customizable input opening
- Capacity up to 11 m<sup>3</sup>/h







# **TURNKEY SOLUTIONS**

- With own inhouse construction, production and automation we can offer turnkey solutions
- Solutions for e.g. complete gypsum plants, bale opening solutions with trommelscreen and shredder for a zero waste solution, complete waste sorting and treatment facilities or complete facilities for pre-treatment of organic waste to biogas





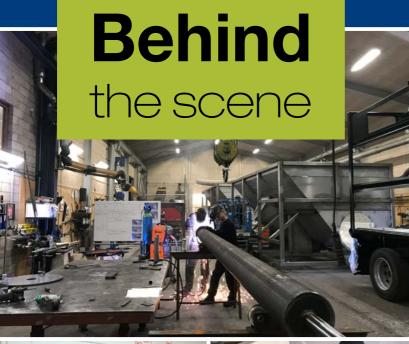




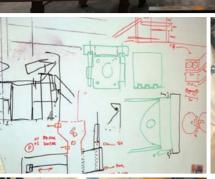
# **CUSTOM SOLUTIONS**

- We can help with any specific requirements for a machine or a custom solution to completely match your needs
- For instance barrel presser, float-sink system, oilfilter separation, conveyor belt, transportation screw, trommel screen or bale turner/lifter





























#### About ReTec

Since 1997 ReTec has developed, constructed and manufactured special machines for the waste and recycling industry. We offer practical solutions to our customer's needs, helping them increase profitability in their business.



1997

ReTec is founded in an apartment in Odense. That same year ReTec moves to the town of Stepping, where "Stepping Smede og Maskinforretning" is taken over.

ReTec Automation ApS is founded, handling and programming al electrical and automation tasks in ReTec's machines as well as the documentation needed afterwards.

2016

"Gazelle" company for the 4th time. An award to all fast growing companies in Denmark fullfilling specific criteria for growth in revenue.

ReTec takes over Platz Karosseri, a local company specialising in building custom truck solutions.

ReTec Miljø ApS

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