

KOMPTECH

magazine 2/2015



FUTURE
NEW EU GOALS

INNOVATION
THE NEW HURRIFEX

PRACTICE
TECHNOLOGY FOR NATURE



KOMPTECH PRESENTS:



XXL Sheet Metalworking up to 16 m Length

Our company is specialised in sheet metalworking and welding. We produce components and assemblies according to the wishes and requirements of our costumers. As steel manufacturer we offer a wide range of services. With our modern CNC machinery we are able to process sheet metal by laser cutting, press braking, milling, punching and barreling.

We also offer production of large parts. With our tandem press brake we are able to bend metal sheets up to a total length of 16 m. The press capacity of 2,500 t is especially suited to bend materials with higher thickness. To cut sheet metal in such big dimensions we provide a laser cutting machine with a working area of 16 to 4 m. This machine is also able to cut chamfers with an maximum angle of 45 degrees.

In January 2015 we started with a new location for the welding department. We are able to produce welding assemblies with a total weight of 50 t. We fulfill all requirements of the European Standard EN 1090-2, execution class 2 to produce load bearing constructions.



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A NEW FAMILY FOR KOMPTECH

*Photo (left to right):
Dr. Stefan Odenthal (CEO Hirtenberger AG)
Mag. Bernhard Lehofer (Heissenberger
Foundation Chairman)
Gerhard Schuster (President of the
Supervisory Board and Owners'
Representative of Hirtenberger AG)
Dr. Heinz Leitner (CEO Komptech GmbH)
Dr. Christopher Grabher (member of the
Supervisory Board of Hirtenberger AG)*

In 2014 the death of company founder and owner Josef Heissenberger shook Komptech. Despite this terrible event, with its great team of employees, partners and customers the company successfully coped with what was no doubt the most difficult phase in its history. To ensure Komptech's long-term stability, it made sense to take a new partner on board. This meant that the company's equity capital structure, which had been weakened by the many necessary investments in products and production capacity, could be strengthened once again and a foundation laid for further growth.

Talks with potential partners intensified in early 2015 and were taken to a successful conclusion by March 2015. The Hirtenberger Group, from Hirtenberg south of Vienna, got the nod. In intensive negotiations it soon became clear that both companies share a similar drive to innovate and a similar long-term focus. At the personal level, the chemistry was there from the start. For both companies, the clear focus of all activity is always on customer benefit. This shared outlook was a major factor in making negotiations faster and easier.

Another important aspect was that our entire worldwide sales network with all partners, sales and service locations would be retained in full.

With the purchase of 80 percent of Komptech's stock, Hirtenberger AG entered the environmental technology field and expanded its portfolio of Hidden Champions (see next page) with sustainable, environment-friendly technologies. This is a real win-win situation for both sides.

During the next few months we will be leveraging our existing synergies in order to put the newly formed company group onto a broader basis and make it stronger.

For customers, this will change nothing. The existing management under the leadership of Heinz Leitner will continue to guide the company, and the existing contact people will remain the same for customers and partners.

ABOUT HIRTENBERGER AG

Hirtenberger AG is headquartered in south of Vienna, Austria and has locations in Pápa (Hungary), Winzendorf (Austria) and Ratingen (Germany). A company with a 150-year tradition, Hirtenberger's core competence is in pyrotechnics and precision engineering. Since 1996 the company has been owned by the Schuster family. With over 1000 employees, in recent years the Hirtenberger Group has seen revenues of around 100 million euros. Group CEO is Dr. Stefan Odenthal.



BUSINESS FIELDS OF THE HIRTENBERGER GROUP



We protect your future.



» Hirtenberger Automotive Safety

Development and series manufacture of pyrotechnical products for safety applications, primarily in the automotive industry



» Hirtenberger Defence Systems

Production and development of armaments and munitions, primarily for the defence industry



» Schaffler

Production and development of innovative solutions and products in the area of pyrotechnical ignition and automotive safety



» Hirtenberger Präzisionstechnik

Non-cutting machining of precision parts, production of punched, stamped and bent components, and high-end tool-making



» Hirtenberger Filter Services

Diagnostics, cleaning and inspection of particle filters and catalytic converters for automotive and construction machinery applications



» Komptech

Development and production of machines and systems for processing solid waste and converting woody biomass into fuel



» Hirtenberger Engineering & Technology

Planning, development, design and commissioning of automatic and semi-automatic production systems for pyrotechnical applications



» Janke Industrial Automation

Planning and execution of machines and systems for industrial automation and cast parts processing for automotive manufacturers and suppliers

ABOUT HIRTENBERGER AG

- » Family-owned
- » Founded in 1860
- » Headquartered in Hirtenberg, Austria
- » Locations in Pápa (Hungary), Winzendorf (Austria) and Ratingen (Germany)
- » Business fields: Automotive Safety, Pyrotechnical Igniters, Filter Services, Mechanical and Systems Engineering, Precision Engineering
- » 106 million euros revenue (2013)
- » 940 employees (2013)
- » 95 percent exports (2013)
- » CEO Dr. Stefan Odenthal

www.hirtenberger.at

THREE QUESTIONS FOR DR. HEINZ LEITNER, CEO OF KOMPTech GMBH

What were your first few months as CEO of Komptech like?

With the death of founder and owner Josef Heissenberger, 2014 was probably the most turbulent year in the history of the company. From one day to the next we turned from an owner-operated into a management-led company. During the emotionally difficult weeks that followed the initial shock we could sense the strong cohesion in our company and the great team that Komptech is, which helped us cope with the crisis. We are very thankful to all of our employees, as well as customers and partners.

What motivated the change of ownership?

As a relatively young company, with the rapid growth of the recent years Komptech has had to invest heavily in expanding its production capacity and in new product development. These investments have naturally been a burden on the equity capital structure of the Komptech Group. That made it necessary to look around for a partner with deep pockets, and we began to talk to the Hirtenberger Group.

As things progressed, it became clear that there were strong similarities in the companies' thinking, shared long-term horizons in planning, and not least a high level of compatibility at the strictly personal level. Ultimately that led to a relatively fast agreement on a firm collaboration.

What will this change mean for Komptech?

Komptech will continue to be led by the same management team as before, with myself as CEO. No changes of any kind are planned for day to day business. The Hirtenberger Group is interested in long-term viability and wants its subsidiaries to develop independently and stably. For the near future we will have align the company as a whole more strongly towards a market and customer orientation. In terms of technology, our immediate focus is on further refining existing products. I am absolutely certain that, strengthened by the Hirtenberger Group, together we can look forward to a bright future and continue to build on Heissenberger's life's work.





THREE QUESTIONS FOR DR. STEFAN ODENTHAL, CEO OF THE HIRTENBERGER GROUP

What called your attention to the Komtech Group?

The unexpected passing of Josef Heissenberger came as a great shock to us. We communicated our heartfelt condolences to the Heissenberger family as well as to Komtech's management. In talking with Komtech executives during the last months we have gained a very positive impression of the company and its people. Our two companies are a very good strategic and cultural fit. With this acquisition, Hirttenberger is making a strategic entry into environmental technology in order to establish a further long-term pillar for the Group.

What does this involvement with Komtech mean for the Hirttenberger Group?

Komtech is not just the foundation for the environmental division of the Hirttenberger Group, but with its size will also have an immediate and large impact on the Group. Our leadership philosophy gives a high degree of autonomy to the individual companies in our group, which in turn requires that they have their own management. We have full confidence in Komtech's CEO Dr. Heinz Leitner and his leadership team, and in their ability to bring the company further success. I'm quite sure that the cultures of these two similar-sized companies will harmonize well, driven by entrepreneurial spirit, inventiveness, technology leadership and innovation.

What are the plans for the future?

Komtech needs long-term stability. We will neither dampen nor overtax its elan, and together we'll continue to grow Komtech's existing culture. We feel a high level of commonality in our leadership cultures, as is indispensable if together we are to take Komtech into the next league. We are confident that there will be synergies in the association with the other companies in our Group in areas like research and development, purchasing and marketing. I can confirm that we absolutely intend to let the Komtech brand continue to operate and develop on its own. With our diversified business portfolio, we understand the necessity for communicating the positioning and differentiation of company and brand profiles. Each subsidiary needs its own identity to build and retain customer and employee loyalty in its business fields.

TECHNOLOGY FOR NATURE

Gilles Schitter is full of energy - because two hearts beat in his chest. One heart beats for nature, which we can learn so much from, and which we must protect. The other beats for technology, the perfect arrangement of gears, components and cylinders that create a modern machine. His composting facility in France shows that these apparent contradictions can form a perfect symbiosis.

Testing the Axtor 6010 for shredding green cuttings. A stationary Multistar 3 SE star screen is behind it.





"Balanced organic and mineral components." Gilles Schitter (left) explains to Komptech's Andreas Kunter the quality of his substrates and soils.



If you visit the Vita-Compost grounds in May, you might be forgiven for thinking you're in a park. In the middle of the grounds is a pond, behind it rocks and a waterfall, all surrounded by green fields, flowers and shrubs. Only on second glance do you notice the compost windrows and other areas where machines are hard at work shredding, mixing and screening.

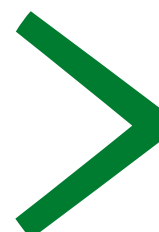
It's a busy time for the facility. A storage building is cleverly integrated into the landscape. Inside, a lively discussion of Vita-Compost's many products is underway. Vita-Terreau, Vita-Humifère and Vita-Preta are substrates made of quality compost and selected additives.

QUALITY IS THE MAIN THING

Don't ask Gilles for just "some dirt." He puts a lot of energy and attention into composting and curing his substrates, and he wants customers to get the most out of them. "When customers tell me what they want to do, I can tell them what they need and how to use it," is his approach. An approach that works - customers are lined up waiting to buy compost substrates, bark humus, decorative stone and all kinds of other things that make gardens more beautiful.

DIFFICULT BEGINNINGS

"I was really a fuel dealer" says Gilles, "but I had a weakness for driving a front loader." That took him from clearing to landscaping to green cuttings. But his first composting attempts using a front loader were fruitless. "The first time I saw a shredder in operation, I knew that was the way to go." It was a life-changing experience. He convinced his local municipal government to give him a contract. He started doing CMC (controlled microbial composting), and built up a deep knowledge of microbiology, humus and soil structure. But it was still a stony path with ups and downs before he got theory and practice to come together the way he wanted. Today, the Vita-Compost company processes over 30,000 tonnes of green cuttings and 15,000 tonnes of excavated soil into substrates for home and professional gardening and landscaping. After the initial intensive decomposition stage, the compost cures for up to a year or longer. Mineral additives help create a high-quality product. Grab it, smell it, see it, for Gilles that's the name of the game in composting.





Gilles relies on his Crambo for shredding woody biomass. A Mustang drum screen separates out the soil.

OPEN TO NEW THINGS

But he doesn't just have an eye for nature. He also has a feel for machinery. "The first time I saw a star screen at work - the motion, the tapping, the cleaning action - I immediately saw the benefits it would have for me." In 2004 Gilles bought a 6 m long stationary Multistar 2 SE. It was soon too short, so he replaced it with a 9 m model. Today its place has been taken by a Multistar 3 SE that works for the composting operation as well as biomass processing. Gilles also uses mobile star screening technology from Komptech. He started out with a Multistar XL, then an L3 with longer coarse screen, and now has a new L3. "I liked the design right away," he says. After a thorough inspection of the inside, the decision was made. "It's true, we have no shortage of machinery," he laughs, "but I don't need a big car or a big house."

I'd rather invest in new, more efficient machines. That keeps me competitive and my employees are happy because the boss buys only the best machinery."

COMBINING NATURE AND TECHNOLOGY

Gilles also has his own approach to screening. "You can't work against nature and screen anytime you like. The material has to be right, and so does the weather. Then the performance will be right." He adds, "and if you have the right equipment, you get even better performance." The Nemus drum screen he just bought is the right equipment, in his view. The screen drum has a special wire arrangement mounted in it. "That makes the interior surface more aggressive and moves the material around more. Also, the slight slope makes it easier for the pieces to fall through. It all adds up to fifty percent higher throughput."

For some years he has processed woody materials from gardening, landscaping and clearing work into biomass fuel. Here again, a green machine won his technician's heart. "I don't think it took more than three minutes of watching a demo. It was clear to me that the Crambo was simply the perfect machine for my material, which has stones, soil and metal pieces in it." But he wouldn't be who he is if his Crambo didn't have a special feature. A screen basket with offset holes made especially for him gives better shredding, in his opinion.

"Technicians and machine developers should get out more often and see the machines in their working environment," says Gilles. "You can only come up with the right solution when you understand the overall situation." As he says it, he sniffs briefly at an elder sprig and then drives off on a front loader.



"Live and work with nature" is the motto of Gilles Schitter and his company Vita-Compost. His composting facility in Bischwiller in France's Alsace region produces top quality compost and substrates with the help of several green Komptech machines.



A biotope in a composting plant - a nice place to work.



"Up to 50 percent higher performance," says Gilles of the special drum on his Nemus.

*Arnfinn Försung and Aud Helene Rosenvinge
with their new tracked Crambo 6200.*





THE WORLD'S GETTING GREENER

Lindum in Drammen, Norway
and Komptech are a perfect fit.
The goal of both companies is to
make the world a little greener
every day.

As is right and proper for a good
Norwegian, in her leisure time Aud
Helene Rosenvinge enjoys nordic skiing.
In professional life she is Lindum's
composting and landfilling operations
manager, with about 30 employees
under her supervision. After work

she studies biological composting
processes at university, with worms as
her speciality. And she's also become a
specialist in dark-green machines from
Komptech.





The tracked chassis gives it the flexibility it needs at the sprawling Lindum facility.

MEGA-STRONG, MAXI-QUIET

"We've used compost turners and star screens for years," says Rosenvinge. "Thanks to Gitmark, Komptech's Norwegian sales partner, we were able to test-run a new Crambo 5200 direct." The new Komptech shredder did very well in these tests. "Thanks to the high throughput, we found that the specific consumption is substantially lower than with competitor products," she says of the company's findings in testing. "We quickly chose the Crambo 6200 on tracks." The tracked chassis gives it the flexibility it needs at the sprawling Lindum facility.

"We also use it at other sites," adds Rosenvinge, "so the machine needs to be mobile." The Crambo shreds about 100,000 tonnes of green waste and waste wood each year. "Yet despite its high performance, it is considerably quieter than other machines. This lets us use it at sites near residential areas," says Rosenvinge in praise of the low noise emissions of the new Crambo direct.

AN UNBEATABLE TEAM

Rosenvinge is happy to work with Komptech. "We identify one hundred percent with their green efficiency® objectives.

Like Komptech, we are ISO 14001 certified and make an effort to be environmentally responsible and save resources." "We've been using Komptech machines for over seven years and have seven of them," says Arnfinn Försung, who is in charge of the Lindum machine park. Recently people from Lindum and Gitmark came to Komptech's Screening and Separating Competence Centre in Oelde, Germany, to take a look at the new Multistar L3. "The new design and numerous improvements are really impressive," says Försung enthusiastically. Another way to make the world a little greener.





Lindum AS

NORWAY
Oslo
Drammen

SWEDEN
FINLAND
ESTONIA
LATVIA
LITHUANIA
DENMARK
GERMANY
POLAND

A municipal company owned by the city of Drammen.

Employees: 130

Services: Biogas production, recycling station operation, composting of green cuttings and organic waste, waste wood processing, substrate production

Komptech machines: 2 Multistar L3, 2 Topturn 3500, 2 Topturn X60, 1 Crambo 6200 track



Lindum
www.lindum.no



Operations manager Aud Helene Rosenvinge and her Crambo make an unbeatable team.



A Multistar L3 Star screen is also part of operations in Drammen, Norway.

BACK TO THE SQUARE ONE?

Things are not good between the EU Commission and the Council of Ministers. The Council opposes the planned withdrawal of the closed substance cycle package, while the Commission is determined to submit a new proposal.

On 16 December 2014 the Commission submitted a work programme which included the withdrawal of the existing closed substance cycle regulations. Since then the phone lines between Council and Commission have been running hot, while various interest groups lobby hard to defeat it. But the hope of changing anything about the withdrawal of the package is faint, judging by how determined the Commission seems to push it through.



A "MORE AMBITIOUS" PROPOSAL?

This is because the Commission has announced that in the course of the year it intends to propose a more ambitious version of the law. According to Karl Falkenberg, who heads the EU Commission's Directorate General for the environment, they don't want to say exactly what that will involve just yet. But apparently it will include targets for improved institutions and infrastructure to reduce the number of landfills.

Product design is also supposed to play a major role. But "taking into account the different needs of the member states" doesn't sound like the new rules will be stricter than the existing ones.

FURY IN PARLIAMENT

The Council is not alone. The EU Parliament is also opposed to the Commission's plans. A majority of representatives only recently voted to continue the waste package.

The word from Parliament is that they are "furious," because the new proposal will cost extra money. The sharp criticism of the EU Commission by former environment minister Janez Potocnik has not helped deescalate the situation. It will be interesting to see what the upcoming months will bring in the way of new closed substance cycle legislation.



*The new Crambo 6200
is ready for rentals.*



GREEN LIGHT

The Mechielsen company has expanded into rental out machines for treating green waste and waste wood. This is the company's second try with waste treatment. The first time they were way ahead of the game. Now the market is ready for them, and they have a green light.



When it comes to wage work, earthmoving and transportation services, Mechielsen from Oldenhoven in the north of the Netherlands has been well known for over 50 years. "We put in some long hours during harvesting season," says Cor Mechielsen. He and his brother Leo took over the company from their father Jan. "We have 65 full-time employees, but during peak season that can go up to 90. We harvest beets, shred corn, load and transport sugar and so on."

CEO Cor Mechielsen (left) and operations manager Jan Jaap Bolt with their new Cribus 3800 drum screen.



NEW HORIZONS

Those peaks don't last all year, so to ensure a steady workload Mechielsen also does earthmoving and drainage works. Years ago Jan had also seen possibilities in green recycling, but at the time the market wasn't ready yet. Cor notes that "my brother and I preferred to take it one step at a time, so first we focused on the new activities in sand and gravel, stone crushing and screening." Eventually green recycling found its way into the mix and in 2005 they got their first work order at a composting plant, for which they needed to rent a screening machine. Last year they took in a similar large order, and quickly put over 1000 hours on a rented drum screen. "We did some research and came to the conclusion that there is now a market for green recycling. We just have to tap into it."

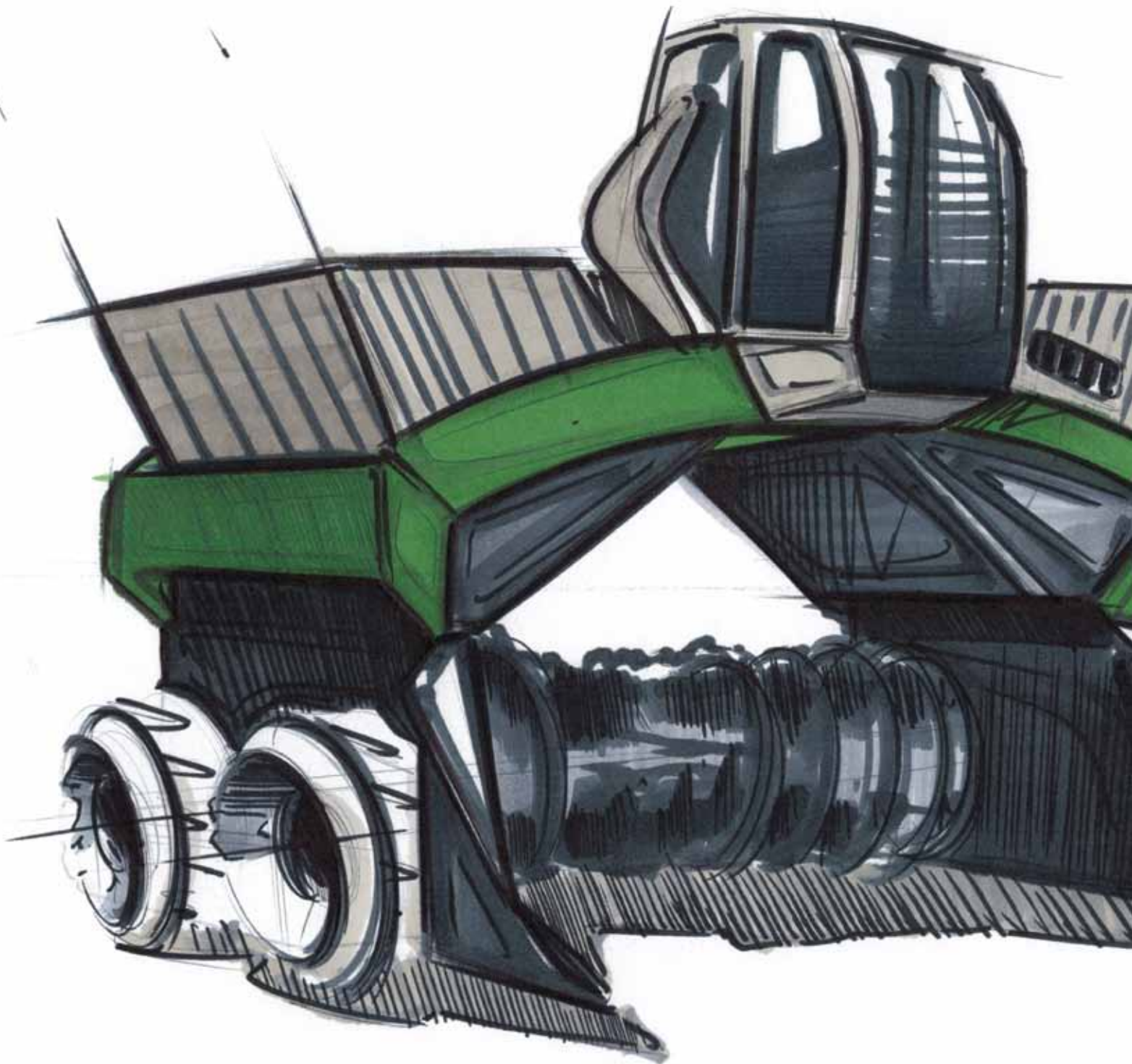
MODERN AND DURABLE

With the recent acquisition of a tracked Crambo 6200 direct shredder and a Cribus 3800 drum screen, they are committed to green recycling. Both machines are now available for wage work and machine rental. The choice of a supplier turned out very easy, since for many years the company has had a good relationship with the Dutch Komptech dealer PON Equipment. "PON knows the business and can help us find new customers, and Komptech machines are modern, durable and reliable. They run so smoothly it gives me goose bumps. We're used to working with our machines ourselves, but now that we've entered the rental market, it's sometimes hard to leave a 500,000 euro machine with the customer. It's harder than lending someone my Ferrari, if I had one..."




THE NEXT GENERATION

In September 2014 the first new generation Topturn X55 windrow turner was delivered to the US, to Sevier Solid Waste in Tennessee. The X55 is the first major redesign in 10 years of Komptech's most popular Windrow Turner, the X53.





A stylized illustration of a green and black geometric structure, possibly a building or a vehicle, with a small airplane flying in the sky above it. The structure is composed of sharp, angular shapes in green and black. The sky is a light blue gradient with a few small, faint clouds. A small airplane is visible in the upper right portion of the sky.



Early in 2014, Solid Waste Manager Tom Leonard was in search of a new windrow turner to replace his older unit. "Support and service were critical factors, since I was not pleased with the support of the previous vendor," he says. The unit also had to be small enough to manoeuvre inside the building, but large enough to turn more yards than before. He soon narrowed his choice down to the new Topturn X55.

PRACTICE 21

NEW FOR THE TOPTURN X55

The X53 was already very popular, with high efficiency, comfort and serviceability, and the X55 model adds even more. The larger cabin has a Bluetooth stereo radio, climate control and an air filtration system to keep fumes and dust out of the cabin. A switchable automatic function controls the ground speed and load on the hydraulic system, so that all the operator needs to do is steer the machine. Fluid and filter changes are easy, and new service platforms allow safe access to the top of the machine.

The GSM modem allows service personnel to log into the machine from anywhere in the world and see any issues the machine may be displaying. The telescoping frame and raised cab arms are reinforced for heavier materials and larger loads. The ploughs are designed that they clear the way for the wheels or tracks freely. Different types of drums are available for multiple applications, and more of the wear parts can now be replaced, extending drum life. The higher-capacity cooling system boosts engine protection.

CAPACITY BOOST

It all adds up to performance. "The X55 makes a better windrow," Tom says. So much so that it allowed a new layout of windrows inside the building. The X55 allows windrows to be piled toe to toe, literally touching, and higher than before, increasing windrowing capacity and thereby system capacity. The addition of the X55 has allowed Sevier Solid Waste to continue to accept greater volumes of material as the area population grows.

*The telescoping frame and raised cab arms are reinforced.
The larger cab offers more comfort.*





Service has become much more user friendly. Easy access to all fluids and filters makes maintenance a breeze. New service platforms allow for safe maneuvering on top of the machine.



Along with the availability of Tier 4 engines, synthetic oils are now used to prolong engine and hydraulic life and to reduce maintenance intervals. The cooling system has been increased to assist in prolonging engine and hydraulic component life.



Different types of drums are available for multiple applications.

HURRIFEX

Stone and light material separator

Six reasons why you'll love the new Hurrifex.

The new Hurrifex combines a stone separator and wind sifter in a single machine. This makes it possible to clean compost and biomass fractions of stones and light materials - primarily plastic film - in one pass. Easily adjustable separation parameters give the Hurrifex a wide range of applications and a separation efficiency over 90 percent. All components are electrically powered, from grid power or with the on-board diesel generator. Maintenance doors in the cladding provide full access to all maintenance positions.



01 Suction and conveyor fan

The first suction and conveyor fan keeps the airflow going. It has a rated power of 7.5 kW and moves an initial portion of the light fraction through a flexible duct to the first container. The second suction and conveyor fan likewise moves light materials into the first container by a flexible duct. The third fan moves it into a different container.



02 Discharge

Stone fraction discharge is by a conveyor with corrugated sidewalls. On its way through the machine the input is freed of stones and then light materials, and discharged by conveyor at the end.



03 Maintenance access

Large maintenance panels grant very good access to all important adjustment, control and maintenance points, as well as the optional generator compartment.



06 Power supply

The power setup is comparable to the Hurrikan S. The standard version of the machine uses grid power. As an option it can be fitted with a turbo diesel generator (60 KVA constant).



04 Control

Normally the machine is run in automatic mode. All functions can also be operated manually for adjustment and service work. The key operating conditions can be controlled on the multifunction display.



05 Chassis

The chassis of the Hurrifex tandem centre axle trailer and the semitrailer has wide 385/65 R 22.5 tyres. Since it is approved for road speeds up to 80 km/h, transportation is no problem.

THE GRAZ TERMINATOR

When “Terminator” Arnold Schwarzenegger visits his home town of Graz, Austria, media attention is assured. But how many people know that three other Terminators are constantly at work in the same city? The Graz Services company uses them to shred bulky and residual waste to prepare them for recycling.

Managing Graz waste: Wolfgang Messner, Chairman of Holding Graz Services (m.) with operations manager Peter Munter (l.) and waste business manager Walter Sattler (r.) in front of the new Terminator.





A Terminator never quits. Even if you stuff it with garbage.



Graz has a tradition of leadership in waste handling. In 1992, the Austrian region of Styria with Graz as its capital became one of the first in Europe to introduce the separate collection of biodegradable waste. A treatment concept was developed that basically remains in effect today, based on the greatest possible degree of source separation of all waste streams. This ensures that a high proportion of the waste can be reused as recycled resources.

IN THE LEAD IN RECYCLING

Wolfgang Messner, chairman of the Graz Services Holding, is proud of the high level of environmental awareness on the part of Graz residents. "With paper and glass we've been at record levels for years, and our overall recycling rate of 74% makes us one of the leaders in Europe. It's our job to provide the necessary logistics."

This has taken on impressive proportions. With just under 300,000 inhabitants, Graz provides 114,000 waste containers at over 30,000 points. Some of them are emptied weekly, while some are high-tech containers that radio in their fill level, so they only need to be emptied when they're full.

REDUCTION THROUGH SEPARATION

Everything revolves around a recycling centre, that has developed from just another collection point for bulky trash to a cutting-edge materials reclamation facility.

On 363 days a year, private persons can bring in electrical appliances, packaging, problem materials, bulky items and construction waste. "We then take care of the proper disposal" says Walter Sattler, who is responsible for waste handling. "The better separated waste is, the more straightforwardly and economically we can process it for re-use. That also reduces the amount of residual waste."

Nevertheless, each year the facility has to deal with almost 80,000 tonnes of residual and bulky waste. It does it by preshredding, screening and separating out ferrous and non-ferrous metals. The oversize fraction is then post-shredded, and wind-sifted to extract a high-energy fraction for use as refuse-derived fuel. What remains is biologically dried or stabilized in a closed rotting facility. Only a small amount of that is ultimately landfilled; most of it is of high calorific value and therefore used for incineration.



*"A drumroll, please"
Wolfgang Messner
starts up the
Terminator.*



10 YEARS OF THE TERMINATOR

As far as plant manager Peter Munter is concerned, the Terminator is the perfect preshredder. "We took the first one into operation ten years ago, and just recently set up the third one. As far as we're concerned nothing's better - the throughput of the Terminator 3400 and the degree of shredding it provides are ideal for our processing line." Like on the older ones, on the new Terminator the drive is separate from the shredding unit. In its compartment on the lower level of the machine, the drive is protected from dust and dirt, while offering easy access. The only thing in the machine's intake is the massive shredding drum. A robust protective panel on the filling side makes it extra tough - after all, this is a Terminator we're talking about.

SMART SOLUTIONS

Munter has also made his own contribution to his Terminator's efficiency. "All of our Terminators are on a platform and have connections that make it easy for us to lift away or switch out machines. That way we can take one in to the shop for maintenance without complications, while another one takes its place in the line."

Munter also feels good about the machines themselves. The close proximity to the manufacturer - just 30 kilometres away in nearby Frohnleiten, Austria - is naturally an advantage. He considers proactive service to be the way of the future. "Sensible maintenance agreements, the occasional special offer on spare parts, and testing and user input on the development of new wear parts. If I have the feeling that both sides benefit, I'm going to be glad to be a part of it."

Finally, a look at the organic waste treatment line. For almost 20 years a Komptech Mashmaster batch mixer has been working here to the satisfaction of all concerned. "We combine the organic waste with green cuttings to get the idea mix for composting," explains Munter. Composting itself takes place at several smaller composting areas around the city. After quality checking and cleansing of contraries, it goes to agricultural use where it provides crops with nutrients that end up as lettuce and tomatoes on farmers' market stalls in Graz. Recycling par excellence!



Graz Services is responsible for the collection, treatment and disposal of waste in this capital city of Styria in Austria. Residual waste is mechanically prepped in the residual waste treatment system, before being separated into combustible and organically treatable fractions for further use.



www.holding-graz.at

THE COURAGE TO SUCCEED

Darko Prodan is a man with a mission. Next year he hopes to take Croatia's largest and most modern sawmill into operation here in Vrboska. One part of it has already started working - an Axtor 8012 is busy making heating fuel.



Big reception for a big machine: Miljenko Čopić (Cedar operations manager), Siniša Vukas (Teknoxgroup), Darko Prodan (CEO Cedar), Dean Klajić (Cedar machine operator)

When people think of Croatia, they usually think of seaside holidays. Few realize that with over 43% forest cover, Croatia is one of the most wooded countries in Central Europe. Accordingly, forestry and wood products are major industries here. But they are industries that face major challenges. Small companies and elderly equipment often make it difficult to compete in the international arena.

For over 20 years the family-owned company Cedar d.o.o. in Vrbovsko in the northwest of Croatia has run a sawmill, specializing in the production of sawn lumber from beech for export to the Middle East, China, Japan and neighbouring countries in Europe.

INVESTING IN THE FUTURE

Darko Prodan, who heads the company, grew up with the smell of freshly sawn lumber, and he hasn't been able to get away yet. Nor does he want to - Prodan is currently in the process of transforming his company into one of the largest beech producers in Europe, with investments to the tune of 50 million euros. With enormous entrepreneurial courage, he is setting out to ensure a good future for his region and its job market. To do so, he is literally leaving no stone unturned - on almost double the space he had before, soon computer-controlled sawing lines will turn 250,000 cubic metres of beech timber into lumber each year, and modern loading equipment will load complete tractor-trailers in just three minutes.

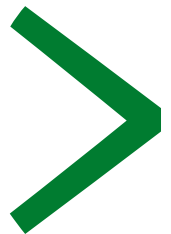
THE RIGHT COMBINATION

Prodan is certain that this courageous step will reap rewards. "We have years of experience, our employees are motivated and we have the ideal location." He's referring to his proximity to the beech that grows abundantly in the surrounding forests. The good transportation links are almost as important. "We're right on the motorway, and just 70 kilometres from the port of Rijeka. Plus, in the future we want to use the railroad that runs past here, so we included our own loading terminal in our planning," says Prodan of his all-out approach.





Croatian beechwood is sawn into lumber here for export around the world.



Under construction - an 8 MW biomass combined heating and power plant and an own loading terminal for rail shipments.



AN AXTOR MAKES THE FUEL

Work is still underway on the job site, but an Axtor 8012 has already gone into operation. It reduces waste wood to chips for use as heating fuel. Currently, with its 800 hp it almost seems a little overdimensioned. But once the eight megawatt combined heating and power plant currently under construction is commissioned, the Axtor will have its hands full. The plant will supply the immense amount of heat needed to dry lumber for shipment, and also feed two megawatts of renewable energy to the grid.

"WE NEED A FLEXIBLE MACHINE."

Darko Prodan

To satisfy the appetite of the power plant, not just timber remains but all sawing residue will be fired. So the Axtor will have to cope with bundles of slab wood, bark and the like. "It was important to us to get a machine with the broadest possible range of uses. We need to be flexible about fuel, and so does the machine," explains Prodan. Of course a purchase like this is never made blind, so he tested the Axtor thoroughly in all its modes. "Normally the Axtor works with fixed teeth and a shredder blade," adds operations supervisor Miljenko Čopić, "and since we sell fuel we screen the output with different screen basket sizes to suit the customer."

IN GOOD HANDS

Komptech's Croatian sales and service partner Teknoxgroup is responsible for taking care of Darko Prodan and the Axtor 8012 down the road. As a Caterpillar sales partner, the company is thoroughly experienced in servicing heavy machinery, and with service points throughout the country they are ready when and where needed.

The Axtor turns sawmill waste into fuel for the heating and power plant.



Screen basket and teeth determine the chip size.



Initiation into the secrets of the Axtor. Service technician Lovro Marinsek (r.) with machine operator Dean Klajić



Cedar d.o.o. in Vrbovsko, Croatia specializes in beech lumber. Its products range from construction lumber to wooden furniture parts.

In the course of an ongoing modernization and capacity upgrade the company is building an 8 megawatt biomass combined heating and power plant to supply not just the company's own needs, but also district heating and grid power. It runs on wood refuse from the sawmill, as well as bark and forestry residue, all chipped by the Axtor 8012.

CEDAR
www.cedar.hr

GREEN INSIDE AND OUT

Starting early this year, Komptech has been green on the inside too. The Frohnleiten-based company is now certified per international environment management standard ISO 14001, and has implemented an environmental management system.



Economy, ecology, society - the three corners of the sustainability triangle that is the measure for the company's actions. With the introduction of an environmental management system Komptech has implemented green efficiency® in development and production, long before a machine gets to the customer.

With ISO 14001 certification, all of the company's processes have been made environment-friendlier. The main focus is on saving energy and resources - and not least costs.

CERTAINTY FOR OUR CUSTOMERS

Komptech customers can now be sure that we are doing all we can in this area. Improved internal and external communication also results in faster reactions to inquiries and to problems that might arise. At the centre of all efforts is respect for people and the environment. Because only healthy employees build quality, and so create the highest level of customer value and satisfaction.

Komptech will publish its first environmental report at the end of the fiscal year - stay tuned!



An official document confirms that Komptech is now ISO14001-certified.



The three pillars of the sustainability triangle stand for the company's approach.



*Service staffer
Michael Schweiger
with his new
electric-drive
Renault Twizy.*



GOING WHERE THE WORK TAKES HIM

In the fall of 2014 Komptech started a revolutionary new project - "Practice Days," when development staffers can visit customers to get a first-hand look at Komptech machines in actual practice.





Komptech technician
Stefan Höfler inspects a
Terminator.

Almost 20,000 operating hours have left their mark.



The Terminators are in
more or less constant use.



HARD AT WORK

About 200,000 tonnes of waste pass through the Hanover waste treatment centre every year. That means hard work for the four stationary Terminators used to preshred the material.

Currently the machines all have between 17,000 and 19,000 operating hours under their belts. "Regular maintenance is naturally a basic requirement for this kind of endurance," says Höfler, who knows all about what it takes.

He adds, "Since the machines run pretty much around the clock, major maintenance can really only be done on weekends." Accordingly, the planned drum replacement took place on Saturday and Sunday. With machines that are run as hard as these, this is also a welcome opportunity for a thorough cleaning. "You can end up working far into the night," says Höfler of these very demanding days.



LEARNING BY DOING

"We're very happy with the machines," says Eberhard Lütge, who is responsible for the Terminators at the facility.

"Naturally, during day to day use you notice some things that can be improved," he says of his extensive experience with them. He's very positive about the Practice Days idea and adds, "I really like the way Komptech takes suggestions seriously and sends technicians to the customer." And turns to Höfler to voice his suggestions. "If the other manufacturers were such good listeners, we'd have a lot fewer problems," says CEO Ulf Meyer zu Westernhausen.

"It's very interesting to get feedback directly from users," says Höfler in appreciation of the many responses.

"On-screen you naturally get only a very limited view of what's going on."

His experience has been quite positive.

"And working Saturdays late into the night also doesn't happen on-screen."

He heads back to Frohnleiten tired, but full of ideas.



Drum replacement is part of a general overhaul.

Stefan Höfler (Komptech Umwelttechnik GmbH) and Eberhard Lütge (aha Hannover)



The facility has four stationary Terminators.



**Zweckverband Abfallwirtschaft
Region Hannover (aha)**



The Hanover regional waste treatment association (Aha) was founded in 2003 as a municipal utility. Its 1680 employees collect and treat household and other waste from the approximately 1.1 million people, 550,000 households and 50,000 companies in the region. Aha also provides street cleaning as well as winter clearing and de-icing services for the city of Hanover. Most of the waste treatment takes place at the central depot in the Lahe neighbourhood.

AHA AND KOMPTECH

Aha uses four stationary shredders and two stationary drum screens by Komptech in its mechanical processing operation. The organic waste composting operation at the same site has a Multistar 2-SE stationary star screen. The company also uses a mobile Multistar M3 screen.



www.aha-region.de

AGRICULTURAL FUELS - SAVIOURS OF THE ENERGY TRANSITION?

In the search for alternative fuels that can help reach renewable energy targets, agricultural waste has been gaining attention of late. A look at the potential of these materials.



It seems clear that climate change will have effects, in some cases dramatic effects, on vegetation and therefore forestry and agriculture. Climate change will lead to higher temperatures and more weather extremes, which will mean more weather and pest damage in forests. That will mean a long-term change in the distribution of species in forests, shifting growing areas for agriculture, as well as (theoretically) larger harvests due to higher temperatures and more rainfall.

WHAT IS AGRICULTURAL WASTE?

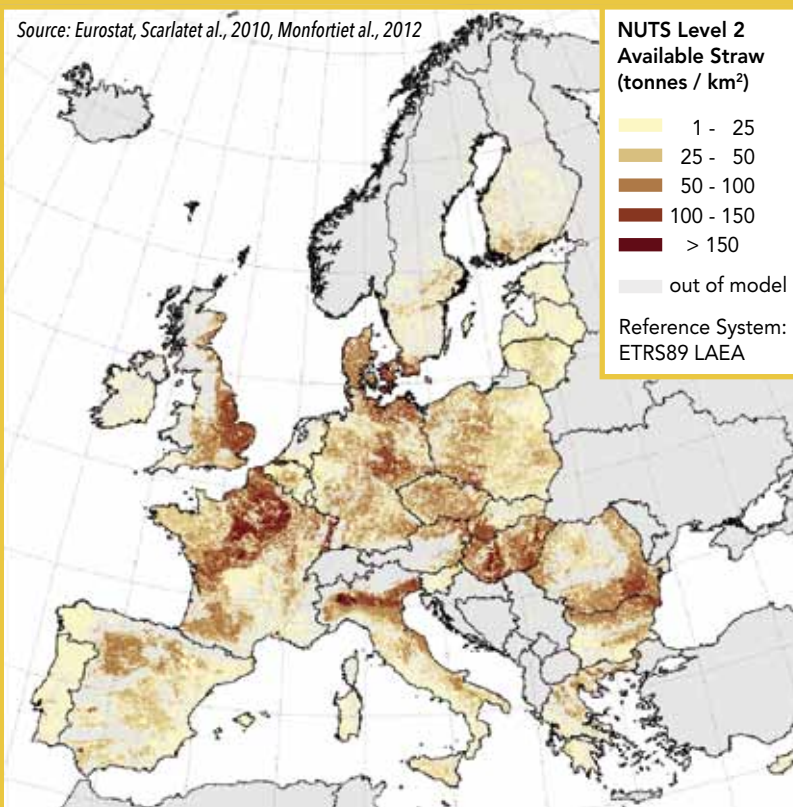
In addition to the familiar sources of raw materials like forestry residue, clearing residue, rootstocks, landscaping trimmings, municipal shrub cuttings and green cuttings, waste products from agriculture are more and more a focus of interest. Certain material flows are considered to have special potential - straw, corn stover, grapevine cuttings, landscaping hay and reeds, grain cleanings, husks and shells. All can be used as fuel when shredded.

THE LOGISTICS PROBLEM

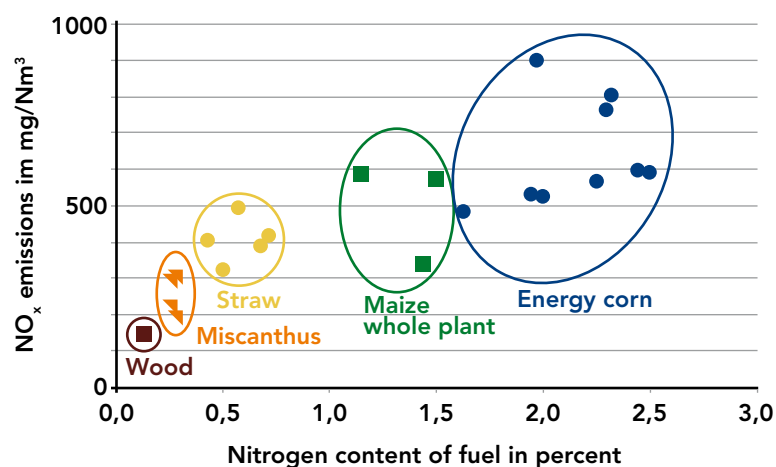
These materials have something in common - their low energy density means that transportation distances must be minimized. Agricultural waste is therefore suitable only for regional schemes in closed value creation chains. In addition, it needs to be dried in order to be more storable, which in turn means additional energy investment.

POTENTIAL IN EUROPE

Source: Eurostat, Scarlet et al., 2010, Monfortiet al., 2012



THERMAL USE - FUEL CHARACTERISTICS AND BURN QUALITY



Source: "Biomass fuels from agriculture" by Christoph Strasser & Elisabeth Wopienka

PELLETS OR BRIQUETTES?

Pressing the material into pellets or briquettes after shredding has the advantage of substantially increasing the energy density. It also makes the fuel much easier to dose for small burners. But the added costs are difficult to justify from an economic standpoint; at any rate, briquetting is cheaper than pelletizing.

A QUESTION OF TECHNOLOGY

But the real challenge in the use of these residues is their combustion properties and the development of appropriate firing methods. The high ash content means more slag and deposits and thereby corrosion, while high concentrations of pollutants mean higher emissions. Furthermore, combustion characteristics are highly variable with these fuels, which complicates burner design.

So, while agricultural waste has high potential in Europe and around the world, there is still some homework to do before these material streams can become truly viable. It will take the development of suitable incineration and emissions reduction technologies, and especially suitable regional logistics concepts. In addition, a clear legal framework for the use of agricultural waste must be put in place with all due speed.

Komptech pays a visit to BBG Donau-Wald: Rudolf Maier (head of sales for southern Germany at Komptech Germany), Filip Daniels (CEO Komptech Germany), Karl-Heinz Kellermann (CEO BBG Donau-Wald), Franz Richter (head of operations at BBG Donau-Wald) and Xaver Bircheneder (BBG Donau-Wald) (left to right)

A WORTHY SUCCESSOR

After putting 8000 operating hours on its former Crambo, BBG Donau-Wald chose another Crambo. We asked them what sealed the deal.

The Crambo is in its element shredding green cuttings.





The new Crambo's first day at work was not blessed with great weather, but everybody came out to welcome the new colleague. Of course, an investment of several hundred thousand euros in a new machine is no small matter, even for a regional power like the Donau-Wald waste treatment association. Located in the east of Bavaria, the association's company BBG Donau-Wald serves over 200,000 households. "We didn't make the decision lightly," says company chairman Karl-Heinz Kellermann, "although it's no secret that the Crambo is basically a perfect fit for our requirements. Just like its predecessor, the new machine will travel from one treatment site to another in our area on a hook-lift truck."

At each site it will shred the green waste stored there.

QUALITY COMPOST AND BIOGAS

The company applies a special strategy for further processing, first screening the shred with a Multistar L3 star screen. The medium fraction goes to anaerobic digestion while the oversize fraction and fines are composted.

The compost is used as a basis for many quality-assured gardening products. "We're acutely aware of our responsibility in terms of climate protection and resource conservation," says Kellermann of his company's strategy. "All Donau-Wald products are produced at local composting sites with no or reduced peat content. That helps reduce the cost of raw materials. Furthermore, we only market our products regionally."

"YOU CAN TELL THERE'S AN INNOVATIVE SPIRIT AT KOMPTECH."

Karl-Heinz Kellermann



As the decision for a new machine came closer, Donau-Wald took another close look at the market and invited several manufacturers to demonstrate their machines. "We found that some companies had been resting on their laurels and invested little or nothing in further development," notes Kellermann. "But that wasn't the case with Komptech. The new direct drive was a big step. At BBG Donau-Wald we started switching to fuel-saving, environment-friendly trucks back in 2006. So naturally the Crambo's new energy-saving drive system was a very good fit for us."

GOOD MAINTENANCE AS A REQUIREMENT FOR LONG MACHINE LIFE

In the long run, even the best machine is only as good as the maintenance and care it gets. Franz Richter is responsible for the composting sites and machine park, and the old shredder was in good hands with him. He and his team took a very close look at the new one during a practice run. "We're probably not the typical user," says Richter.

"We do a lot of things ourselves, since we have a well-equipped shop and skilled people." His trained eye immediately detected the many large and small technical improvements on the new Crambo. "It's nice to see a manufacturer who pays attention to user feedback," he comments.

SPEED IS OF THE ESSENCE

But sometimes there is no substitute for manufacturer service. When those occasions arise Richter needs to see fast reaction, and he also needs to know that the person on the other end of the line knows what he's talking about. "These are two things we've worked very hard at lately" says Filip Daniels, Komptech sales director in Germany. "Professional customer care throughout the life of our products is our top priority. If our all-round technicians can't answer a technical question right away, we call in our product specialists immediately. They know their machines down to the last nut and bolt."



Filip Daniels and Karl-Heinz Kellermann exchanging opinions on efficient machinery.



"That's new!" Komptech service advisor Bernd Dirkmann points out the advantages of the new Crambo as BBG Donau-Wald people watch with interest.

BBG Donau-Wald KU

The municipal company BBG Donau-Wald is responsible for the transportation, storage and handling of organic waste and green material, and for improving and marketing compost. As a certified specialist, the company has modern machinery with two fermentation plants, compost plants and composting sites in the Donau-Wald region.

BBG
Donau-Wald

|

Kommunalunternehmen
für die Behandlung von
Bioabfall und Grüngut

www.bbg-bayern.de

EXPANDED SERVICE NETWORK

Komptech has also put some thought into speeding up service calls. The centrally-located Revitec company in Germany now reinforces the service network in that country. A dedicated service coordinator decides which technician from where goes to which service call. Filip Daniels is certain that "when a customer needs us, we'll have a capable technical at their site in the shortest possible time." Regardless of the distance, the customer pays only a flat travel fee.

Franz Richter makes sure that whenever there is a service call, his own people look over the technician's shoulder. "After we watch them a few times, we can do the job ourselves. All we need then are the parts."

REDUCING WEAR PART COSTS

Cost consciousness is important at BBG Donau-Wald. They pay special attention to the wear parts on the shredding drum. "While the prices have gone down lately" says Richter in recognition of Komptech's efforts, "it's still worthwhile to refurbish worn cutter teeth. We use a device to cut off the worn tips, and then on weld new ones. That way we get 2 or 3 repeat uses per tooth." Wear and spare part prices are something Filip Daniels discusses frequently. "We're making a great effort to help our customers out on this. But the cost of a wear part is more than just the materials and labour.

It's also the development, the continuous improvement work, and naturally the warehousing and logistics that we have to take into account. When we can reduce our costs in these areas, we naturally pass on the savings."

In closing, Karl-Heinz Kellermann notes that "the Crambo was the clear front-runner in our overall ranking." Franz Richter is quite sure that the next 8000 hours with the Crambo direct will be as trouble-free as they were with the last Crambo.



PASSIONATE ABOUT THE BUSINESS

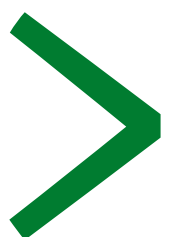
Lieven Vandendriesche is an impassioned technician and businessman. And because he also has a passion for the environment, he doesn't just have a composting plant, he also has a wind turbine.



Nele and Lieven Vandendriesche with Michaël Degelin of Pon Equipment

The facility doesn't just have green machines, it also has a large wind turbine.

The company was founded in 1978 by Lieven's father Julien Vandendriesche, and initially acted as a fresh food trucking company. In 1986 the company entered the composting business, and invested heavily in transportation and recycling equipment in the 90s. Vandendriesche bought its first Komptech machine, a Crambo, in 2003. Today there are three - a Crambo 6000 and Multistar L3 and Multistar XXL star screens.





Waste wood processing is a major source of income for the company.



Lieven Vandendriesche checking the material.

BIOMASS AS A GROWTH BUSINESS

"At this point we're focusing more and more on biomass processing instead of composting," says Lieven Vandendriesche. "Volumes are increasing." His customers are inter-municipal contractors, earthmovers, and nurseries and landscapers. He, his wife Nele and ten employees serve customers in Belgium and France.

QUALITY IS IN DEMAND

Customers' high quality expectations are not a problem, due in no small part to the Komptech machines. "The throughput is excellent" says Vandendriesche in praise of the green machines' performance. "They're also

very reliable, the warranty conditions are very good and Komptech's distribution partner Pon Equipment does a great job," he says, referring to the good relationship he enjoys with "his" Pon Equipment staffer Michael Degelin.

PURE PASSION

Day by day, Vandendrieschen demonstrates his passion for his business - his working day starts at five in the morning and goes until six at night, including on Saturday and Sunday, when he makes any repairs that are necessary. He also has a big heart for the environment, and his plant has a wind turbine that makes electricity.



It's an XXL job, even for the Multistar XXL.





The Tipturn X63 is in its element, even when mixing ores.

BLENDING, NOT TURNING

Specialisation, dependability, efficiency, durability, ruggedness - these are some of the features that define Komptech's new Tipturn X63 and make it even more capable than its predecessors for a wide range of environmental and industrial activities, including mineral blending.

The new generation of turners did not go unnoticed by Masias Recycling, Komptech's dealer in Spain and Portugal with more than 20 years experience in developing, projecting and installing turnkey waste processing plants all around the world. Masias recently closed a milestone deal that affords it positive results for the first quarter of this year. This is the delivery and commissioning of the first Tipturn X63 in Europe for mineral blending. It took place in Huelva in the south of Spain, where mining has long been an important activity.

VERSATILE AND RELIABLE

The versatility, reliability and performance of the new Tipturn X63 clinched the sale. Including this unit, the company has supplied seven such machines around the world, consolidating Komptech's leadership in this sector. The customer in this case was Impala Terminals Huelva in Puerto de Huelva. The commissioning day was a great opportunity for employees to discover first hand this durable machine's capacity, technical improvements, cabin design, engine, turning rotor, chassis, control panel, etc.

THE FIRST APPLICATION IN EUROPE

The Tipturn is the first of its kind used for mineral blending in Europe. "We are very satisfied with the operation, as it further consolidates Masias Recycling and Komptech's complementarity in this sector, as well as the commitment both companies have to supplying top quality and cutting-edge equipment," pointed out Antonio Heredia, commercial manager of Masias for Spain and head of sales and operations follow-up. "Masias Recycling's knowledge of the market's needs, alongside the know-how Komptech has gained over the years, are a guarantee of success as far as our clients' satisfaction is concerned", says Heredia.

IMPROVED PERFORMANCE

The new Tipturn X63 is not just the successor to the X60, but also an evolutionary step in capabilities for a wide variety of industries. Equipped with a more powerful engine that is in compliance with the most recent regulations and an intake width of up to 6 metres, the X63 can achieve

workloads of up to 4,500 cubic metres per hour. It also boasts new features like the wheel-mounted chassis, which grants it increased traction and manoeuvrability. The cabin is equipped with a lifting/lowering system for easy access and is more spacious, has a powerful air conditioning system with a monitored particle filter, an ergonomic air-cushioned seat, and a camera for manoeuvre control, all of which contribute to a safe and comfortable workspace.

MINIMUM EFFORT, MAXIMUM SAFETY

This new design includes two large, extendible maintenance platforms, integrated into the body panels, equipped with an automatic, hydraulic opening system, which allow maintenance operators to safely and easily access maintenance points. They are designed to accommodate several technicians per working area. The position of equipment and mechanical components has been reconfigured so that one of the platforms provides access to the drive train, engine components, cooling system and pumps, while the other one makes it easy to access tanks and electrical and hydraulic systems. The X63 is easily maintained with little effort and maximum safety.

A SPECIAL VERSION FOR MINERAL BLENDING

It isn't easy to adapt a compost turner to mix highly dense and abrasive, electrically conductive and easily friable materials. It requires reinforced, wear-proof materials and an especially well-protected electrical system. Everything has been thoughtfully implemented in this model to guarantee excellent results with this type of material. Together with the trust in Komptech and Masias have gained from Impala Terminals Huelva, this resulted in the choice of this machine, which has become a new national and European benchmark.

The new Topturn X is at the head of the class when it comes to maintenance.



Impala owns and operates a network of terminals that facilitate global trade flows. The company specializes in warehousing, multi-modal logistics and related port services for essential commodities worldwide. Impala combines the strengths of its people and assets to provide vital access to markets and new opportunities.

impala

www.impalaterminals.com



Left to right: D. Antonio Heredia (Country Manager Spain, Masias Recycling), D. Javier Peña Días de Entresotos (Project Manager, Tafigura Mining Group), Stefan Windisch (Area Sales Manager, Komptech GmbH)



Screening with a star: The Multistar S3

Mobile star screen

NEW



Excellent maintenance access
through service doors and easily
removable flexible cladding

Large hopper volume up to 3.5 m³
with low loading height

Screen deck drive by electric
motors, controllable with
frequency converters



Built on hook lift platform
(7m container) for ease of
transport

One-piece fines discharge
conveyor prevents leakage

Clear, easily understood
control panel with startup
and run-out control

All components powered by grid
current or with the optional on-board
diesel generator

