

GERMANY AUSTRIA INDIA EDIBLES HUNGARY USA CHEMICALS **GERMANY - BAVARIA EMIRATES ENVIRONMENTAL TECHNOLOGY ENGLAND TURKEY WASTEWATER** TREATMENT **ITALY**



Dear customer, dear reader

Performance is the key!

Your experience is certainly exactly the same as ours: performance is expected from you. And then it is ideal if you can rely on partners who know and understand these demands, bear them in mind and are capable of implementing them perfectly into solutions. Anyone who knows us knows that Hiller is a partner of this type!

The main focus of our whole company is to consider the goals and the welfare of the customer at all times in everything we do and deliver. We therefore not only place top value on a high-quality product but we also place great value on comprehensive consultation and personal contact, because this is the only way to come to a complete understanding of the specific requirements of every project. Then we can supply the machine or system that is exactly right for those requirements. Exactly this is the added value which is automatically included in every delivery from our company.



It has long been known that Hiller is the best place to go for a decanter that will do exactly what it should, that will do this reliably without requiring continuous adjustment by a professional due to changing sludge properties, and that will withstand faults caused by other components of the system without causing additional operating problems. This is why our machines have earned the reputation of good-naturedness, a reputation of which we are very proud, because we have managed to achieve this positive quality even though at the same time the machines are very powerful.

This of course includes that we never make empty promises or promises that cannot be kept about the results that can be expected in operation. Even though today guaranteed values unfortunately often appear to be nothing more than mere paperwork, we will never be influenced by wishful thinking. We prefer to test the genuine performance of the machine on site under real working conditions. Because this is not only an excellent opportunity for us to score, but also gives the customer reliable data for planning and evaluation of tenders.

Everyone who has organised and participated in tests of this type is well aware of the work involved. However, I am firmly convinced that all the work is worth it, and I would like to take this opportunity to express my special thanks to all customers who have decided to go this way. It is really encouraging to see how many customers prefer to see what they should believe rather than simply rely on paper promises.

I would like to invite you all to accept our invitation: "Test us!"

Best wishes from Bavaria, and God be with you to all customers, partners and employees

Yours sincerely Georg Hiller

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"Dewatering championship" in the Bavarian foothills

The championship in a very special field was conducted at the sewage treatment plant of a drainage authority in February 2010 at an idyllic spot between the Tegernsee and Schliersee: dewatering of anaerobically digested sewage sludge. This was necessary because one of the dewatering centrifuges at the sewage plant was due for major repairs. Because the machine was installed in 1993, plant management were considering purchase of a new system rather than repairing the old one.

They decided to find the best from four manufacturers to make sure that they did not end up with a machine from "just any" manufacturer.

Three German and one Danish manufacturer were invited. The sludge dewatering championships were about to start.

All four manufacturers were invited in succession to conduct dewatering tests with decanters that conformed to the tender requirements to determine the best possible guaranteed values.

The submitted guaranteed values were also subject to high contractual penalties if they were not achieved.

As part of the tendering process the submitted guaranteed values were ultimately included in an economical assessment.

It must be noted at this point that one of the manufacturers did not submit a main offer because of his group's conditions. Only an alternative tender was submitted, which was not followed up.

The most economical tender was ultimately that submitted by **HILLER** GmbH. It showed the most economical guaranteed values with the nominally most powerful machine in the competition.

The contract was awarded in March with the old machine being removed and returned in June. The new machine was then commissioned at the beginning of July, at exactly the time agreed in the contract.

In conclusion, it can be stated that the "championship" was a great success for **HILLER** GmbH, because process guarantees demonstrated in practice were considered and not just "paper values".

Even though we are naturally pleased that we as the best in this competition received the prize in the form of an order, we would still like to thank the customer for not simply wanting to believe nice promises but for having decided to use a method that was fairer and more secure for all involved by checking the performance of the machines on site.



TOP innovations demand TOP service

At the Moosburg sewage treatment plant

Moosburg with its 17,500 inhabitants is on the banks of the picturesque Isar river about 45 km north-east of Munich. The sewage treatment plant is designed for 40,000 PE and currently handles about 33,000 PE.

Roland Littmann, manager of the Moosburg sewage treatment plant has been here for 10 years and made himself available to HILLER for an interview.



What is special about the Moosburg sewage treatment plant?

We have always been open to new technology and are always searching for innovative solutions to improve the performance of our sewage treatment plant.

A few years ago we increased the plant capacity to be able to accept a wide range of third-party sludge and cosubstrates. At the same time we are continuously optimising our treatment processes and the efficiency of our power systems.

An important economic factor is our emphasis on exploiting the energy of our sewage gas.





The use of a fuel cell at a sewage treatment plant is very unusual. Can you describe the processes in more detail?

There are only three sewage treatment plants that use a fuel cell in the whole of Germany, and we are the only one in Bavaria. This is a pilot project, 48% of which was subsidised by the state.

The methane gas we use for fuel is generated in the digester from the fermentation of about two thirds sludge and one third cosubstrate, which partly comes from surrounding industrial areas. We also add food waste and other organic materials to the digester feed.

The sewage gas generated in the digester is used to generate power with our two motor cogeneration plants and with one fuel cell.

The fuel cell gives off heat as well as power. The exhaust air is around 400 degrees Celsius. This is used in the sewage treatment plant in a very innovative process. The heat is fed to a thermal oil circuit, which runs a sludge dryer. At 130 degrees Celsius this removes enough residual moisture from the sludge which has been dewatered in the **HILLER** centrifuge that the dry matter content is as much as 90%.

What HILLER machines do you use in your plant?

We have a **HILLER DP 45** dewatering centrifuge for some years now. After our thickening centrifuge from another Bavarian decanter manufacturer had become somewhat long in the tooth and was due for replacement, we decided to purchase a new decanter centrifuge for thickening from **HILLER** because of our previous good experience with the company and we are now operating a **DT 45**.

What does such a highly innovative and interconnected plant demand from HILLER?

Yes, you are right, this is a highly innovative plant, now operating fully automatically 24 hours a day with one shift only.

To be able to operate a plant with only one shift we need outstanding process stability and maximum possible operating safety of the various components.

We need a reliable service partner to make sure that we can safely manage such a challenge.

Downtime of machines must be less then 48 hours per event. It is very important for us to have competent **HILLER** service technicians available at short notice at an economical price.

Failure of both decanters would have an immediate negative effect on the processes and economical operation of our plant. If the dewatering machine failed, we would be unable to operate the sludge dryer and disposal costs would increase very quickly. We would also have to stop accepting sludge from outside, because the volume of our sludge buffer would be at its limits very soon.

Failure of the thickening machine would quickly increase the water content in the digester feed with a resulting reduction of gas production and power generation.

At the same time the solids inventory (MLSS) in our activated sludge tanks would increase, requiring increased aeration and increased energy costs.

Our years of experience with the company have shown us that **Hiller** can optimally meet our requirements for extremely flexible customer service.

Bernd Ramsauer, HILLER service manager, knows only too well from experience that operating savety and availability of spare parts at short notice are very important to many HILLER customers. We can meet these requirements very easily by offering HILLER rotor units to our customers while we are conducting regular services. We also keep a comprehensive range of spare parts on hand for important mechanical and electrical components. This ensures that we can supply parts very quickly and reduce the time required for repairs.

We are well aware of the sensitivity of the processes and of how highly they are interconnected such as here at the Moosburg sewage treatment plant, and we place great emphasis on solid basic training and ongoing professional development of our service technicians.

Are there any current new and innovative projects at the Moosburg sewage treatment plant?

Yes, we want to continue work on optimising our power systems. We are planning to set up a pyrolysis plant for further beneficial use of the dried sludge.

The resulting lean gas can be used to fuel the cogeneration plants or the fuel cell.

We are planning a district heat system to use the waste heat from the cogeneration plants and the fuel cell as much as possible. We are planning to supply waste heat from our processes to the sewage plant itself, city buildings, kindergarten, various schools and also social housing with 180 units at an economical price.



What do you find special about HILLER?

We are impressed with the long life and the quality of the machines and also with the technical results.

We are really pleased with the competence and the enthusiasm of **HILLER** employees.

What is particularly important for us is to have a competent **Hiller** technician on site within 48 hours and to have telephone assistance for those small problems that crop up from time to time. There is also the feeling of safety in knowing that spare parts are available at short notice.

HILLER's service is really excellent.







European steel giant awards new contract to HILLER GmbH

It all started in 2002 when a delegation from the client was searching for a company to service the existing decanter from a competitor at the

IFAT (International Trade Fair for Water, Sewage, Refuse and Recycling).

They were not satisfied with the previous service provider and visited our booth in the search for better service.

After initial discussions the client sent a complete rotor unit for reconditioning. The next step was a factory tour to examine the completed work. The reconditioned rotor unit was formally inspected and a short time later reinstalled by our service technicians.



agroscience services

Eurofins agroscience services is an institute for research in manufacturing processes and optimising manufacturing processes for food products while observing all legal requirements.

For this purpose an institute has been established in Stade an institute for conducting various tests in the laboratory and in the field.

Various processes with all respective equipment and analytical instruments are available in the Stade institute. Manufacturing processes and applications:

- Storage and sterilization (preserves manufacturing)
- Pasteurisation (e.g.: milk and juice processing)
- Production of various juices
- **■** Wine production
- Beer production
- Production of edible oils (olive oil etc.) and many more

A search was made for a suitable continuous process (other than pressing) suitable for the production of juices and/or oils (olive oil in this case) and attention was drawn to **HILLER** GmbH.

HILLER GmbH has been able to offer **Eurofins agroscience services** a centrifuge for continuous production of various juices and oils for the required applications, which is also suitable for food production.

It is a high-performance **DECAFOOD DF15** centrifuge with an output of approx. 100 – 500 litres per hour, specially designed for small production volumes.

In 2003 an extension of the plant was planned and **HILLER** was requested to tender. Intensive discussions on the optimum machine equipment for the task had already taken place. This was followed by a detailed tender, which was ultimately accepted. The machine was delivered and commissioned in June 2003.

After the decision was made to increase capacity in 2010 and the competitor's machine, which was repaired in 2002, had reached the end of its service life, all manufacturers in the market were requested to tender for a new decanter.

The RFP was now based on the European ATEX requirements. **HILLER** GmbH responded as with all requirements of this type: discussions and suggestions **WITH** the client to determine the best possible machine configuration for the purpose.

Hiller GmbH received the order because our previously delivered machine was working very well, our services were available at all times and the personal service was also to the full satisfaction of the customer. Customer's comment: "You are certainly not the cheapest offer, but the overall package was the best."

Once again we see that the key to the greatest benefit for both sides is a partnership oriented to the long term, not short-term thinking and action.

The philosophy of our company has once again proven to be the right choice.



Eurofins agroscience services can now produce juices and oils with this state-of-the-art technology.

The machine was commissioned in July 2010, with pineapple juice production and other products.

In addition to the centrifuge **Eurofins agroscience** services now has an expert contact partner in the area of olive oil production and the production of juices from a very wide range of products which can provide support at any time.

Leading industrial houses endorse HILLER India



HILLER Decanters India Pvt. Ltd. continued to consolidate its position in the Indian Market, as the country stood insulated from the economic meltdown. They bagged orders for over 70 decanter centrifuges in different applications in the last business year.

Almost all of the leading houses in the water treatment sector, like Agua Designs, Degremont, Enhanced Wapp, Geomiller, Ion Exchange, Ramky, and Thermax, have chosen **HILLER**. Their continued patronage towards **HILLER** India is a testament of our high quality standards and efficiency in providing after sales- service, our dictum, to keep our customers happy.

HILLER India was able to contribute to a very extensive list of water treatment plants in thermal power stations in India. After eliminating tough competition they could successfully book orders for supply of centrifuge units to:

- HAZIRA Thermal Power Station under the highly prestigious Engineering and Manufacturing enterprises BHEL and Thermax Ltd, leading solution providers in the engineering and environment sector
- IISCO Steel Plant's thermal power station in Burnpur operating under largest Engineering consultancy organization Mecon and Ion Exchange Infrastructure Ltd.
- Themal Power Plant by the Aryan Coal Benefications and Cethar Vessels Ltd, leading power plant equipment manufacturers
- Thermal power Plant AT Gujarat State Electricity board by Alstom India, global leaders of Power Generation plants and Triveni Engineers Pvt. Ltd who maintain a top 3RD position in sugar, distillery, water and turbine business

HILLER India's efforts in the field of alcohol industries have also been well rewarded, as they supplied centrifuge units to over 20 major distilleries by Mojj Engineering Systems Ltd, Great Galleon, Alko Plus Producers Ltd, Membrane Engineering Pvt. Ltd, KBK-Chem Pvt. Ltd and Globus Spirits Ltd, where the results of our high performance decanters of the **DecaPress** series have been nothing short of impressive. Owing to the satisfaction of the customer in getting superior results than the competitors and in after sales service, HILLER India was awarded with repeated orders for dewatering spent wash in their other distilleries. Further, in the current business year several distillery manufacturing units are approaching HILLER India for new decanter units for their newer plants or expansion projects after having used competitors' centrifuges for several years.



HILLER's newest "baby" decanters DP15-422 were supplied to Victoria Hospitals in Bangalore, plant by leading water treatment manufacturer UEM India Ltd, to Hotels ITC SHERATON and Indus Hotels, and to SUN TV Plant in Chennai run by the leading Singaporean engineering house Metax Engineering Pvt. Ltd. And also to several STPs and ETPs who opted for the "baby" due its compactness and exceptional performance, besides its dapper appearance.

The paper industry also showed their benevolence to **HILLER** India as they continued to be the prime suppliers of centrifuge units for the bio-methanation plant run by Tamil Nadu News Print and Paper Ltd, leading manufactures of Eco-Friendly paper, BVR papers and also for the paper plant by the prestigious ITC Ltd.

HILLER India was an integral part of several sewage treatment and water treatment plants all over India this year including major projects under Hyderabad and Bangalore Sewerage Board and prestigious projects for Madurai Corporation under Ramky Infrastructure Ltd.

In the slop oil treatment sector, state owned Balmer Lawrie Ltd, showed their commitment by awarding **HILLER** India, three phase and two phase centrifuges, for their major projects in IOCL this year.

Cipla, one of the principal pharmaceuticals manufacturers of India, have also been our devoted clients. HILLER India supplied several units this year for their ETPs and other separation units in pharmaceutical plants. Dr. Reddy's Lab Ltd, the second largest pharmaceutical production houses, are also consistent buyers of **HILLER** centrifuges.

HILLER India is also a proud supplier of decanters to the

effluent treatment plants of Cadbury India Ltd, Coca-Cola India, and Carlsberg Breweries (South Asia Breweries Pvt.

HILLER India is manufacturing a wide range of various decanter models locally for the local market. High speed models are based on **HILLER DecaPress** series, with some adaptions to optimally serve the requirements of the Indian market. The tremendous development of HILLER India's business has necessitated an expansion of their manufacturing unit.

We are confident that this expansion will provide a sound basis for a continuation of their thriving success.

















A Focus on China Successful Start-up at Zhangjiagang No.2 WWTP

In December 2009, our subsidiary in China, **HILLER Separation Equipment &** Engineering Co., Ltd., started up another project with 3 units high performance dewatering decanters **DecaPress DP54-422** with **HILLER** DecaDrive regenerative backdrive in Zhangjiagana. The entire dewatering plant was supplied by the plant construction company PWT based in Nantong, Jiangsu Province.

The WWTP is located in Zhangjiagang, which belongs to Suzhou city, a city which is famous in China for its historic gardens. The capacity of this WWTP is approx. 70,000 m3/d, comprising of municipal and industrial wastewater, using the oxidation ditch process for secondary treatment.

From the start the three Hiller DecaPress machines run smoothly with constant dry solids output and clear centrate, and fulfill all guaranteed performance values. Commissioning, training of operators, and postcommissioning after-sales service have all been carried out by HILLER Separation Equipment & Engineering Co.,

"We are happy to use **HILLER** decanters because of the high quality, stable operation, and because of the perfect after-sales service. It is really a very good machine -German technology, really reliable!" said Mr. Liu, the operator for the sludge dewatering plant.



"Due to the successful operation of HILLER decanters at No.2 WWTP and No.3 WWTP in Zhangjiagang, we prefer to use **HILLER** machines again for the future projects, such as Jingang WWTP, Jinfeng WWTP, Leyu WWTP and Changyinsha WWTP." said the director of the end user, Zhangjiagang Water Supply and Drainage Corporation.

HILLER is grateful for these very positive testimonies. Like the plants already installed and in operation, all future projects will be managed the "HILLER way": Perfect consultation and service throughout the entire project, and a fully satisfactory installation with reliable, stable, and easy-to-operate high performance decanters.

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HILLER repair centre



Once the customer has decided to purchase a new **HILLER** centrifuge there is also a high-quality after-sales concept that guarantees many years of professional support to maintain operational safety, supply of spare parts and short response times. The core component of this is a specialised and independent repair department in our company.

The organisation of the repair department is separate from the rest of the company and it has its own equipment to make it a generally independent and effective operating unit.

With qualified technicians and a special range of machines economical repairs at the best possible quality are guaranteed. Because the interfaces have been reduced to a minimum, repair times are very short.

If necessary we can supply rotors or mobile dewatering systems from our in-house pool to ensure that the customer's plant continues to operate during the repair.



Factory repairs offer the following significant advantages for the customer:

- assured quality, because the complete repair process is integrated into an ISO9001:2008-certified quality management system and is fully monitored.
- Original HILLER spare parts and original HILLER wear protection components are used exclusively.
- Mechanical stress calculations are the only criterion for deciding whether to continue using or to replace safety-relevant components. Non-destructive testing processes are used as support in making decisions.
- For liability reasons repair weldings on safety-relevant components must be conducted by qualified welders only. All **HILLER** welders are appropriately qualified.
- Process and material developments from new machine designs are implemented in repairs.
- Bowls and scrolls are balanced on state-of-the-art horizontal balancing machines at operating speed. The dynamic balancing process is essential for optimum operation of the centrifuge.



- Every rotor repair includes several hours of test running under defined conditions. The test requirements are generally equal to those for new machines. This is the only way of ensuring that the centrifuge has been correctly repaired.
- Removal and installation is conducted by qualified and experienced **HILLER** technicians, who also optimise the customer's plant in the course of commissioning.
- 6 month warranty.

The positive development of sales in the repair sector demonstrates that our repair concept meets all practical requirements. We will continue to direct our efforts towards further improving the infrastructure and general organisation for repairs to enable us to optimally serve our customers.



Press Release

HILLER is creating jobs

Once again HILLER GmbH management could congratulate five apprentices on their very good final marks on completion of their qualification as industrial mechanics and mechatronics technicians.

"This certificate is much more than just a piece of paper", said Stefan Weinholz, apprentice supervisor, while giving the graduates gifts for their excellent performance. Particularly to be noted are the very good results of Matthias Ammer as a mechatronics technician, and the outstanding work of Martin Huber, who spent many hours

in constructing a fully functional scale model of a decanter centrifuge during his apprenticeship. "A good, solid apprenticeship is the most important factor for a successful start in the working world. With our continuing growth at home and internationally we can offer our young employees, the most important capital of our company, outstanding professional perspectives", stated Georg Hiller jun., managing director of **HILLER** GmbH.

All apprentices were visibly pleased to hear Georg Hiller jun. announce that all of them were to be offered permanent jobs.



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HILLER can provide competent solutions for these industries and applications:



Food and beverages







Chemical processing and pharmaceutical industry

Environmental technology





Mining, tunnel construction, mineral raw materials and drilling fluids