

R Decanter technology for optimum results

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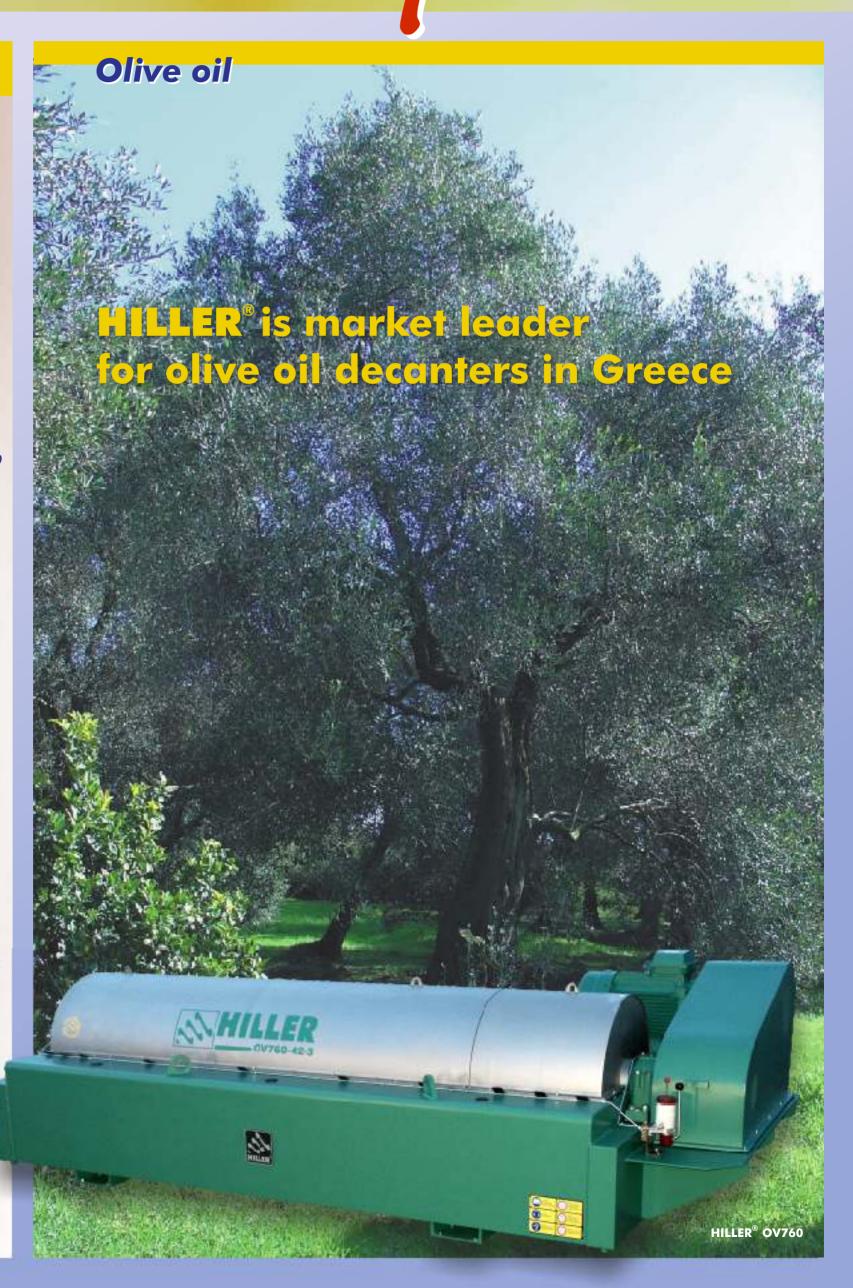
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PRODUCT APPLICATIONS PRODUCTS



Market leader for olive oil decanters

HILLER® is market leader for olive oil decanters in Greece

When dealing with decanters for producing olive oil Greece is one of the most important countries for HILLER®. Since growing olives is an important branch of agriculture in Greece olive oil production has been bolstered by EU wide and domestic support programs.

But there are going to be changes owing to the EU wide cuts in subvention programs which will have mediumterm effects on the number and size of oil mills and the competition there.

For more than 30 years **HILLER**® has been well-known in the Greek market for getting a maximum of oil from the olives. Thus olive growers and oil mill owners profit from maximum crop yields in return for their hard work.

HILLER® has been able to sell many more centrifuges over the past years, a development that resulted in selling the most centrifuges ever in 2005/2006.

HILLER® is not planning to rest on its laurels. Even in the future our customers can be sure that they will be able to produce even more economically with all the innovations of our centrifuges and thus improve the already high quality of their olive oil even more.

Alcohol production

HILLER® centrifuges and decanters are not only increasingly employed in distilling processes but also in all passes of drinking alcohol. The use of decanters in whiskey production has been a well-known and long implemented process for HILLER® centrifuges.

Apart from all the other manifold possibilities of employment and references a **HILLER**® decanter with electronic differential speed control was first employed in Turkey for the production of raki, a local aniseed liquor. EFE in Izmir, one of Turkey's largest raki distillers purchased a HILLER® Decapress DP45 with differential speed control which doubled the capacity of the two installed Italian centrifuges. Owing to its torquebased differential speed control the desiccation rate of the pomace was increased by 10%. This investment transacted by the ambitious EFE group had become necessary in the course of extending their production and the installation of a new production line which was put into operation last winter. This initial success was realized in cooperation with Teknokrom, our new partner in Izmir, a distributor of food stuffs, fruit juice, and vegetable oil.

Superfine Separation in Tunneling

For four years now **HILLER**® has worked in the field of superfine separation in tunneling where separating units with reciprocating screens, individual hydro-cyclone stations, and subsequent superfine separation using Hiller decanters are employed for hydroshield heading in wet process technology.

In cooperation with **Boenigk Consult**, one of **HILLER®'s** distribution partners, various large-scale projects have been realized worldwide, e.g. in the USA, Malaysia, the Netherlands, and Spain. For our latest success in the Netherlands a decanter line in compact container design for a load of 12 tons running extremely smoothly and almost vibration-free was introduced. It produces a rather solid, soil-like end product that can be removed by trucks. This unit was installed right next to a central hospital in Rotterdam and fulfils all environmental requirements as to noise emission and running smoothness.



Since it also produces a solid end matter with a dryness of more than 60% the removal is very economical for the group of construction companies there. Apart from large-scale tunnel projects a very compact centrifuge solution in mobile container unit form has meanwhile been developed which is employed for so-called micro-tunneling projects. It has proved successful, especially when quickly changing sites and short operating periods are asked for. Construction companies that are active in this field just love this implement.

HILLER® decanters designed for solid matter loads of 2-6 t/h, equipped with top-performance high-pressure hydraulic systems made by HILLER® are preferred for these jobs.



Apart from many specially designed models our product line of basic models was substantially extended by some more sizes

They are the **HILLER® DP51** and **DP58** for high-performance dewatering, and the olive oil centrifuges **OV510**, **OV580**, and **OV760** (see front picture).

Immediate success in sales approved these designs within the shortest time and shows the competitiveness of these new models by HILLER® GmbH.

Tanneries

Tanneries produce functional leather which is basically categorized as leather for shoes, leather for furniture, and leather for the automotive industry. Of course, leather is also used in other fields such as handbags, but the first three applications have the highest number of consumers.

Nowadays leather is produced for very particular users. There are many tanneries in South America because production costs and quality there have fulfilled the requirements. However, there is a tendency to outsource tanneries to the Asian region, i.e. more and more tanneries are founded there. This has mainly to do with the producers of the end products. Leather-consuming producers have to react to changes in style and fashion design quite fast these days, which can be done best when you produce close to the end consumer.

Traditional tanneries produce a lot of wastewater. A typical larger-size tannery produces 200 - 250 m³ of wastewater with a solids content of about 0.5 - 1.0%.

Moreover, they also produce highly concentrated fatty liquid waste as well as highly contaminated chromium wastewater. The volumes of these effluents are, however, considerably smaller and can therefore be treated with smaller machinery in the case of the above mentioned unit.



To treat the chromium liquid waste a HILLER® DP37-422 would suffice, and a HILLER® DP26-422 or a HILLER® DP31-422 would be sufficient for treating the fatty wastewater. Depending on the type of

treatment very large volumes can be substantially reduced by employing sedimentation tanks or thickeners.

The sedimentation tank yields a concentration of the solids content to about 3 - 4 %, while the downstream thickening unit increases this result to even 7 - 8 %. While the machine expenditure is smaller there is, however, a very big problem of smell nuisance owing to the sedimentation tank and the thickener. So this technology can only be used if there are no people living in the adjacent neighborhood. For this reason, one of our customers is planning to get rid of his sedimentation unit while an other one intends to install one for exactly the same reason.

The liquid waste is treated by retaining the fatty sludge by means of regular two-phase machinery made of stainless steel. When treating 0.5 - 1.0 % sludge a solid matter value of up to 40 % can be achieved. However, there must be a follow-up biological treatment before the concentrate can be discharged to the receiving water unit. Solutions for 3 - 4 % sludge are also available.

PROJECTS FAIRS





Fairs in 2006

Preview of fairs in 2006

One of the most important fairs in 2006 is the ACHEMA, the

28th International Exhibition Congress for Chemical Technology, Environmental Protection, and Biotechnology in Frankfurt am Main from 15 to 19 May 2006 Please visit us at stand B42/B44 in hall 5.1

You will find the current list of fair dates on the Internet at www.hillerzentri.de

Subject to alteration and supplementation



IFAT 2005 in Germany

After having had a considerable number of visitors at our stand at the IFAT 2002 already we were actually surprised by the masses of visitors last year. Many of our customers dropped by to express their satisfaction with our products but we could also socialize with a vast number of potential customers. Especially visitors from Asia and overseas were interested in our products.

Apple juice



We regularly organize promotion campaigns for our customers to gather experience regarding the

HILLER® DecaFood DF54-402S for

extracting the juice from the apple mash. The focus is on the crop, the operating safety, and the purification behaviour of our technology.

The test unit was in large-scale operation from mid September to mid November. During this period about 80,000 liters of apple juice were produced at a rate of 75-80 percent by weight.

The test run was monitored by a technical college to gain representative results.

On an 'open day' our technology was presented to the interested professional public, and one visitor came all the way from Schleswig-Holstein in the far North.

The visitors' response was absolutely positive, especially since the dryness of the pomace and the excellent quantities were quite a surprise. The tasting of the pressed juice yielded many positive reactions.

This gives you an impression of what pomace from a HILLER® decanter looks like.



We presented our visitors several innovations:

- > Introduction of new HILLER® DP type series for high-performance dewatering in connection with the extension of our product line by 3 models
- > Optimization of durability due to adjustments on wear protection
- > New development of energy-saving drive
- > Introduction of the newly developed measuring and control system HILLER® EMR5000
- Presentation of HILLER® DecaGuard 1002 as a complete system for bearing and vibration monitoring

Many guests also stopped at our mobile test facility outside to 'experience' what **HILLER®** means when mentioning quality 'Made in Germany'.

Doncaster Airport



In the course of extending the infrastructure of Robin Hood Airport in Doncaster (UK) a new sewage treatment plant, based on the SBR (sequencing batch reactor) technique, was built for this airport in the heart of Great Britain.

In the sludge dehydration unit a HILLER® High-performance Centrifuge **DP31-422**, equipped with the latest model of the dynamic HILLER® DecaDrive, was installed. This drive features the new HILLER® EMR 5000 control device which. apart from its versatile flexibility, offers the customer a substantially improved operating comfort for selecting the frequency converter.

The successful sales in Great Britain also include communal customers like Scottish Water and Yorkshire Water. In the industrial area we installed machinery for producing potato products, vegetable processing, and the processing of slaughter waste.

Big5 in Dubai, a big success



HILLER® GmbH attracted considerable interest among the visitors of the Big5 fair in Dubai.

Especially the **HILLER**® 3-Phase unit found lots of favour.

Owing to the successful Dubai fair one 3-Phase machine and two more HILLER® DP-422 units have been sold to Saudi Arabia in the mean-time.

WEFTEC 2005

USFilter, our exclusive distributing partner in the USA, was present very successfully again at the WEFTEC 2005 presenting a newly



IWEX in England

HILLER® DP66-422 for the IWEX Fair in England



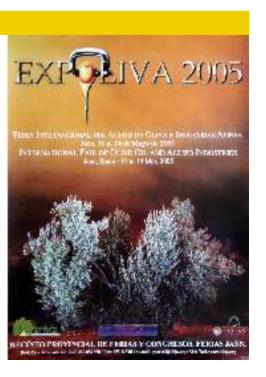
This machine was the biggest machine ever exhibited in a fair in England.

Expoliva 2005

This fair in Montoro, Spain is one of the largest and most important fairs for growing and processing olives in the world.

Just like in the previous years HILLER® **GmbH** presented their latest technologies for olive oil production at the partner stand of Centrifugacion Alemana.





CURRENT CORPORATE ISSUES CORPORATE ISSUES

Finishing the asphalting of our new parking lot of 1,600 m² on 23/24 November last year concluded the first phase and created the underground engineering preconditions to begin with the planned extension of our production area.





Addition of another floor

Since December 2005 HILLER® GmbH has had another 180 m² of office area because one floor was added to the office building. This extension had become necessary owing to the increase of the number of personnel

and the expansion of the company. The management of HILLER® GmbH considers this structural extension a further step

towards extending our competitiveness in the world market.

Newly developed measuring and control system

With the new electronic measuring and control device EMR 5000 HILLER® introduces a device that stands out from all competing systems by two outstanding advantages. It is the first time that a device was developed that can control two different screw drive systems:

Backdrive and **HILLER**® **Hydraulics** merely by pushing a button. Furthermore, it enables the customer to choose between up to ten (!) different brands of frequency converters when realizing a Backdrive drive. In case of a hydraulic drive the choice is even free.

Other features of the EMR are a colour touch panel with graphics capabilities which makes operating the machine chickenfeed. All important machine parameters are displayed clearly laid out allowing for complete system control in eight different languages, retrievable by just pushing a button, too.



The new electronic measuring and control device HILLER® EMR 5000

A profibus DP interface is optionally available which can be used for comprehensively connecting the device to a superior control unit. This makes the EMR 5000 a highly functional but also easy to operate control system for a HILLER® decanter drive.

DecaGuard 1002

New! A complete one-stop system easily mounted and connected

- ð•frequency monitoring
- ð• early detection of bearing damage
- ð• monitoring of outer and inner cage and rolling elements
- ð• outstanding price-performance ratio
- ð•redundant safety

DecaDrain mobile unii

The HILLER DecaDrain® test units demonstrate the possibilities and results of **DecaDrain**[®]. The mobile units can be quickly incorporated in your processes allowing you to assess its quality regarding your product on site.



China



New branch HILLER® office opened 2005 in China

Teknokrom specialize in top-quality stainless steel tanks for most diverse applications. All types of stainless steel tanks are manufactured by welding robots which guarantees a constant high-level quality.

One of the fields they focus on is the manufacturing of units for the extraction of olive oil.

In cooperation with HILLER® they can supply the Turkish market with complete production lines for maximum extraction results during the first and the second processing step.



New test facility

Owing to the extensive utilization of the existing test facility the management decided to build a new one in addition.

The new facility was designed for the most different requirements of the market. It is located in a standard 40 foot container which is licensed for sea transportation and can thus be employed worldwide at relatively low costs.

The design of the unit permits installation of several different decanter sizes. The decanters can be easily exchanged so that the required dewatering performance can be verified with the optimally suitable decanter type. This convinces the customer that the decanter on offer meets the required demands.

The technical layout is designed for thickening and dewatering operation.

Design

.. mible demonstration plant

wihadid bow centrifuge

40 foot sea container, completely insulated including heating for operation in winter

Dewatering features:

1 - 80 m³/h depending on the decanter size

FHM processing:

Powder or liquid polymer treatment with two different systems integrated

Solid matter removal:

by means of a high consistency pump during the thickening operation by spiral conveyor, pivoted and heightadjustable, during dewatering operation

Connected load:

63A - 250A depending on decanter size

Celebratees and new staff members

Celebratees honored at the 2005 Xmas party

for 25 years

Mr. Franz Bauer for 15 years

Ms. Rosalia Gärtner

Mr. Bernhard Ramsauer

Mr. Gerhard Seidel Mr. Gerhard Golisch

Mr. Heinrich Berg

for 10 years Ms. Inge Gockner

Ms. Karin Attenberger

Mr. Günter Haider

Mr. Michael Huber

Mr. Thomas Buresch Mr. Friedrich Brod

New employees in 2005:

Mr. Stefan Angstl, 1/1 (Service)

Ms. Lieselotte Baumgartner, 1/1 (Sales)

Mr. Andreas Baldauf, 3/1 (AV)

Mr. Michael Prizl, 11/1 (Service) Mr. Michael Wielicki, 9/1 (Sales)

Ms. Monika Zehentbauer, 12/1 (Sales)

Ms. Franziska Brenninger, 9/1 (apprentice Accounting)

Ms. Karin Wimmer, 9/1

(apprentice Construction)

Mr. Maximilian Kreitmeier, 9/1 (apprentice Workshop)

Mr. Philipp Rauch, 9/1 (apprentice Workshop)

Mr. Martin Schlemmerer, 9/1 (apprentice Workshop)

Mr. Christian Schlittmeier, 9/1

(apprentice Workshop)

Mr. Romeo Stupar, 1/1 (Production)

Mr. Thomas Thurmaier, 1/1 (Production)



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ER®

Decanting centrifuges, hydraulic drives and separators

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