

INNOVATIONS IN GALA FORM™

Actual Market Situations Require Partnership, Experience and Practical Solutions

Today's Customers demand all-inclusive advice on the entire plastic production process! There is enormous pressure to make sure every single line not only operates efficiently and profitably but also achieves the warranted qualities in all regards. For this, suppliers to the industry must possess a great deal of experience and truly comprehensive know-how. Customers must be able to rely on the availability of professional experts for technical assistance and speedy dispatch of spare parts, whenever and wherever they may be needed.

This is where Gala Excels!

We satisfy these needs by ensuring the final process runs smoothly and produces well shaped pellets in the characteristic Gala Form™. Gala truly offers 24-hour service, with experienced staff available at any time to help with advice, information or spare parts. It is this comprehensive service we offer and our ability to present practical solutions that our customers have come to appreciate. In particular, when the Customer needs something very special — something out of the ordinary — when looking for a tailor-made solution that may not yet exist— Gala has become the preferred partner and supplier of choice.

Our goal is Your success!

In this Newsletter, you will find some of the most recent developments in the area of Pelletizing and Drying...

Presented By
Gala Kunststoff- und Kautschukmaschinen GmbH
Gala Industries, Inc.
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DRYER FOR HIGH CAPACITIES FOR UP TO 100 T/H

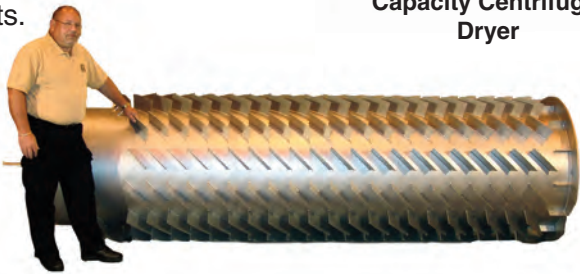
In a unique major effort, Gala has assembled in its own plant a dryer testing facility to be able to test the high-performance machines in real time and long-term.

Various products with different properties have already been tested. Within this thorough test series, significant optimizations are being generated.

Gala's entire dryer product range will benefit, as well, from these ground breaking tests.



Gala Model 100 High Capacity Centrifugal Dryer



Rotor for Gala Model 100 High Capacity Centrifugal Dryer



Dryer Model 100 at Gala's Dryer Test Facility for rates up to 100 t/h

BENEFITS

Safety

- door timed interlocks
- easy access
- FEA designed

Environmental

- clean operation
- low noise emissions
- low energy consumption

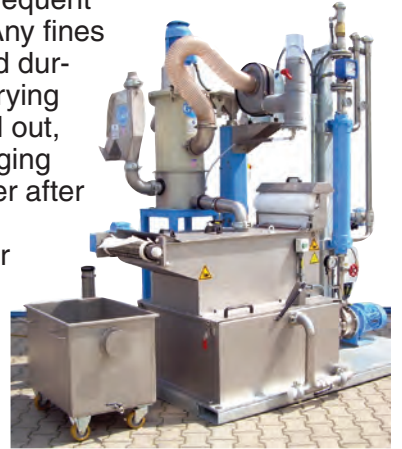
Profitability

- suitable for various applications
- minimum floor space
- proven reliability



INNOVATIVE WATER SYSTEM AND DRYING TECHNOLOGY

These modern water systems were upgraded especially for compounders and manufacturers of masterbatch with frequent product changes. Any fines which are produced during the cutting or drying process are filtered out, ensuring that changing of the process water after a product or color change is no longer necessary in most cases. Therefore, resources will be saved, cleaning time will be reduced, and time needed to heat up the fresh process water will be reduced, saving energy consumption.



MB500 -BF with continuous band filter

As a retrofit package for existing IS (Integrated Sieve) tank water systems, Gala has developed a Continuous Band Filtration (CBF) System. With this water filtration method, any fines of 150 micron and above are continuously transported out of the water system. The system works automatically and does not need cleaning in most of the cases. As the filter material is continuous, the service life of the filter material is expected to be very long. The CBF system operates principally maintenance free. With this system, time for complex color or product changes is shortened to only a few minutes. *(continued on page 3)*

BENEFITS

Safety

- automated start-up & shutdown
- redundant safety interlocks
- optional:
 - steam-tight
 - insulated
 - hot face protected

Environmental

- clean operation with easy access
- low energy consumption
- efficient closed loop filtered water system
- low noise

Profitability

- suitable for various polymers
- minimal floor space
- low maintenance
- minimal power consumption
- minimal water consumption
- low production costs



MB500 -BF with continuous band filter

INNOVATIVE WATER SYSTEM AND DRYING TECHNOLOGY

(continued from page 2)

The perforated dryer screens have been improved to be more operator friendly and easier to assemble and disassemble by using belt straps around the screens.

These new Easy Mount (EM) screens are available for any application up to 32 Series Dryers requiring frequent dryer cleaning as well as heavy wear applications, such as under-water pelletizing and drying of glass fiber filled compounds.

These screens have been applied already in many field applications and proved to be pellet leak free.



Easy Mount (EM) Screen

PELLETIZER TECHNOLOGY

In the field of pelletizer technology, Gala has successfully implemented electronically controlled blade adjustment in the Electronically Adjusted Pelletizer (Model EAC).

This innovative concept builds upon known, field proven pelletizer technology. By integration of the latest electrical



components, the pelletizer system can be made simpler and with fewer parts.

This maintenance-free system is automated and generally requires no operator intervention. The blade adjustment is completely reproducible and independent of an operator; the lifetime of the pelletizing tools could be increased and the blade adjustment could be performed more precisely.

During the development and assessment of the

new pelletizer Model EAC (Electronically Adjusted Cutter), Gala relied on the support from multiple production facilities. These companies were willing to field test the new equipment under production conditions. Also LyondellBasell had the chance to benefit from the advantages of the machine. The process of data collection on wear and tear of the cutting tools is still ongoing and will be used for comparison with the previously used machines. If the performance continues as is, the next machine will be upgraded also, stated a responsible person in a site meeting after 3 months experience with the new EAC in production.

INNOVATIVE DIE PLATE CONCEPT

The die plate is the “heart” of the pelletizing system. The Gala die plate has experienced various exciting innovations. Combinations of special geometries, innovative insulation ideas and manufacturing methods combine to create a die that has excellent performance and is user friendly.

This results in 70% energy savings for the heating of the die plate over traditional systems. During use of these new designs, the operating window is enlarged.

Pressure drop across the die plate is reduced, which results in quite a few advantages for the operation. The processes can now work with either higher output rates within the same pressure than before or can be operated on a significantly lower pressure value. This allows the production to be gentle to the material processed as well as lowering the energy requirement for the extrusion process.

BENEFITS

Safety

- automated start-up and shutdown

Environmental

- minimal energy consumption
- less wear and tear
- reduced waste and off spec material
- low production/ polymer pressure

Profitability

- minimal start-up waste
- low production & maintenance cost
- easy maintenance
- easy and simple operation
- reproducible results
- low blade wear
- can reduce capital equipment cost

BENEFITS

Safety

- automated start-up and shutdown
- failsafe pelletizer clamping

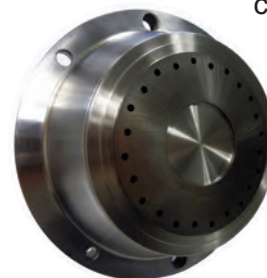
Environmental

- low energy consumption
- low wear and tear
- low waste and off spec material
- elongated production runs

Profitability

- minimal start-up waste
- low production cost
- low maintenance cost
- few parts in operation
- easy and simple operation
- reproducible results
- blade wear indication
- minimum operator involvement required

The new die plate design is called “Heat Flux” technology. It is available for retrofit and can be combined with all existing heating concepts. Electric, oil and steam heating are possible, as well as regulation with one single zone, multi-segment or complex multi-zone heating.



Heat Flux Die



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