A HISTORY OF SERVICE AND INNOVATION

In 1984 brothers Pieter and Erik Eenkema van Dijk formed Van Dyk Baler Corporation to introduce the Bollegraaf horizontal baler to North America. The innovative machine, with its proprietary pre-press compression system, revolutionized fiber and multi-material baling with its high production and efficiency.

As the recycling industry continued to develop, so did the brothers’ company. Van Dyk was responsible for many of the first dual-stream and then single-stream recycling plants. The company delivered many “firsts” to the industry, including introducing the OCC screen in 1991 to clean up OCC loads.

As the exclusive distributor for Bollegraaf, Lubo and TOMRA, the company has access to unique technology. Importantly, as Van Dyk learned how the technology was applied in Europe it was often able to see trends that would affect the U.S. market before they took hold.

This knowledge, applied to North American material streams, commodity market requirements and customer specifications allowed the firm to become a leading market innovator.

Today the firm, now Van Dyk Recycling Solutions, brings a long track record of success to solving its customers’ problems. While it has been responsible for some of the largest, most innovative plants in North America, its primary customer base always has been independent recycling companies.

Those seeking low operating cost, high production and highly efficient recycling system components or complete turnkey plants are among the best customers for the company.

A PARTNERSHIP OF STRENGTH

From the very beginning, Van Dyk has partnered with Bollegraaf. Bollegraaf’s position as a growth company was set early on by its revolutionary founder, Hartog Bollegraaf. In the aftermath of World War II, Hartog had a vision to build a pioneering business that brought new solutions to buyers around the world. In 1990, his son, Heiman, further expanded the company in order to fulfill the needs of their growing customer base. In the past 75 years, Bollegraaf has evolved into one of the leading turnkey recycling system suppliers in the world.
GLASS: OPTIONS FOR GETTING IT CLEAN

Cleaning the glass product produced in today’s material recovery facilities (MRFs) continues to be a challenge for many operators. Van Dyk has worked closely with its customers to conduct detailed R&D that has resulted in two systems to meet their needs.

Experience has taught Van Dyk that for best results material should first be sized. For this reason, Van Dyk begins with a double-deck vibratory screen. This sizing step enhances downstream separation, yielding a significantly cleaner product.

One process uses a Walair density separator. The second uses a zig-zag separator, which produces glass containing less than 6% NGR (non-glass residue).

THE INDUSTRY’S WIDEST SCREENS

Bigger is better, and Van Dyk offers the industry’s widest screens. Wide screens offer operators advantages in both capacity and efficiency. For those considering plant upgrades, they can be the ideal solution.

Van Dyk’s wide screens are available in 10’, 12’ and 13’3” widths. These screens spread material more widely, yielding cleaner separation and larger throughputs.

The company’s models feature non-wrapping star and large diameter axle combinations that significantly reduce material wrapping. The unique Lubo star design delivers excellent separation of containers and fiber. They also are equipped with quick disconnect shafts to make routine maintenance easy.

NGR BREAKDOWN

<table>
<thead>
<tr>
<th>Sample</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Average</th>
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<tbody>
<tr>
<td>CSP</td>
<td>2.5%</td>
<td>3.1%</td>
<td>3.5%</td>
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<td>1.1%</td>
<td>0.4%</td>
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<tr>
<td>Residue</td>
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<td>0.6%</td>
</tr>
<tr>
<td>NGR Total</td>
<td>4.2%</td>
<td>5.7%</td>
<td>5.7%</td>
<td>7.8%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Zig Zag glass clean up system and breakdown of four samples of non-glass residue (NGR).

VAN DYK ALSO HAS DESIGNED A PROCESS WHEREBY CUSTOMERS CAN RETROFIT LARGE DIAMETER AXEL AND NEW 440 STAR COMBINATIONS INTO EXISTING SCREENS.
Bollegraaf balers’ single-ram design uses a fraction of the power used by traditional two-ram balers and operates automatically without a dedicated operator. The unique pre-press flap eliminates the shearing of other balers. The energy spikes and higher maintenance associated with shearing are eliminated with Bollegraaf balers.

Bollegraaf maintains a strong focus on R&D and has recently introduced numerous enhancements to improve performance. Some of the most notable include:

- **Double channel cylinder** – The double cylinder has proven to increase bale density.
- **Fully lined bale chambers** – The entire bale chamber and channel are lined with replaceable Hardox® steel plates.
- **Adaptive channel pressure (ADCP)** – This fully automated system achieves optimum pressure for each grade automatically.
- **New tying system for plastics** – Numerous benefits include the ability to reduce the possibility of wire breakage while also reducing wire costs in a unique way.

Many improvements in the baling of plastics continue to enhance the flexibility of Bollegraaf balers.

Of course, Bollegraaf balers continue to feature HUNGER cylinders. HUNGER hydraulics are extremely durable and considered the best in the world. In fact, in 32 years Van Dyk has replaced just one main ram cylinder!

The Bollegraaf continuous improvement program ensures recyclers of the most advanced technology to lower costs and increase efficiency. Through Van Dyk’s rebuild program, many of these features can be added to existing Bollegraaf balers.

Want to process both commercial loads and single stream with no screens?

We have the No Screen Solution: a new and improved way to process 18-20 TPH of commercial and 13-15 TPH of single-stream material. No purchases of stars or labor to change them is needed. The system hardly even needs sorters. For commercial loads, it allows SOP to be separated automatically. Additionally, this new system has a much more compact footprint.
AN ELLIPTICAL SOLUTION

The Lubo elliptical separator is a powerful piece of engineering. It takes the existing concept of a ballistic separator to the next level of performance. Developed through a rigorous R&D project by a team of dedicated engineers, the first units were tested for two years, running 24 hours per-day, seven days per week in an MSW application. The units have been offered commercially for some time and deliver the pinnacle of performance.

STRING STRIPPER

Want to take out increasing levels of film in single-stream loads? Lubo has developed the "String Stripper" to do this automatically.