



People Power at L-PACK

Sustainable Packaging for Branders

From recycled fibre to corrugating and complete branding solutions

When Peter the Great chose Lipetsk, Russia, to make canons, based on rich deposits of iron ore, he succeeded then – but, over the centuries, more than he could have imagined. Now Lipetsk is a technology hub for metalworking, machinery, tools, engines, chemicals, and most recently, containerboard manufacture and corrugating. Petr Karanchuk, CEO of L-PACK, brought new life to Lipetsk, using Russia's own recovered fibre to produce packaging for leading brands.

Says Karanchuk, "We are a pioneer in Russia, making packaging from packaging. This means the transport box to the branded packages inside. Our customers appreciate us for our fast order processing and quality packaging. They also value the positive experience of interacting with our people who care about sustainability."

Adds Karanchuk, "We pride ourselves in continuous process improvement. Tight control of pulping recycled fibre, making paperboard and fluting all the way through to finished packages. Flexibility around their needs, conti-

nuously improving our processes, always with a smile – that's the L-PACK promise."

A huge leap ahead for L-PACK was their decision to purchase a large 4.8 width meter printing and writing machine from Europe in 2017 and converting it for the packaging segment. Starting up in March of 2019, the completely rebuilt infrastructure houses stock preparation lines for OCC and a complete special stock preparation line for Used Beverage Cartons (UBC), two paper machines, two corrugating lines and other specialty converting equipment to make a wide range of premium packages.

Nearly two decades of experience in quality production

When you visit L-PACK and tour the facility from pulping through converting, smiles are everywhere. When workers tell you that they always toast the health of Petr Karanchuk at a celebration, they are sincere. Says Karanchuk, "Our packaging solutions are not about me. Quality products and relationships are about our people and their interactions with customers. I should say strategic suppliers, also, because they are essential to our ongoing progress."



Modest beginnings, now the biggest in recycled linerboard

L-PACK, founded in 2001, produces singlewall and doublewall corrugated containerboard and a full range of grades. In addition to the standard list, the range of products includes micro corrugated board, large-scale packaging and fanfold. Their own raw materials base, cooperating with the leading suppliers of raw materials (Arkhum, Ilim) and continuous modernization of production ensure the dynamic development of the company. Since 2002, an annual increase of volume of production has been more than 10%.

The production cycle starts with waste paper, which is used to make testliner and fluting. The paper we produce serves as raw material for corrugated containerboard. The ready sheets then go to converting machines, where they are turned into the final product – corrugated packaging.

According to Ivan Grishin, leader of paper production, “I started out with a modest job, back when we had only a small linerboard machine. Now I am mill manager, over the entire operation. My team has little papermaking experience, yet we produce at a high level, rivaling the best output from Europe. We come to work inspired, having the desire to reach new levels of performance every day. We are all about continuous improvement of our processes and output. Leading brands in Russia and neighboring confederations and countries gain from our packaging commitment to excellence.”

Learning from a supplier how to partner

Adds Grishin, “Kadant Lamort has played a crucial role gearing up for our new pulping capa-



bilities. They were in close contact well before we started up. They provided insights and on-site training, including Skype conferences every week. As a result, our twin stock preparation lines provide UBC and OCC run smoothly, overcome by stickies and contaminants. Kadant has helped us troubleshoot when a problem arises, and are ready to back us up virtually or at the mill on short notice. This includes our Tetra Pak UBC line, which is the first in Russia. Their equipment for stock preparation assures us of a high level of fibre quality, lower energy usage and top quality – even from variable quality recycled waste.”

According to Elena Kasyanova, CEO assistant and translator, “I translate technical ideas from suppliers who support us, but also enthusiasm. We make L-PACK shine as a place to work and visit, because we love our work, and the challenges we face.”

Karanchuk notes, “The Japanese philosophy and methodology of quality advances is in the air at our mill, because we strive daily for small gains in our processes. We deliver quality end products, of course. But our core competence is continuous improvement. Each team is encouraged to advance each day. Individuals are there for each other. This includes a small network of strategic suppliers.”

L-PACK’s unique way of applying the „lean production” concept has evolved from Edward Deming’s quality strategy and Toyota experience. According to this strategy, each employee is engaged in the process of business optimization and losses elimination. Organization of work and staff motivation system is aimed solely on the overall final result.

Kadant OCC Line technology

The OCC line has a capacity of 800 bone-dry metric tons per day featuring the latest techno-

- 1 800 Tons per day of liner and fluting production are made from OCC and Tetra Pak UBC. The complete OCC pulping system and UBC line are from Kadant Lamort.
- 2+3 UBC (Used Beverage Cartons) are part of L-PACK’s commitment to minimizing waste, and re-using this valuable resource for multiple value streams. L-PACK’s recycling UBC is a first in Russia.



1 Ivan Grishin, leader of paper production, has a hands-on approach to all tasks at L-PACK, large and small. PolyAl is shipped to partner companies who use this raw material to make a range of composite end products. Kadant Paal balers package the material, shipped to partner companies who use the PolyAl as a raw material.

2 This Jumbo P2200 LMC packaging system is the largest machine for packaging in Russia. Web – 5200x2200 mm* Speed – 100 items/min printing in two colors.

logy for the production of recycled corrugated container, enabling the mill to operate with low energy consumption and high capacity.

The system includes a Hydrapulper® low consistency continuous pulper, a heavy duty and high efficiency detrashing system that includes the Hydraflow continuous detrasher & trashwell design, followed by high density cleaners. It also features a coarse screening system that features removal of large & heavy debris allowing fibre free rejects, including Styrofoam, as well as high-efficiency Fibrewall® screen cylinder design to assure the best stickies removal.

Grishin comments that "L-PACK selected Kadant for this greenfield project based on proven OCC equipment technology and track record of successful rebuilds."

The former coated paper machine, imported from Sappi Holland, has been completely modernized, rebuilt and transformed to incorporate advanced containerboard manufacturing technology.

Proven multi-stream repulping technology; the Tetra Pak UBC advantage

Delivering a high yield of non-contaminated fibre and separating of plastics and aluminum is not easy. Because the traditional approach for a pulper cleaning system is limited by the size of the rejects handling system and the number of cycles possible it fell short.

L-PACK's streamlined UBC recycling system from Kadant, referred to as the LP Recycling System, includes a specially designed Helidrum® pulping system, a compact All-in-one Screen-One screening, and a novel reject treatment,

where the fibre is recycled and used by the board mill, and independent „clean“ streams of polymers and aluminum from post-consumer waste are ready for recycling or recovery.

Compact Liquid Packaging Recycling System benefits include:

- Aluminum and polymers value streams from the pulper – fibre free, ready to be reused.
- Producing high quality final pulp without residual aluminum or plastics.
- Extremely sustainable solution; energy savings with low temperature pulping & chemical free operation.
- No shredding to prevent potential aluminum debris in the final pulp.
- High yield of all raw materials and end products.
- Closed water loops.

"Our LP Recycling is compact and innovative, requiring no shredder or forward cleaners, reverse cleaners, dispersing or kneading devices," says Marcello Giorgi, Kadant Lamort global sales & marketing director. "A notable feature of L-PACK's OCC line is furnish with high mechanical strength, giving them a marketing advantage with their packaging board."

Continues Giorgi, "We are proud of our partnership and successful journey with L-PACK. Continuous improvements will help them stay at the top with leading branders." •