

Recycling Plastics Reliably with the INTAREMA

When their factory in Kewdale, Western Australia was destroyed by a fire in 2019, Integrated Packaging decided to build a new and advanced plastic packaging plant at the same place. However, the focus of the new factory did not lie on the production side, instead, “we made recycling the priority,” said Maintenance Manager Michael Hill.

Ever since the company has been established in 1982, Integrated Packaging offers an extensive range of products and services for almost any packaging requirements. In 2017, the company has then merged with Pro-Pac Packaging (PPG) and is now a leading manufacturer for flexible packaging products with several manufacturing and distribution sites across Australia and New Zealand.

EREMA helps with the long-term Business Success

While Integrated Packaging invested in state-of-the-art equipment for the reconstruction of the destroyed factory, the focus on recycling made one machine even more important – the INTAREMA 1309 T repelletising line from the Austrian manufacturer EREMA. With this machine, the new factory can now reliably recycle 98% of the production waste.

Therefore, Integrated Packaging diverts a massive amount of waste from landfill, “which is critical to reduce our environmental impact,” said Michael. “In our view,” Michael added, “reducing plastic waste in any way possible is core to our long-term business success and our ability to meet our customers’ expectations.” Hence, the decision for the right recycling equipment had to be well-considered. The final choice was then made between several European machines and in the end, their great reputation as the world-class standard in plastic recycling equipment was the decisive factor for the latest INTAREMA recycling line from EREMA.

While Integrated Packaging already uses other EREMA machines across their sites, the factory in Kewdale is the first one to use the INTAREMA system. Now, after nearly three months with the machine, Michael can

Erema plant in the new factory building.



Michael Hill,
Manager at
Integrated
Packaging,
Kewdale, shown
with Erema
technician after
handover.



only praise it. "If we'd buy another one within the group, I will definitely recommend the one we've got," he said.

Starting up the INTAREMA amidst a Pandemic

Setting up a machine of a manufacturer from the other side of the world during a pandemic could have led to a variety of problems, but Michael enjoyed a smooth start-up process: "It was one of the easiest projects I have ever been on." Crucial for this experience was the ability to self-install the machine which was well managed through EREMA's online training. The operators thus felt confident with machine even before an EREMA technician from Austria arrived for the commissioning. Due to the current travel restrictions the EREMA technician needed to quarantine for two weeks, before being able to go to site. During that time he already helped remotely, and once on site, Integrated Packaging could produce high quality pellets already after 2 days.

Benefits of the INTAREMA

Ever since the machine was set in motion on the 1st of February 2021, the brand-new factory enjoys the reliable work of the INTAREMA. For Michael, so far especially three benefits stand out.

First, because the compactor section of the INTAREMA collects the guillotined waste directly, the machine reduces the need to convert it to granulated fluff plastic before re-introducing it back into the process.

Second, the machines high availability for production, allowing for continuous operation. This is enabled by the self-cleaning automatic backflush melt filter system. The filter operates with 2 pistons, each containing two pairs of filters, which can be backflushed and changed individually without stopping the line. This drastically reduces the number of screen-changes and downtime.

Third, EREMA's online self-service portal with a comprehensive offering of training, maintenance, and spare parts allows for a consistent self-management of the machine. "EREMA has genuinely maximised the use of digital technology, to allow us to maximise the machines' performance," Michael said about the online portal.

A high Throughput enabled by EREMA's Innovation

With the new recycling machine, the factory in Kewdale can now recover three tons of in-house production waste every day. The high throughput of the INTAREMA is thereby enabled by the patented Counter Current technology. This technology changes the direction of rotation inside the cutter/ compactor to the opposite direction to that of the extruder screw. As a result, the INTAREMA achieves higher throughput, more stable operation,

and generally greater flexibility in the production process. The amount of material that is recycled every day thus fully meets Michael's expectations: "Everything we've asked for has been achieved."

Recycled Pellets with a Top-Quality

The recycled pellets from the INTAREMA also impressed with their high quality and this allows the producer to feed up to 100% of the pellets back into the production process. The consistently high quality is mainly a result of the cutter-compactor which pre-conditions the material before the extrusion, thus enabling a gentle melting and an excellent moisture control. Therefore, next to nothing is getting wasted. "What we produce through the INTAREMA is a good product, so we can put it back into our films," Michael said.

A pleased INTAREMA User

With an easy start-up process, a reliable throughput, and a smooth operation the INTAREMA 1309T from EREMA pathed the way for Integrated Packaging's successful return to production in Kewdale. Michael's conclusion thus turns out to be brief: "I am very, very happy with the machine".

CEMAC technologies represents EREMA in Australia.

Contact us to find out more

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