High Demand of Plastic Recycling Machines

Sales Doubled for Polystar in 2021

The growing demand for plastic recycling directly reflects the machine sales for Polystar. By the end of April 2022, a total of over 110 recycling machines will have been shipped within 12 months – twice as many compared to last year.

ew regulations in many countries now require producers to use a higher percentage of recycled content in flexible and rigid packaging products. Instability of raw material prices and supplies also forces plastic producers to better recycle their own production waste. Therefore, plastic recycling machines are getting bigger. Recyclers are now buying larger-capacity machines and more machines. The 800 to 1000 kg/hour pelletizing extruder has become a standard for post-consumer and even some post-industrial recyclers. A Japanese post-consumer recycling company just placed an order of four of these machines from Polystar in December 2021. In the same month, several recyclers in Australia, Colombia, Mexico, Russia and the US have also repeated their orders with multiple higher-capacity machines to be able to comply with the increasing recycling demand of washed PE film and bottle waste.

Post-Industrial Recycling – Higher Quality Requirement

Reusability of the recycled pellets has become more important than ever for plastic producers who recycle and reprocess their in-house waste. Packaging film and woven bag producers now require higher quality recycling in order to reduce production cost as much as possible. In India, the requirement of more advanced



LDPE film recycling machine for postindustrial waste are on demand all over the world. © Polystar

recycling machines is rising, especially for PP raffia, woven bags and FIBC producers who need to process their internal waste. 75 Repro-One recycling machines have been installed in this sector alone in India. The Repro-One recycling technology is a combination of shredder, extruder and pelletizer into one machine. This one-step, powerful (shredder) yet gentle (low processing temperature) process produces the best possible pellets quality at the lowest operation cost, enabling the producers to reuse all of the pellets back in PP tape extrusion lines.

New Regulations for Recycled Content

The packaging film sector (stretch film, CPP film, etc.) and plastic bag producers

are required to use a much higher percentage of recycled pellets in the end products. For better quality control and to maximize the reusability back into the film extrusion lines, more producers have decided to recycle all the production waste internally instead of outsourcing it. Recent installations of the Repro-Flex recycling machines (a cutter-compactor integrated model designed for recycling film waste) in Denmark, Italy and Switzerland are equipped with smart features to minimize energy consumption and labor intervention.



The HNT series of stretch film recycling machines are on the market in many different specifications. © Polystar



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