CPM offers profitable waste handling solutions through pelleting. You can rely on the pelleting experience of CPM to help you handle residual materials from nearly every industry, especially human household waste recycling. Partner with CPM for your total solution—the process and the specialized equipment—for profitable waste handling.

- High Performance
- Low-Cost Maintenance
- Maximum Security

Contact
YOUR PARTNER IN PRODUCTIVITY

Densification of Waste Materials

Densification of waste materials is an important step in many recycling processes. Waste products are often difficult to handle because they come in a mix of various materials with low bulk density. CPM manufactures pelleting equipment and has the background to help you design a process to transform difficult-to-handle materials into easy-to-handle pellets. Waste pellets are uniform in shape and have a high bulk density. This has made pelleting an important step in a number of waste recycling facilities for many years.

The CPM Recycled Densified Fuel (RDF) Pelleting Process

CPM has expertise in handling recycled densified fuel (RDF) products coming from human household waste and has also developed pelleting processes for numerous mixed paper, plastic and textile residues. To convert these cumbersome materials into convenient pellets, CPM has designed specialized conveying systems for a reliable production process, free from build-ups and blockages.

In the CPM RDF pelleting process, waste material flow is buffered into a specially designed life bin. The advantage:
- Pellet mills can run continuously and independently—even with intermittent material input feed
- Life bin can feed up to four pelleting lines from a single material flow

The CPM waste material extraction screw is designed to convey even the most difficult materials. The advantage:
- Accurate control of pelleting capacity, even with large variations in waste material particle size

The CPM vibratory feeder is an essential element in the waste material pelleting line. The advantage:
- Transports waste material into the pellet mill

During transport, waste material is shaken apart, creating a dependable, regular product flow to the pellet mill and a very stable pelleting process.

Smooth Running—The CPM Forced-Feeding Screw

Deflectors and directing parts that can cause obstructions are a thing of the past with the CPM forced-feeding screw. It rotates inside a ring-type die ensuring optimal waste material flow regardless of direction—even uphill. Pellet mill motor overloads are rare, but if one occurs, the bypass function slides the entire feeding screw away quickly clearing the die.

Control You Need—The CPM Lineator

The invention of the CPM Lineator lifted pelleting technology to another level. The Lineator makes it possible to remotely control the distance between the roller and die surfaces while the pellet mill is running. Its compact and reliable design provides swift, accurate and safe roller adjustment during the pelleting process.

The Output You Require—Exact Die Specifications

CPM offers a number of die specifications to meet your output quality criteria exactly. Whether it is a fluffy material with a consistent particle size or highly densified waste material pellets, CPM has the dies for your job.

Loads of Applications

From polypropylene foil to polyester fibers and flakes—even sewage sludge, residues from processing industries, and more—CPM can help you design the process and select the machines that are right for you.

Polypropylene Foil: A residue from the manufacture of plastic bags can be densified through CPM pellet mills and fed back into the extrusion process. CPM has developed a special “bag-blowing” process that protects the polypropylene foil from grease lubricant contamination. Plus, CPM press roller assemblies are life-lubricated to further reduce contamination. Overheating and product liquefaction is prevented through additional air aspiration to dispel excessive heat around the pelleting equipment.

Polyester Fibers and Flakes: A residue from a number of processes can be pelleted with CPM equipment and fed into the extrusion process.

Sewage Sludge: A waste material that can be pelleted and further processed in an environmentally friendly fertilizer. Even though dried sewage sludge has difficult flow characteristics, CPM pellet mills are able to pelletize sludge with the use of dedicated conveying systems.

Other residues from processing industries become valuable after densification. Some of these include: dried chicken, pig and cow manure from intensive animal production; sawdust and bark waste from wood processing; and bagasse, from the sugar cane industry. Additional materials such as carbon, bentonite, fly-ash, graphite, gypsum and many more can also be densified with CPM pellet mills.