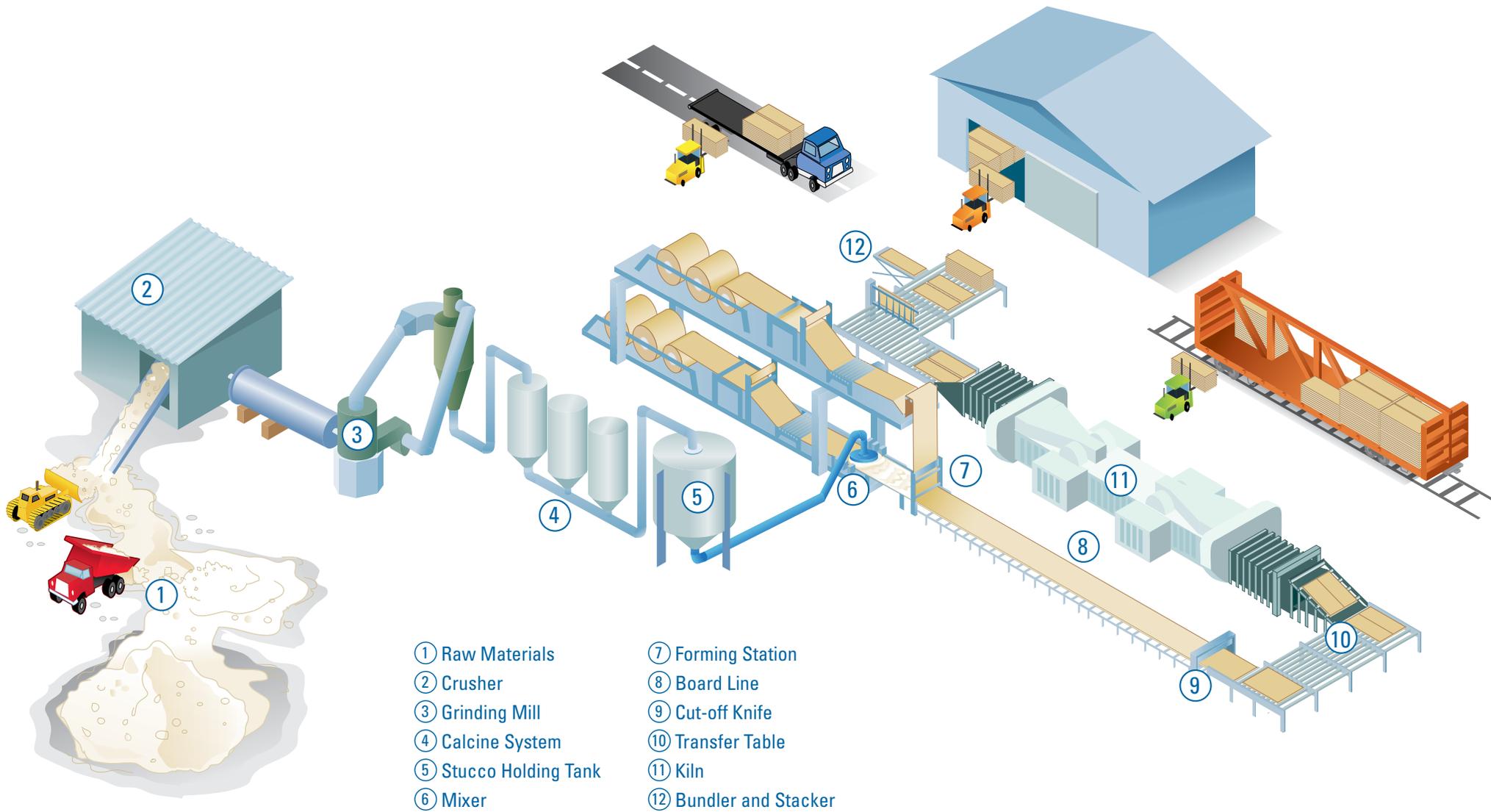


# Typical Process of Manufacturing Gypsum Board



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- 1 Raw Materials**

High-quality gypsum rock is extracted at quarries or mines near plants or transported by cargo ship, rail or truck. Recycled paper for facing and backing wallboard, or fiberglass mats for Dens™ Brand products is shipped to Georgia-Pacific Gypsum board manufacturing facilities across North America.
- 2 Crusher**

Large rocks are crushed into small pieces. At some plants, the crushed rock undergoes a surface drying process before going to the grinding mill.
- 3 Grinding Mill**

The mill reduces small rocks to a very fine, chalk-like powder called land plaster.
- 4 Calcine System**

The land plaster is heated in large kettles to remove most of the water from the plaster.
- 5 Stucco Holding Tank**

Calcined land plaster, called stucco, is fed from a holding bin to the mixer by a screw conveyor.
- 6 Mixer**

In the mixer, water is added back to the stucco to form a slurry, and foam is added to the slurry to make the wallboard more lightweight.
- 7 Forming Station**

The board forming line starts with two large rolls of recycled paper or fiberglass mats. The slurry is poured onto the bottom sheet and is immediately covered by the facing sheet from the other roll. This “sandwich” passes through a pair of forming plates or rolls which determine the thickness of the board. The face paper or mat wraps around the sides of the sandwich to enclose the edges of the board.
- 8 Board Line**

The board travels down a long conveyor line in a single continuous piece. During this trip, water rehydrates the stucco, causing it to harden.
- 9 Cut-off Knife**

At the end of the line, a blade cuts the hardened board into various lengths.
- 10 Transfer Table**

Here the cut lengths are turned face-side up to protect the face paper or mat, then fed into the kiln.
- 11 Kiln**

The board kiln completes the drying process, leaving the gypsum board virtually moisture-free.
- 12 Bundler and Stacker**

The bundler “books” the gypsum board by putting two pieces together with the face on the inside. It is trimmed to exact lengths and the pairs of boards are taped together to further protect the board face. The bundles are stacked for transfer to the warehouse for shipping to customers.

**Throughout the gypsum board manufacturing process, product quality control is ensured through computerized process control systems, visual inspection and frequent lab testing throughout the day.**