



## Tetra Scherping™ Cheese Curd Draining Conveyor



### Application

The Tetra Scherping Cheese Curd Draining Conveyor is custom designed to meet the specific requirements of your individual plant. This enclosed, continuous, automated machine for production of granular or matted curd cheese includes custom designed features that enable you to pre-salt the curd when making low moisture cheese; or wash the curd at several possible locations when making higher moisture cheese.

The Tetra Scherping Cheese Curd Draining Conveyor is the industry's most versatile curd conveyor offering the flexibility to vary your make from matted to granular curd.

### Working principle

The first step in the draining process is separation of the curd and whey which takes place on a wedge-wire screen directly below the curd and whey inlets. This specially designed screen separates the whey so efficiently that the curd is de-wheyed by the time it has traveled two-thirds of the way down the screen.

As effective as this screen is at separating the whey from the curd, it accomplishes this separation with minimal curd damage and relatively little fat and moisture loss.

The de-wheyed curd then passes from the wedge-wire screen to the draining belt where the whey can continue to drain from the curd. After a short time the curd is stirred by vertical agitators which levels the curd.

As the curd continues to travel along on the draining belt whey will flow away from the curd as it is stirred by the vertical agitators. This type of gentle agitation will not cause excessive damage to the larger, softer curd granules.

The use of a vertical agitator results in very little mechanical damage to the curd thereby keeping moisture and fat losses to a minimum and allowing the manufacture of high moisture cheese. The use of this efficient whey drainage system makes it possible to use curd depths of 8-10 inches (200-250mm) on the second and third belts thus allowing for a relatively compact machine.

When the curd has achieved the desired firmness and dryness, it may be allowed to mat and cheddar naturally or be stirred with a succession of peg stirrers should the production of stirred curd be desired. Optional spray devices are available on this conveyor for a curd washing system to facilitate the production of washed curd varieties such as Colby or Monterey Jack.

A full width double cut curd mill is used to mill the curd. The mill is controlled by a frequency drive motor which allows the speed to be adjusted to accommodate the curd chip size. The full width curd mill keeps fat loss and fines to a minimum whether making matted or stirred curd.

The Tetra Scherping Cheese Curd Draining Conveyor uses a self tensioning, self-tracking, belt consisting of a series of molded polypropylene sections linked together with molded plastic pins. The flat rigid surface of this belt allows for agitation of the cheese without generating fines. The hydrophobic nature of the polypropylene prevents curd from sticking to the belt surface allowing for fast and easy cleaning of the belt.

The belt is driven by polypropylene drive sprockets positioned across the entire width of the belt to ensure even distribution of the load.

## Highlights

- Custom designed for required throughput.
- High moisture control.
- Gentle agitation.
- Ideal for cheddar or granular curd production.
- Capacity of 12,500–30,000 pounds of curd per hour.
- Dimensions based on specific application.
- Type 304 2B finish with internal welds ground smooth and polished.