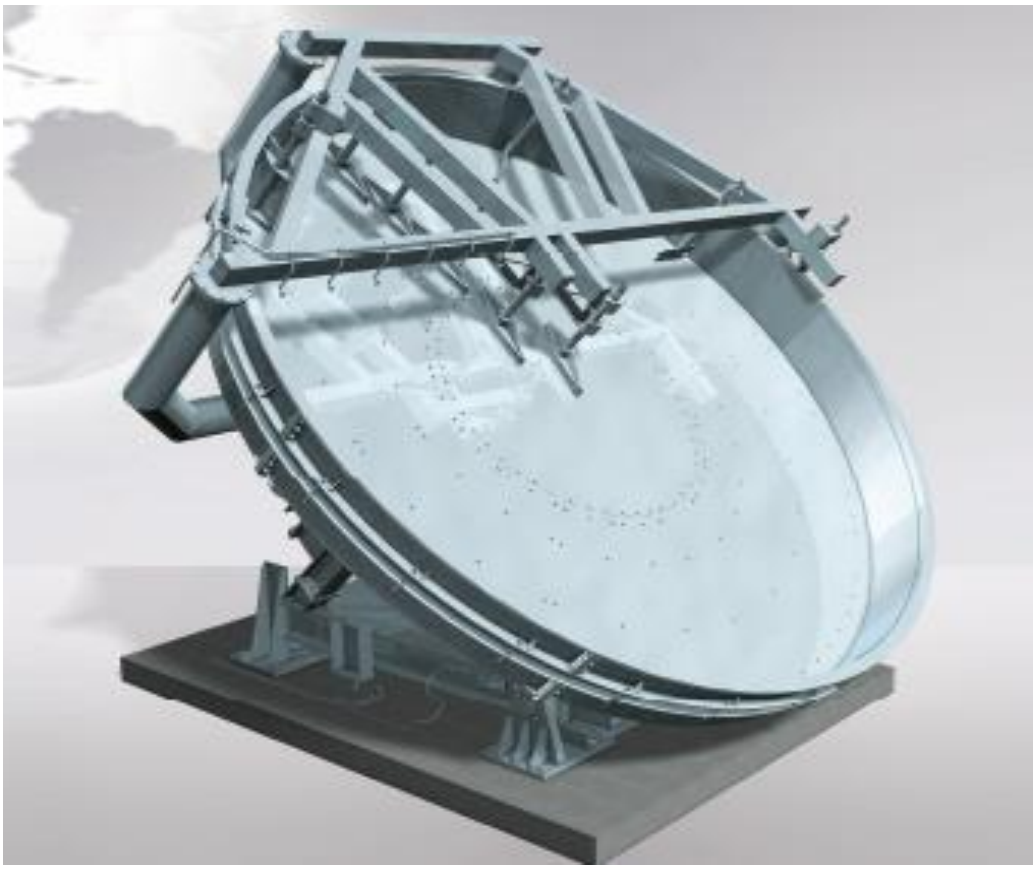
CEMTEC
Cement & Mining Technology

CEMTEC PELLETIZING DISC



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AGGLOMERATION OF FINE MATERIAL

Agglomeration of fine materials without compacting, by growth and tumbling in the presence of a liquid binder is usually called pelletizing. Pelletizing – forming of spherical pellets – in CEMTEC Pelletizing discs is the best technical solution available.

CEMTEC Pelletizing disc

PD 75/90

CEMTEC – Pelletizing discs are the equipment of choice when uniform pellet size and ease of control are important when converting powdered materials into round spherical pellets up to 20 mm diameter.

Pellet sizing, based on disc angle, disc speed, and locations of solid and liquid feed, is automatically controlled through the operational flexibility of CEMTEC – Pelletizing discs.

Laboratory and pilot scale tests will determine optimum flow schemes, equipment sizing and scale up.

All Pelletizing Discs are constructed of heavy, welded, reinforced carbon steel plate; all inner disc bottoms are lined with "expanded metal" and the disc rim is lined with polyethylene plates to reduce abrasive wear.

The base and the scraper support provide maximum stability while allowing disc angle adjustment, without the need for separate scraper adjustment.

The disc angle is automatically adjustable from 40° to 60° horizontal by electrical operated jacking screw.

Also the disc speed is automatically adjustable with a frequency converter from approximately 5 to 11 rpm.

Individually mounted vane type plows easily control and maintain the product layer over the disc's entire surface.

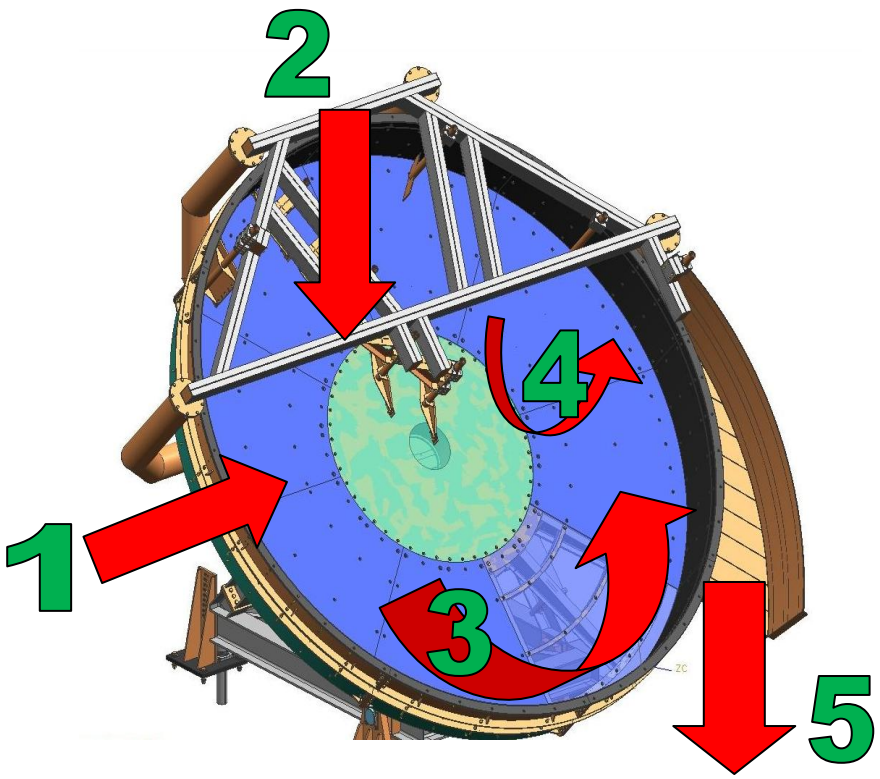
The pivot base, a rotating part, is mounted on heavy-duty anti-friction bearings. Automatic lubrication is featured on all CEMTEC discs.

MAIN FEATURES OF CEMTEC PELLETIZING DISCS:

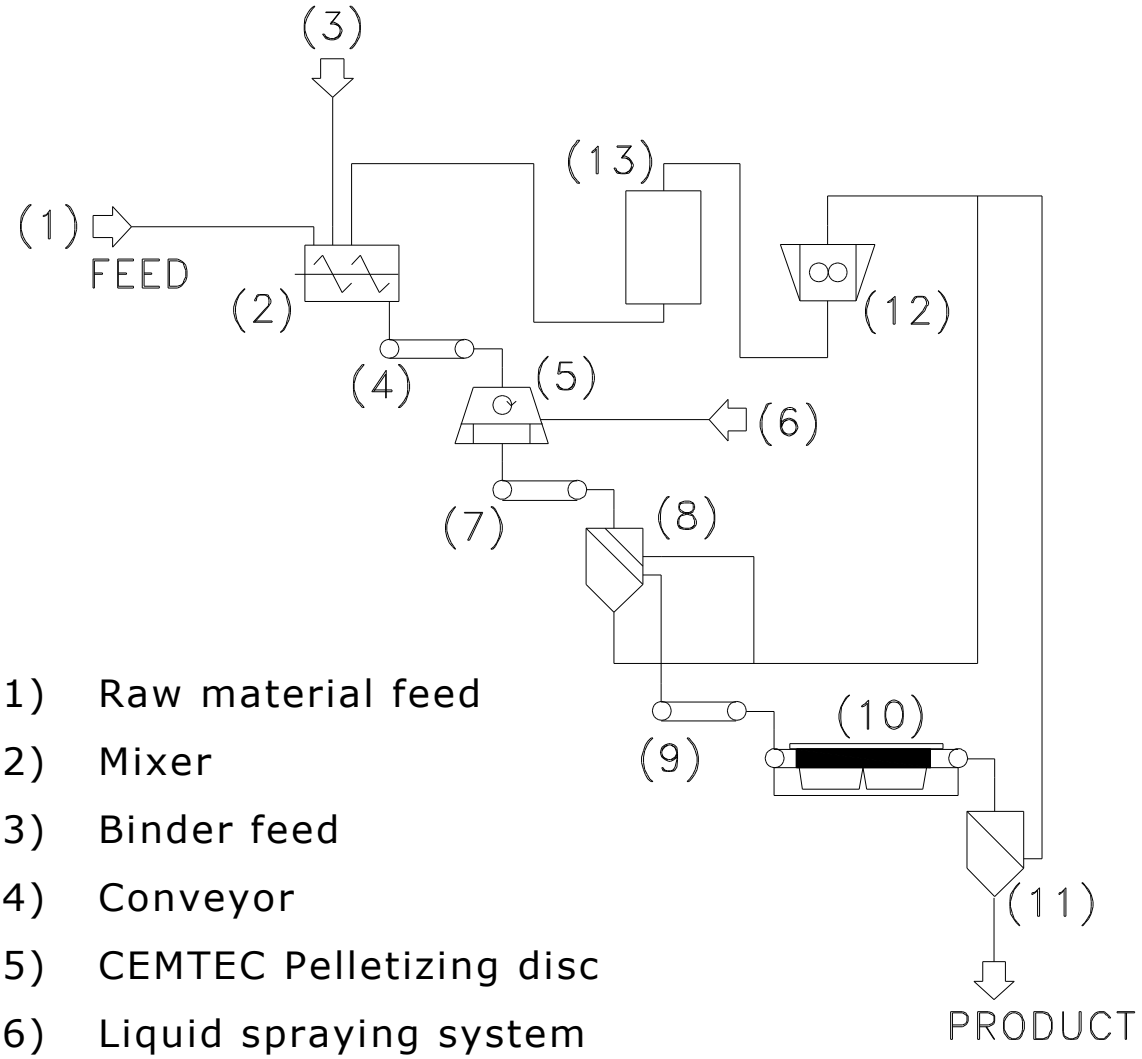
- Adjustable inclination during operation
- Variable speed control during operation
- Adjustable disc height
- High wear resistant lining of disc
- High wear resistant bottom, side and rim scrapers
- Water spraying system
- Central lubrication system

PELLETIZING PRINCIPLE

1) Fine material is continuous feed to the disc.
2) Feed material is wetted with liquid binder by a spraying system.
3) The rotation of disc causes the "wet" fines to form small spherical particles.
4) The small spherical particles growing like a snowball by coalescence into larger particles,
5) until they discharge from the disc.



TYPICAL PELLETIZING SYSTEM



1) Raw material feed
2) Mixer
3) Binder feed
4) Conveyor
5) CEMTEC Pelletizing disc
6) Liquid spraying system
7) Conveyor
8) Roller screen
9) Conveyor
10) Rotary kiln / Grate kiln
11) Final screen
12) Crusher
13) Recycle / Hopper