



# Roll Compaction

Antibiotic Powders (Amoxicillin, Penicillin, Etc.)

## Pharmaceutical Compaction Technology



Model CCS1025 Roll Compactor

### THE CHALLENGES

- Antibiotics are prone to product segregation, poor flowability and sensitivity to moisture and temperature.
- As a result, customers often experience low capacities and out-of-spec densities which are detrimental to handling and tableting, resulting in reduced efficiencies.

### THE SOLUTION

- Existing unit replaced with Fitzpatrick CCS1025 Roll Compactor —following successful trials.
- Able to achieve more consistent particle size distribution (between 200 - 1000  $\mu\text{m}$ ).
- Dual screw feed design - improved uniformity of feed to compaction rolls.
- Vertical pre-compression screw purposely rotates at higher RPM than horizontal feed screw, thereby inducing natural deaeration.
- CCS Roll Compactor is equipped with real-time roll gap feedback controls to ensure uniform compact density.
- Integrated mill – has the ability to interchange rotor profiles in order to achieve more controlled particle size distributions.
- The CCS1025 was designed for an “in wall” installation, thereby greatly improving the GMP, and facilitating much easier cleaning.
- The Unit was designed to meet the area classification required by the Customer Facility. Instruments / sensors in the process room were I.S. (intrinsically safe).
- Components in the technical area were behind a sealed wall and did not require additional protection.