



## POWDER VACUUM MIXERS

### VACUUM POWDER MIXERS—TECHNOLOGY

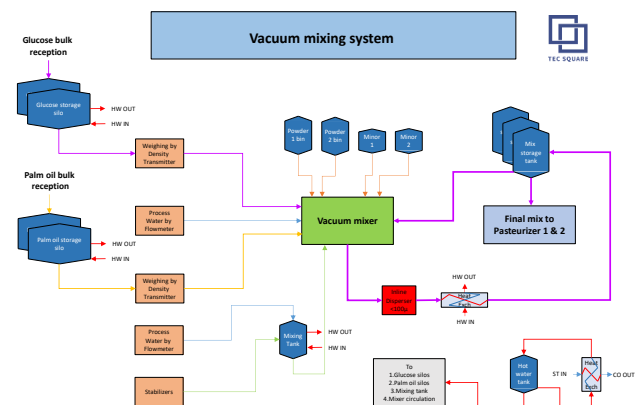
TEC Square prefers vacuum transport for powder mixing in the dairy industry. We design these systems with standard components. This method of transport has several advantages over traditional methods.

The principle of operation:

- ◆ Powder is dosed at a constant flow into a vacuum chamber above the liquid level.
- ◆ Powder is dispersed in the mixing tank by 2 high shear mixers.
- ◆ The mixed liquid is pumped out by a standard centrifugal pump and pressed through a back pressure valve to ensure a 100% dissolving.
- ◆ Liquid is circulated at a high rate via a hydration tank, back to the vacuum mixer.
- ◆ The right mixing temperature is maintained by a heat exchanger in the circulation loop.

### VACUUM POWDER MIXERS — KEY POINTS

- ◆ We use standard components keeping CAPEX low.
- ◆ We dose powder above liquid level thus avoiding micro air bubbles.



# SPECIFICATIONS AND ADVANTAGES

|                            | TEC Square Vacuum Mixing System   | Advantages   |
|----------------------------|---|--|
| Vacuum tank dosing system  | TEC Square designs the dosing system to add a constant flow of powder.  | <ul style="list-style-type: none"> <li>• This method of mixing gives a more efficient mixing effect.</li> </ul>  |
| Vacuum tank dosing point   | We add powder above the tank liquid level in a vacuum chamber   | <ul style="list-style-type: none"> <li>◆ Hardly any foam is created when dosing powder, even with very hygroscopic powders.</li> <li>◆ No micro air bubbles are created this way.</li> </ul> |
| Use of standard components | We design the complete system with standard components available on the market, no patented technologies required | <ul style="list-style-type: none"> <li>◆ Saving on CAPEX</li> </ul>  |

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