



## AUTOMATED LECITHIN DOSING INCL. CIP

### AUTOMATED LECITHIN DOSING UNIT TECHNOLOGY

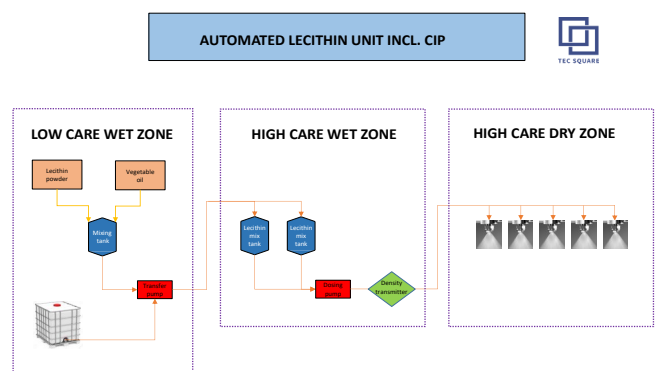
TEC Square has designed a fully automated lecithin dosing unit that can be integrated in an existing spray dryer and CIP plant.

The principle of operation

- ◆ Ready-made lecithin mix in an IBC or other container in the “low care wet zone” is pumped to the mix storage tanks situated in the “high care wet zone”.
- ◆ If needed a mixing tank can be provided in the “low care wet zone”, where lecithin powder and vegetable oil can be mixed before transfer.
- ◆ In the mix storage tanks the mix can be pasteurized and cooled down to the dosing temperature before adding eventual minor ingredients manually.
- ◆ Mix is pumped via a mass flow meter to the spray dryer nozzles situated in the “high care dry zone”

### AUTOMATED LECITHIN DOSING UNIT — KEY POINTS

- The operation is fully automated and can be integrated in the central control system.
- Cleaning is done automatically



Typical lecithin set-up

# SPECIFICATIONS AND ADVANTAGES

	TEC Square Automated Lecithin Dosing Unit	Advantages
Location	<ul style="list-style-type: none"> <li>The unit is split into 3 parts in 3 different hygiene zones</li> </ul>	<ul style="list-style-type: none"> <li>It comply to GMP, FDA, FSCC 22000 and other hygiene standards.</li> </ul>
Pasteurization	<ul style="list-style-type: none"> <li>The final mix can be legal pasteurized to client requirements in the mix storage tank.</li> </ul>	<ul style="list-style-type: none"> <li>It comply to GMP, FDA, FSCC 22000 and other hygiene standards</li> <li>Avoid bacteriologic cross contamination</li> </ul>
Automated CIP	<ul style="list-style-type: none"> <li>The transfer line to the storage tanks and the storage tanks can be CIP from the central CIP plant</li> <li>The dosing line to the spray nozzles will be a part of the drier CIP sequence.</li> </ul>	<ul style="list-style-type: none"> <li>No need of any manual cleaning and operation required</li> </ul>
Flexibility	<ul style="list-style-type: none"> <li>The transfer line to the mix storage tanks can be CIP together with 1 storage tank while the other tank is still in production.</li> <li>The dosing line can be CIP together with the drier while mix is being transfer to the storage tanks.</li> </ul>	<ul style="list-style-type: none"> <li><b>Unit can operate 24/7</b></li> </ul>
Automation	<ul style="list-style-type: none"> <li>The unit will be delivered with a <b>control panel in the “wet high care zone”</b> which will be communicating with the <b>central PLC</b>.</li> <li>The unit is delivered with an accurate mass flow meter.</li> </ul>	<ul style="list-style-type: none"> <li><b>No people require in the “dry high care zone”</b></li> <li><b>Consumption of lecithin can be controlled accurately</b></li> <li><b>Total consumption can be send to the ERP system</b></li> </ul>

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