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Dynamic Impregnator Reactor System

Multifaceted system designed for complex feedstock impregnation and processing

Photo by Dennis Schroeder, NREL/PIX 21315

Several unit operations are combined into one robust system, offering flexible and staged process configurations in one vessel. Spraying, soaking, low-severity pretreatment, enzymatic hydrolysis, fermentation, concentration/evaporation, and distillation are amongst its many capabilities.

- 1,900 L Horizontal Paddle Blender Vessel with Sidewall Liquid Drains
- 6-60 rpm / 50 HP Tri-Directional Agitator
- 3.4 bar & Vacuum ASME Design, 316L Stainless Steel
- Heating/Cooling Jacket using Water or Steam
- 150 L Chemical Mix Tank & Pump with Spray Injectors
- Vent Condenser with Collection Tank and Vacuum Pump

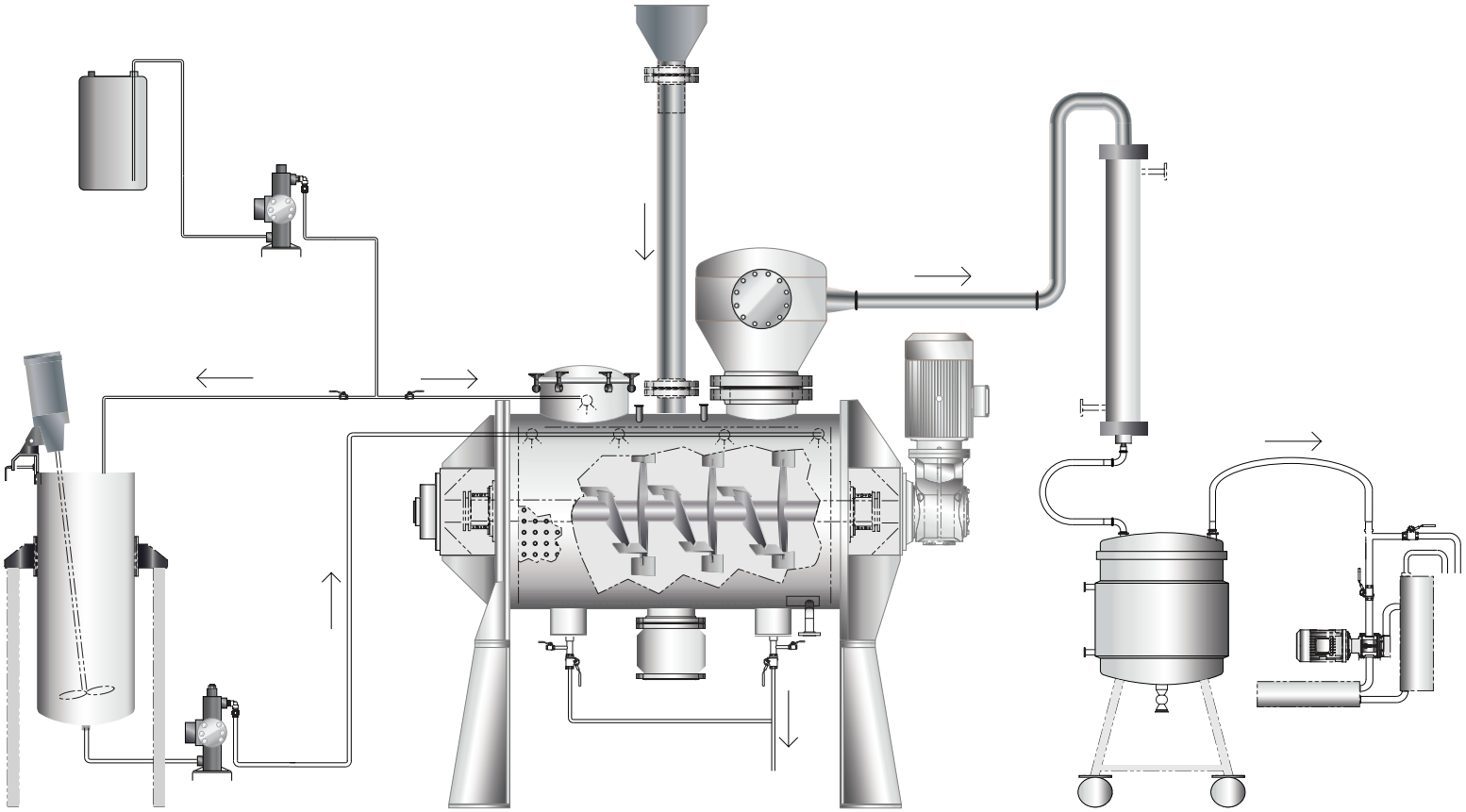

Illustration created by Anthony Castellano, NREL

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