

K-1 LAB MIXER

A NEW DIMENSION TO THE MIXING/PELLETIZING PROCESS

The Lancaster Products high shear lab mixer is ideal for testing, experimentation and development of new processes and products. This rugged and economical machine can also be used for small production work. With various styles of rotors available, the Lancaster K-1 Lab is the mixer of choice for almost any type of batch mixing. The counter-current mixing action results in improved mix quality and the ability to mix-pelletize in a single machine.

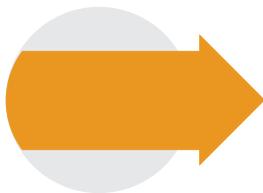


K-1 HIGH SHEAR LAB MIXER

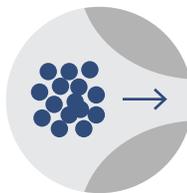
EASY TRANSITION FROM PROOF-OF-CONCEPT TO FULL PRODUCTION

The K-1 Lab Mixer provides value throughout the product development and production process. Scaling up to production sized volumes is seamless as the Lancaster K-Series production mixers operate with the same counter-current high shear mixing action.

ADVANTAGES



Efficient transfer of process specifications requiring only minimal adjustments to the mix design



Optimize formulations and experiment in smaller batches



No disruption to production schedule for development work

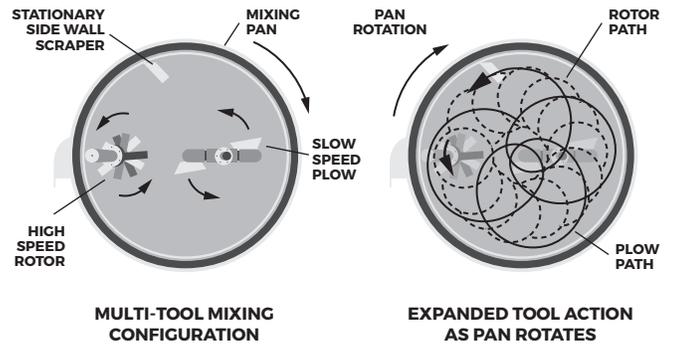


Reduces the amount of material required when compared to production scale mixers.

The Lancaster Products **counter-current mixing action** is the most effective mixing technology for rapid and consistent uniformity.

COUNTER-CURRENT MIXING ACTION

Counter-current action occurs when the pan rotates in a clockwise direction, while the mixing tools rotate counter-clockwise creating a shearing action within the mixing cavity. The powerful combination of multiple mixing tools including the rotating pan, high-speed mixing tool, and the counter-rotating plow effectively eliminate all dead zones in the mixer. Mixing tools are strategically placed to promote maximum material interface.



DESIGN FEATURES

- Removable stainless steel mixing pan for easy clean up
- Large viewing port on the pan cover for adding process materials, observing the mix, and taking samples during the mixing process.
- Touch screen control on integrated control stand
- Thermocouple mix temperature reading
- Dual hand safety buttons for operating mixing head
- CE certificate of compliance
- Optional Features:
 - pan heating and cooling
 - various rotor styles

CONTROLS FEATURES

- Electronic individually controlled speeds of pan and rotor, switchable from ft/sec to m/sec.
- Timer that starts/stops with the machine.
- Pre-programmable mix design times
- Resettable elapsed mixing timer that provides for total mix process cycle times
- Input or adjust pan and rotor speeds before or during operation
- Data record of operating functions can be exported to a USB or other device



SPECIFICATIONS

	IMPERIAL	METRIC
Pan Volume	0.7 cu.ft	20 Liters
Working volume	0.3 cu.ft	8 Liters
Pan motor	¾ Hp	0.6 kW
Pan speed	0.44 - 3.57 ft/sec	0.13 - 1.1 m/s
Rotor motor	3 Hp 2.25 kW	2.25 kW
Rotor speed	8.6 - 103 ft/sec	2.6 - 31.4 m/s
Weight	1100 Lbs	500 Kg
Length	40"	1000 mm
Width	30"	750 mm
Height	53"	1350 mm