Helical double planetary blades promote better and cleaner mixing.

Traditional double planetary mixers

Equipped with rectangular-shaped paddles, these mixers are prone to 'climbing' issues where product tends to ride up the blades and out of the mix vessel. Precisely angled helical planetary blades overcome this problem and promote better, cleaner mixing.

Limitations of rectangular stirrers

Due to their geometry, rectangular stirrers rely on centrifugal forces and gravity to keep product within the mixing zone. As batch viscosity increases...
Helical planetary blades promote better mixing

Helical planetary blades prevent the ‘climbing’ problem commonly experienced with traditional rectangular stirrers. High Viscosity “HV” blades offered on Ross Double Planetary Mixers feature a precisely angled helical contour which generates a unique vertical mixing action: the sweeping curve firmly pushes the batch material forward and downward, keeping it within the mixing zone at all times.

This enhanced control over batch level ultimately leads to improvements in mixing efficiency, clean-up time and product purity.

More information on “HV” Blades

Click here to see “HV” blades in action. Or view the website www.planetarymixers.com

Sample Application:

When a manufacturer of silicone sealants decided to develop a new highly-filled sealant formulation, they encountered problems in making the product in their double planetary mixer with rectangular blades. The sticky nature of the viscous material results in the batch climbing up the blades and into the gearbox area where it is not being mixed.

They tested the “HV” Blades and found them to be very appropriate for their requirements. In the processing of this sealant, silicone polymer and other liquid components are loaded into the mix vessel. Silica powder and other fillers are added to the surface of the liquid in increments, as necessary. Vacuum is pulled on the batch prior to mixing. The finished product is a smooth air-free sealant with a viscosity of over 9 million cps.