

## TECHNOLOGY BRIEF:

Renting offers a fast and cost-effective way of confirming a new mixing strategy or increasing capacity without the risk of capital purchase.

# Take advantage of rental mixing equipment.



## Experience the benefits of renting

At a fraction of the true equipment cost, a rental mixer allows scientists and engineers to put new ideas for process improvements to the ultimate test – in actual production. Renting also offers a powerful tool for optimizing efficiency on the process line. Whether increased production is scheduled for no later than the end of next week or a mixer is needed on-line for only a couple of months, a trial/rental program offers flexibility to match capacity to demand without the risk and delay of a capital purchase.

## Some useful tips and considerations

- Rent from a reliable source. Find out where others have had success renting new or reconditioned equipment and the quality of technical support they received. Any warranty is only as good as the company that issues it. Aside from being your best bet in parts availability and warranty issues, the OEM would also be your best resource in terms of equipment modifications.
- Certain programs credit a significant portion of trial/rental fees towards the purchase price of a same or larger capacity mixer. Ask about these credit terms and any free consignment period that may apply.

- Discuss your current method of processing, mixing objectives and application in detail with your sales or technical representative to identify the best mixer for you to rent. In a number of cases, a practical first step is to run a mixing trial at the supplier's mixing laboratory. Plan on attending the mixing trial. Some testing laboratories allow unwitnessed simulations but your expertise on the characteristics and properties of your specific product will boost the trial's chances for success. Plus, you will be able to observe how the mixer is operated, learn useful techniques and identify any potential issues well before the rental equipment is delivered to your facility.
- If renting equipment to obtain data for scale-up, a good rule of thumb is to test on a mixer no smaller than 10% of the capacity you are looking to eventually purchase.
- Rental options are not limited to pre-owned equipment. When new technologies emerge in processing equipment that show promising features and functions, renting can be a way to test-drive a new mixer design that may suit your manufacturing needs. A month or two may be enough time to decide if the rental mixer indeed fits into your specific production line or if an upgrade is justified. Cost-benefit analyses can therefore be based on direct measurements of improved efficiencies.
- Normally, it takes months to build full-scale equipment. While waiting for the new unit to be delivered, research, production or operator training can proceed with rental equipment.

### Sample Application: Tungsten Carbide Cladding

A company making wear-protection products was looking for a mixer to combine tungsten carbide, Teflon and other components. They were using a drill press mixer which was too small for their desired production and did not give them a homogenous mix. The mixture is a high-performance cladding material.

Simulation trials on a heavy-duty Double Planetary Mixer at the Ross Test & Development Center revealed that this was a viable method of preparing the extremely heavy and viscous dough-like mixture. The mix vessel was heated to 350°F and the desired consistency was obtained in less than 10 minutes.



To confirm this new mixing strategy, the company rented a Double Planetary Mixer to run more trials at their own facility. After extensive testing on the rental unit, a new mixer was purchased with exactly the right features needed for this specific application.

**For more information on  
Ross Mixers and our  
Trial/Rental Program**

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or call 1-800-243-ROSS (7677)