

66-18 Pro Blend Mixer (Project 02-03) (9/02)



The Pro Blend is a power vacuum mixer designed to mix dental stone, investment, and alginate materials. It features two electric motors: a 600-RPM, 1/8-horsepower motor to provide power for the mixing blades; and a self-contained, oil-less motor that provides vacuum for removing air from the dental materials being mixed. Both motors are said to be protected from overheating by a thermal overload switch. The Pro Blend is advertised as allowing hands-free mixing by the use of a coupler on the unit that is activated by inserting and twisting the Pro Vac-U-Mixer bowl into the unit. A built-in electronic adjustable timer controls mixing times which have a five-second increment and defaults to the previous time setting with each use. Additionally, the Pro Blend is equipped with a sensing device that is said to allow the drive motor to activate only when vacuum is above 15" Hg and a Pro Vac-U-Mixer bowl is locked into place. The

vacuum-sensing device is also reported to automatically start and stop in conjunction with the electronic timer's programmed time, while another switch releases vacuum once mixing is complete. As with previous Whip Mix mixing units, a built-in vibrator arm is present which activates by depressing it. The intensity of vibration is controlled by increasing or decreasing pressure to the arm. The unit's typical analog gauge displays vacuum from 0" to 30" Hg. The Pro Blend mixer comes with a wall-mount bracket, 500-mL Pro Vac-U-Mixer bowl, tube of lubriplate, package of gauze filters, vacuum hose with connections, and detachable power cord. It is 15" W x 9³/₄" H x 10¹/₄" D and weighs 27 pounds. Accessories sold separately are the Pro Blend Benchtop Stand, Pro Vac-U-Mixer (300 mL, 500 mL, or 875 mL) and replacement bowls. The Pro Blend is available in 115V/60Hz or 230V/50Hz voltages.

Manufacturer:

Whip Mix Corporation
361 Farmington Ave.
P.O. Box 17183
Louisville, KY 40217-0183
800-626-5651
502-637-1451
502-634-4512 FAX
www.whipmix.com

Suggested Retail Price:

\$1690.00 Pro Blend Mixer (item number 29150) complete with wall-mount bracket and 500 ml Pro Vac-U-Mixer

Government Price:

Pro Blend Mixer (contents and item number as above)
\$1284.60 Contiguous 48 States
\$1332.55 Alaska, Puerto Rico, Hawaii

ADVANTAGES:

- + Provides consistent, automatic, and hands-free mixing of dental laboratory materials.
- + Successfully mixed a wide range of materials during the laboratory evaluation.
- + Automatic mixing feature means users need not stand by machine for entire mixing time.
- + Operation of unit's controls is easy and intuitive.
- + Has a built-in adjustable timer.
- + Easy to operate.
- + Oil-less vacuum pump requires less maintenance.
- + Can be mounted either on the wall or the laboratory bench top.
- + Meets all electrical safety standards.
- + Manufacturer's instructions are complete and easy to understand.

DISADVANTAGES:

- Required additional steps are time consuming when materials with a 20-second or shorter mixing time are used.
- Does not have a timer for vacuum-only period after mixing; would be handy for some materials.

SUMMARY AND CONCLUSIONS:

The Pro Blend mixer is an automatic, hands-free vacuum mixer that can be wall-mounted or mounted on the bench top by using an optional stand. The unit is automatically controlled by a built-in timer and vacuum-sensing device that start and stop the mixing process. The adjustable timer defaults to the previous setting or may be changed in increments of five seconds up to a maximum of five minutes. A twist-latching device on the Pro-Vac-U-Mix bowls provides hands-free mixing, but clinical evaluators noted this feature required additional steps compared to current vacuum mixers in use. However, these additional steps were found by DIS laboratory testing to add only nine additional seconds to the mixing cycle. The Pro Blend's dual-motor design provided smooth dense mixes of all types of materials used during the evaluation. The hands-free feature was found to be especially useful when the mixing of materials requires more than 20 seconds. **The Pro Blend Mixer** is rated **Acceptable** for use by the federal dental services.