

### **Synopsis of Laboratory Air-Abrasion Units (Project 03-36) (7/04)**

Laboratory air-abrasion units (e.g., microblasters, air abraders, sand blasters, blasters) are a vital component in dental laboratories. Air abrasion units are used extensively in fixed partial denture fabrication. Their primary function is to remove investment and oxides from newly cast metals. They are also used to prepare the porcelain-bearing area of metal-ceramic fixed partial denture frameworks. The two basic components of air-abrasion units are the abrasive material tanks and the workstations.

An important point to keep in mind when purchasing an air-abrasion unit is the different types and sizes of abrasive material needed for the different procedures to be performed. If a number of different sizes of aluminum oxide or glass beads are to be used, it would be economical to have a corresponding number of tanks. This limits the need to change material in the tank for each use. Most units allow easy switching between tanks and most offer models that can be fitted with multiple tanks.

Most air-abrasion units require external suction to remove dust and residue. This will obviously add to the cost of the purchase and should be considered. Air-abrasion units come with either a hand-held pencil dispenser or a fixed-type dispenser (i.e., mounted-blasting nozzle), or both. Some of the units with a fixed-type dispenser recycle the abrasive and are used mainly for deinvesting chrome-cobalt frameworks. This synopsis consists of [tables](#) listing selected air-abrasion units commonly used in Air Force dental laboratories, their manufacturers, and various features. This information should assist the reader in selecting an air-abrasion unit that will best suit their needs.

Synopsis of Laboratory Air-Abrasion Units\* (7/04)

Product/Model	Bego Protempomatic Z 	Bego Duostar Z 	Bego Korostar Z 	Bego EasyBlast 
Manufacturer or Distributor	Bego USA Inc. 20 Albion Road Lincoln, RI 02865 (401) 334-9261 (401) 334-9265 FAX <a href="http://www.bego.com">www.bego.com</a>	Bego USA Inc. 20 Albion Road Lincoln, RI 02865 (401) 334-9261 (401) 334-9265 FAX <a href="http://www.bego.com">www.bego.com</a>	Bego USA Inc. 20 Albion Road Lincoln, RI 02865 (401) 334-9261 (401) 334-9265 FAX <a href="http://www.bego.com">www.bego.com</a>	Bego USA Inc. 20 Albion Road Lincoln, RI 02865 (401) 334-9261 (401) 334-9265 FAX <a href="http://www.bego.com">www.bego.com</a>
Retail Price	\$3,195.00*	\$2,585.00*	\$1,885.00*	\$1,630.00*
Government Price	\$2,556.00*	\$2,070.00*	\$1,508.00*	\$1,302.00*
Dimensions (inches) (WxHxD)	14.35 x 21.25 x 21.65	14.35 x 23.25 x 21.65	14.35 x 21.25 x 21.65	16.5 x 13.4 x 16.5
Voltage	110v/230v	110v/230v	110v/230v	110v/230v
Foot Control	No	Yes	Yes	Yes
Number of Tanks Available	2 only	2 only	2 only	2 only
Dispenser Type	Mounted blasting nozzle	Hand-held pencils and mounted blasting nozzle	Mounted blasting nozzle	Hand-held pencils
Self-contained Suction/Filter System	No (see note)	No (see note)	No (see note)	No
Recycles Abrasive	Yes	Yes, for the mounted blasting nozzle only	Yes	No
Special Features and Notes	Can purchase with self-contained suction system (Protempomatic Plus) 230v only	Can purchase with self-contained suction system (Duostar Plus) 230v only	Can purchase with self-contained suction system (Korostar Plus) 230v only	

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.

**Synopsis of Laboratory Air-Abrasion Units\* (7/04)**

Product/Model	Comco Microblaster MB 1002 	Comco Microblaster MB 1006 	Comco DirectFlo Production Blaster 	Comco PowerFlo Production Blaster 
Manufacturer or Distributor	Comco Inc. 2151 North Lincoln St. Burbank, CA 91504 (800) 796-6626 (818) 955-8365 FAX <a href="http://www.comcoinc.com">www.comcoinc.com</a>	Comco Inc. 2151 North Lincoln St. Burbank, CA 91504 (800) 796-6626 (818) 955-8365 FAX <a href="http://www.comcoinc.com">www.comcoinc.com</a>	Comco Inc. 2151 North Lincoln St. Burbank, CA 91504 (800) 796-6626 (818) 955-8365 FAX <a href="http://www.comcoinc.com">www.comcoinc.com</a>	Comco Inc. 2151 North Lincoln St. Burbank, CA 91504 (800) 796-6626 (818) 955-8365 FAX <a href="http://www.comcoinc.com">www.comcoinc.com</a>
Retail Price	\$3,500.00*	\$4,100.00*	\$5,250.00	\$8,150.00
Government Price	N/A	N/A	N/A	N/A
Dimensions (inches) (WxHxD)	22 x 9 x 10	22 x 9 x 10	18 x 17 x 16	18 x 17 x 16
Voltage	115v/230v	115v/230v	115v/230v	115v/230v
Foot Control	Yes	Yes	Yes	Yes
Number of Tanks Available	1 or 2	1 or 2	1 only	1 only
Dispenser Type	Hand-held pencils	Hand-held pencils	Hand-held pencils	Hand-held pencils
Self-contained Suction/Filter System	No	No	No	No
Recycles Abrasive	No	No	No	No
Special Features and Notes	Workstation sold separately	Workstation sold separately. High air pressure capable	Workstation sold separately	Workstation sold separately. Microprocessor controlled

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.

Synopsis of Laboratory Air-Abrasion Units\* (7/04)

Product/Model	Euro Worldent Sand Shot Foursome 	Integral Systems Poli-Cutter 	Jelenko Jel Blast II 	Renfert Basic Classic 
Manufacturer or Distributor	Worldent Group 9600 W. Sample Rd Ste 403 Coral Springs, FL 33065 (954) 340-4991 (954) 340-4992 FAX <a href="http://www.worldentgroup.com">www.worldentgroup.com</a>	Integral Systems Inc. 4203 Sepulveda Blvd. Culver City, CA 90230 (888) 252-7876 (310) 313-0780 FAX <a href="http://www.integralusa.com">www.integralusa.com</a>	Heraeus Kulzer, Inc. 99 Business Park Dr. Armonk, NY 10504 (800) 431-1785 (914) 273-9379 <a href="http://www.heraeus-kulzer-us.com">www.heraeus-kulzer-us.com</a>	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>
Retail Price	\$795.00*	\$545.00*	\$1,037.00*	\$878.01*
Government Price	\$636.00*	\$436.00*	\$777.75*	\$599.24*
Dimensions (inches) (WxHxD)	15 x 13 x 17	12 x 7.5 x 12.5	15 x 10 x 13.25	13.40 x 9.85 x 15.75
Voltage	115v/220v	110v	115v/230v	120v/230v
Foot Control	Yes	Yes	Yes	Yes
Number of Tanks Available	2 or 4	1,2 or 3	2 only	1 or 2
Dispenser Type	Hand-held pencils	Hand-held pencils	Hand-held pencils	Hand-held pencils
Self-contained Suction/Filter System	No	No	No	No
Recycles Abrasive	No	No	No	No
Special Features and Notes		Finger tip instant shut-off on pencils		

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.

Synopsis of Laboratory Air-Abrasion Units\* (7/04)

Product/Model	Renfert Basic Master 	Renfert Basic Quattro 	Renfert Basic Quattro IS 	Renfert Vario Basic 
Manufacturer or Distributor	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>
Retail Price	\$1,092.97*	\$1,408.92*	\$1,870.77*	\$1,921.33*
Government Price	\$745.95*	\$961.59*	\$1,276.80*	\$1,330.85*
Dimensions (inches) (WxHxD)	15 x 10.65 x 15.75	17 x 12.20 x 22.05	17 x 12.20 x 22.05	13.40 x 9.85 x 15.75
Voltage	120v/230v	120v/230v	120v/230v	120v/230v
Foot Control	Yes	Yes	Yes	Yes
Number of Tanks Available	1 or 2	2,3 or 4	2,3 or 4	0,1 or 2
Dispenser Type	Hand-held pencils	Hand-held pencils	Hand-held pencils	A mounted blasting nozzle and optional hand held pencils
Self-contained Suction/Filter System	No	No	No	No
Recycles Abrasive	No	No	No	Yes
Special Features and Notes			Immediate Stop (IS) Air Flow	Wall mount or bench top

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.

**Synopsis of Laboratory Air-Abrasion Units\* (7/04)**

Product/Model	Renfert Vario Jet 	Vaniman Prestige 	Vaniman Prestige I/O 	Vaniman Sandstorm Expert 
Manufacturer or Distributor	Renfert USA Inc. 3718 Illinois Ave. St. Charles, IL 60174 (800) 336-7422 (630) 762-9787 FAX <a href="http://www.renfert.com">www.renfert.com</a>	Vaniman Manufacturing Co P.O. Box 74 Fallbrook, CA 92088 (800) VANIMAN (760) 723-6990 FAX <a href="http://www.vaniman.com">www.vaniman.com</a>	Vaniman Manufacturing Co P.O. Box 74 Fallbrook, CA 92088 (800) VANIMAN (760) 723-6990 FAX <a href="http://www.vaniman.com">www.vaniman.com</a>	Vaniman Manufacturing Co P.O. Box 74 Fallbrook, CA 92088 (800) VANIMAN (760) 723-6990 FAX <a href="http://www.vaniman.com">www.vaniman.com</a>
Retail Price	\$2,855.12	\$989.00	\$1,299.00	\$549.00*
Government Price	\$1,948.62	\$792.00	\$1,039.20	\$439.00*
Dimensions (inches) (WxHxD)	15 x 10.65 x 15.75	18.5 x 16 x 22.5	18.5 x 16 x 22.5	14.5 x 10 x 14.5
Voltage	120v/230v	110v/220v	110v/220v	110v/220v
Foot Control	Yes	Yes	Yes	Yes
Number of Tanks Available	0	3 only	3 only	1 or 2
Dispenser Type	Mounted blasting nozzle	Hand-held pencils	Hand-held pencils	Hand-held pencils
Self-contained Suction/Filter System	No	No	No	No
Recycles Abrasive	Yes	No	No	No
Special Features and Notes	Abrasive is poured into the blasting chamber. Can be wall mounted or used on bench top	Air hose inside chamber	Insta-Off (I/O) air flow feature. Air hose inside chamber	

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.

**Synopsis of Laboratory Air-Abrasion Units\* (7/04)**

Product/Model	<p>Vaniman Sandstorm XL</p> 	<p>Vaniman Sandstorm Pro</p> 
Manufacturer or Distributor	<p>Vaniman Manufacturing Co P.O. Box 74 Fallbrook, CA 92088 (800) VANIMAN (760) 723-6990 FAX <a href="http://www.vaniman.com">www.vaniman.com</a></p>	<p>Vaniman Manufacturing Co P.O. Box 74 Fallbrook, CA 92088 (800) VANIMAN (760) 723-6990 FAX <a href="http://www.vaniman.com">www.vaniman.com</a></p>
Retail Price	\$915.00*	\$665.00
Government Price	\$732.00*	\$532.00
Dimensions (inches) (WxHxD)	20 x 16 x 18	14.5 x 10 x 14.5
Voltage	110v/220v	110v/220v
Foot Control	Yes	Yes
Number of Tanks Available	1 or 2	1 only
Dispenser Type	Hand-held pencils	Hand-held pencils
Self-contained Suction/Filter System	No	Yes
Recycles Abrasive	No	No
Special Features and Notes		

\* Manufacturers provided the data in this table. \* Price is with 2 tanks.