Question 1: What advantages do Air Techniques AirStar Compressors offer me?

- Air Star compressors are specifically designed for dentistry. All AirStar dental compressors produce 100% oil free, ultra dry dental compressed air.
- Air Techniques is the trusted leader in oil free dental air technology. We have over 30 years of oil free compressor manufacturing experience. This means that you can have complete confidence in our products and trust them for reliability.
- AirStar eliminates the problems of oil, moisture and microbes in the air stream. How? No oil whatsoever is used. Further, our exclusive, patented Humidistat constantly monitors the moisture content of the air stream and will automatically initiate a special drying cycle if extra moisture removal is ever needed. Consequently, the ultra-dry air in the storage tank is not conducive to microbial growth.
- Air Star is sized for your practice. Five models accommodate up to 10 continuous users and multiple configurations can supply large clinics.
- Air Techniques has published two excellent reference documents. One, "Oil Free. The Difference is Clear", summarizes the advantages of the true dental quality compressed air produced by AirStar compressors. The second, "Essential Utilities", explains all of our air and vacuum products.

Question 2: How do I determine the correct compressor size?

Air Techniques uses the number of simultaneously air users (Ex: High speed, Slow Speed Handpiece) as the determining factor for the size of the compressor. Please consult the sizing chart:

AIR TECHNIQUES INC.

70 Cantiague Rock Road
Hicksville, NY 11801
1-800-AIR-TECH / Fax 516-433-7684

AIRSTAR Oil-Less Dental Air System

Model	Volts (min/max)	Amps	CFM @ rated Capacity Peak (100PSI) / Continuous (80 PSI)	Users Numbers of Heads	Recovery Time 80-100 PSI (Seconds) +/- 5%
AS10	105/125	8	2.4 / 1.2	1-2/1	48
AS21	105/125	15	4.6 / 2.6	2-3/1	45
AS22	200/250	8	4.6 / 2.6	2-3/1	45
AS30	200/250	8	4.8 / 2.7	3-4/2	46
AS50	200/250	16	9.2 / 5.2	5-7/2	43
AS70	200/250	24	13.8 / 7.5	7-10/3	37

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Question 3: Wet vacuum or dry?

There are two types of Vacuum available. The standard of the industry for the past 25 years has been **water ring vacuum pumps**. The Air Techniques VacStar creates a high level of vacuum and air flow to move aerosol, liquid and solids from the operating area. What is pulled through pipes from the operatory is flushed through the system and down the drain. If water & waste disposal costs are not an issue, than a wet vacuum is the system of choice.

Dry Vacuum systems have gained increasing market share in the past five years. Recent improvements in technology have produced Dry systems (**Air Techniques - STS**) that equal the performance of Water Ring systems. Somewhat higher acquisition costs can be offset by lower operating costs compared to water consuming pumps. Debris from the operating area is pulled to a "solids collection tank" allowing only the air to pass through the "dry" pump. Collection tanks automatically drain at the end of the day. If space is available and water is an issue, Dry Vacuum is the answer.

If a bullet point comparison is desired:

Water Ring Vacuum- VacStar

- High level of Vacuum (pull of liquids and solids)
- Compact space required
- Low acquisition cost.
- Limited water consumption (Hydromiser)

Dry Vacuum System - STS

- High level of Vacuum and air flow
- Efficient Electrical consumption
- Reduced operating costs – No water & sewer bills
- Low total life cost.

Question 4: How do I determine the correct vacuum pump size?

Air Techniques uses the number of simultaneously vacuum users (Ex: HVE (High Volume Evacuator), SE (Saliva Ejector) or Nitrous Scavenger) as the determining factor for the size of the vacuum pump. Note: 1 HVE = 2 SE's or 1 HVE = 2 Scavengers. Please consult both sizing charts to determine proper sizing for either the VacStar or STS.

VACSTAR Dental Vacuum System

Model	Volts (min/max)	Amps	CFM 0î HG	Max. No Users HVE+SE
VS20	*105/125 205/240	* 16/8	16	2+0, 1+1, 0+4
VS40	205/240	13.4	22	3+0, 2+2, 1+4, 0+6
VS50/50H	205/240	16	32	** 4+0, 3+2, 2+4, 1+5
VS80/80H	205/240	26.8	44	** 7+0, 6+1, 5+3, 4+4,0+13

*VACSTAR 20 may be converted from 230V to 115V at installation site.

**If both pumps are running together. If only 1 pump: For VS see VS 20 or 40; for STS see STS-5, 10 and 15.

STS Dry Vacuum System (Max No. Users for single pump, if dual pump double No.)

Model	Volts (min/max)	Amps	Max. No Users HVEís + SEís
STS-3	200/250	13	3+0, 2+2, 1+4, 0+6
STS-5	200/250	13	5+0, 4+2, 3+4, 2+6, 1+8, 0+10
STS-6	200/250	2@13	** 6+0, 5+2, 4+4, 3+6, 2+8, 1+10, 0+12
STS-10	200/250	2@13	** 10+0, 9+2, 7+6, 5+10, 3+14, 2+16, 0+20
STS-15	200/250 3phase	16	** 15+0, 13+4, 10+10, 8+14, 4+22, 0+30
STS-30	200/250 3phase	2@16	** 30+0, 25+10, 20+20, 15+30, 10+40, 0+60

Another factor that effects how well a vacuum pump performs is the Office's plumbing pipe size. This chart shows the acceptable pipe size range for all Air Techniques vacuum products:

Vacuum Pipe Size Chart

Model	Min / Max Pipe Size
VS20	1" / 1½"
VS40	1¼" / 2"
VS50/50H	1¼" / 2"
VS80/80H	1½" / 2"
STS-3	1" / 2"
STS-5	1½" / 2"
STS-6	1½" / 2"
STS-10	1½" / 3"
STS-15	2" / 3"
STS-30	3" / 4"