

How the Air Prep™ works

To remove moisture from warm compressed air [most Blasters use mobile diesel driven air compressors] you must first cool the air sufficiently to allow the water vapour to condensate into water droplets. Water droplets can then be removed from the air.

The AirPrep™ System is a unique design which efficiently removes moisture, with negligible drop in compressed air pressure. This is very important. [Every 10 psi lost at the nozzle decreases production by 15%]

The hot compressed air initially enters an inlet prefilter to remove oil and contaminants before going through a large oversized horizontal after cooler/heat exchanger. Here cooler ambient air is fanforced through thousands of aluminium cooling fins, which cools the compressed air down to near ambient temperature.

This cooler air now contains a much higher percentage of water droplets converted from water vapour. The compressed air then enters a large expansion chamber and forced to rise through a stainless steel demister pad, which assists in coalescing remaining moisture. Water is drained regularly.

The air exits cooler, cleaner and dryer to your Blasting System.

Features

- Negligible pressure loss through system.
- Skid mounted unit with fork lift pockets and full load rated lifting lugs for portability.
- Compact rugged design with horizontal after cooler/heat exchanges. [works much more efficiently than vertical radiator]
- Heavy duty protective bar grating over after cooler.
- Large 8" x 6" inspection manway.
- Pneumatic fan motor includes filter regulator, lubricator and muffler. Electric fan motor also available.

See p.282 for typical set up details.

Eliminate Costly Moisture Problems With an Airprep™ System

A 'must have' for Specialist Blasters



AirPrep™ - A high efficiency system to remove moisture from your compressed air.

If you are serious about production blasting, that is - continual production blasting to earn profits each and everyday, you'll need to invest in a serious moisture removal system.

You should not underestimate the benefits of using cool, dry air for blasting. You can actually blast up to 15% faster! You never have to choke your Blast Machine, your abrasive metering valve doesn't need constant adjustments - so you save money in abrasive.

This is a system, that once you've tried it, you'll never go to a site again without one. It really makes a difference - and can easily pay for itself within 6 months!

How can you increase profits using Dry Air?

Many Blasters who use AirPrep™ Moisture Removal Systems find that cool, dry compressed air actually blasts up to 15% faster. That's like 1 hour extra blasting each 8 hour day, free!!

Dry air makes it much easier to control your abrasive flow. You almost never need to choke your Blast machine again. And by getting the abrasive metering just perfect many blasters find they use 25% less abrasive. Just by adding an AirPrep™ System to their Blasting package! [That also means cleaning up and disposing of 25% less abrasive]

If you run air tools such as Graco Spray Pumps on clean dry air, they not only ice up less, they also require a lot less maintenance and last longer.

Compressed air is costly. Fuel, repairs, regular maintenance on compressors is a large expense for Specialist Blasters. An AirPrep™ system makes the most of your air investment by making the air work more efficiently.



AirPrep™ units can be used with all sizes of Blast machines. It is a secret to trouble free and high productive Blasting that many Blasters never find out about.

Where does all the moisture come from?

On any given day, the air all around us contains water vapour - usually expressed as Relative Humidity RH%. The higher the RH, the more water vapour held by the air we breathe.

When your air compressor takes this air and compresses it to 100psi, it has to suck in 7 cu ft of free air to make 1 cu ft of compressed air! So you've got 7 times more moisture in any volume immediately!

As compressors generate heat by compression the air is hot and the moisture will stay suspended as vapour. But as the air cools down - in the hoses, in your Blast machines - it condensates into real water. That's what can really cause you a problem, especially if it stops your abrasive flowing easily.

But wet air is also heavier air and can be using up around 15% of its energy in carrying moisture through your system. Just when you wanted all that energy propelling abrasive at the surface! That's why specialist operators claim that clean dry air blasts 15% faster.

What do others have to say?

"An AirPrep is just as important as the Blast Pot to take to our job sites"

Experienced Blaster, Mackay QLD

"We have proved that AirPreps pay for themselves inside 6 months. We'll never go to a project without one"

Large Contractor, Melbourne VIC

"Even on a normal day, the AirPrep removes gallons of water from our compressed air. It's amazing! It lets us use the leanest abrasive mixture"

Contractor, Sydney NSW

Blastmaster® AirPrep™ Air Drier Specifications

Model	Capacity CFM	Capacity Litres/sec	Height mm	Length mm	Width mm	Weight kg	To Suit Blasting System . . .
ACS 250	250	118	1170	865	725	123	Small blast machine
ACS 400	400	189	1600	1000	750	355	Production blast machine and airtools [ie Graco Pump]
ACS 750	750	354	1800	1200	825	556	Production blast machine with 2 operators
ACS 950	950	450	2010	1550	950	570	Production blast machine with 3 operators
ACS 1200	1200	566	2010	1650	950	660	Production blast machine with 4 operators
ACS 1600	1600	755	2100	1750	950	925	Production blast machines with 5 operators

Larger sizes available on request.

Contact Blastmaster for free advice on sizing Air Driers to Systems.