PIRATE BRAND AIR DRYERS

WHY IS DRY COMPRESSED AIR SO IMPORTANT IN ABRASIVE BLASTING?

Blasting contractors know that dry compressed air is key to superior surface preparation. Wet compressed air clogs blast pots, corrodes valves, and causes flash rusting. Re-work is costly both in dollars and to your reputation so do the job right the first time with properly conditioned compressed air.

PROBLEMS CAUSED BY WET COMPRESSED AIR

- Surface contamination / flash rusting on a blasted substrate
- Spoiled finishes
- Reduced flow of blast media
- Increased equipment down time
- Valve lubrication washout resulting in jams
- Clogged blast pots
- Excessive grit consumption
- Corrosion of blast pots, valves, spray guns & other equipment

AIRLINE CONDENSATION is an unavoidable byproduct of the air compression process. Condensation occurs when hot & humid compressed air cools in the airline. A 375CFM air compressor operating on a warm humid day will produce more than 30 gallons of water in a single 8 hour shift.

ABRASIVE DOES NOT LIKE WATER:
Just one drop of water will form a golf ball size clump of abrasive blast media which is more than enough to stop the flow of abrasive to the metering valve. Wet abrasive just doesn't flow.

WARRANTIES AND REPUTATION:
With the likelihood of blasting with wet compressed air leading to surface contamination, flash rust, or coating failure, an air dryer can save you from the hassle and loss of profitability from performing re-work/warranty work. In addition to the savings, blasting with dry air will protect your reputation of getting the job done right the first time and help you build a collection of satisfied customers.

CONTRACTORS BEWARE - AFTER-COOLERS ARE NOT AIR DRYERS!

Blasting contractors: remember that an AFTER-COOLER and moisture separator alone do not prevent condensation from occurring downstream. To lower the humidity of blasting air and prevent condensation from occurring on the blasted surface, an AIR DRYER must be used. Dry air is the key to superior surface preparation.

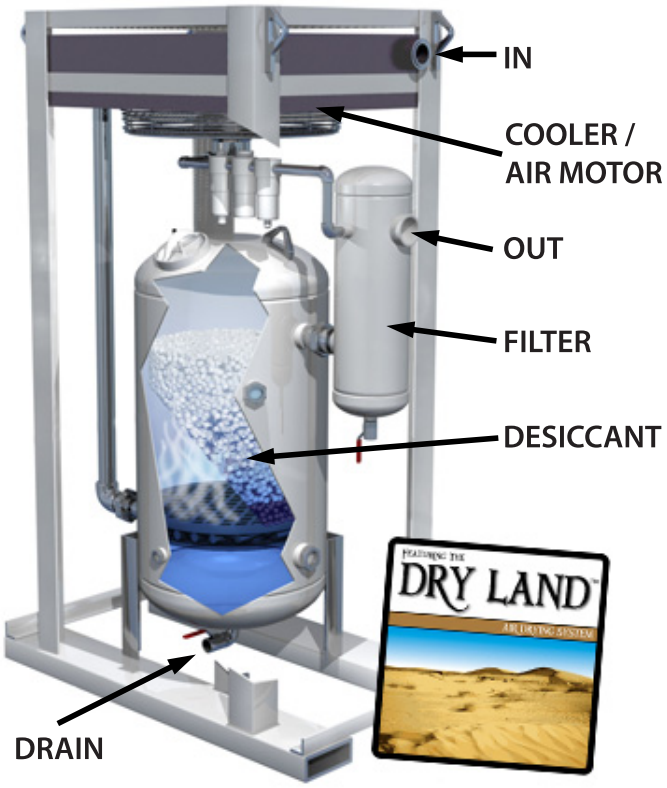
INDUSTRY CONFUSION: Many suppliers are incorrectly referring to their AFTER-COOLERS as AIR DRYERS. If a unit only contains a fan/radiator and filter, it is only an after-cooler. If it has those components + a large tank of desiccant, then it is an AIR DRYER.

	AFTER-COOLER	AIR DRYER
Cools Incoming Air	✓	✓
Removes Entrained Moisture	✓	✓
Filters Air	✓	✓
Removes Water Vapor From Cooled Air (Lowers Relative Humidity)		✓
Uses Desiccant		✓
Works Down To 0° F		✓

AIR DRYERS - HOW THEY WORK & WHAT THEY DO FOR YOU

PIRATE BRAND® air dryers are the perfect solution for the mobile blasting and painting contractor. They are single tower deliquescent compressed air drying package conveniently mounted to a forklift skid so it can be easily lifted on the back of a truck or trailer and moved about within a plant or work site.

- **REMOVES FAR MORE MOISTURE THAN AN AFTER-COOLER**
- Completely portable skid mounted system
- No electricity required, Plug-n-Play design
- Efficient - very low PSI drop
- Air motor with filter and auto-lubricator
- Two site glasses for checking desiccant level
- Includes initial desiccant fill free
- Operates down to 0°F
- Better operator comfort = more productive operators



HOW THE AIR DRYER WORKS: The air dryer first cools hot and wet air discharged from the compressor. This first stage of cooling forces a substantial quantity of entrained moisture to condense. But even after exiting the after-cooler, the air is saturated with vapor (100% relative humidity) The compressed air then passes through the drying vessel, which contains specially formulated desiccant called Dry-O-Lite®. The desiccant cuts the humidity of the air roughly in half. Air finally flows through an after-filter to trap any fine particles in the air flow.

The blasting contractor is left with cool, clean and dry compressed air for superior blasting quality and zero moisture-related downtime.

WHAT IS DELIQUESCENT DESICCANT?: Deliquesce means to dissolve. A desiccant is a drying agent. So deliquescent desiccant is a drying agent that dissolves.

OPERATOR COMFORT: Providing dry and cool air not only improves the quality of blasting, it also allows the operators to work in greater comfort therefore blasting more productively. If your air compressor is putting out 180°F air, the air dryer will cool it down to within 10°F - 15°F of the ambient air temperature. So on a 90°F day, your compressed air stream can be cooled at least to 105°F. Then, using a "cool tube" the air being fed to the respirator can be cooled down to between 73°F and 53°F. A cool/comfortable blaster is a productive blaster.

FYI: In winter, "hot tubes" will freeze up when used with wet compressed air.

AVAILABLE AIR DRYER MODELS

888-1310-021PB

AIR DRYER ADPB-250 CFM @ 100 PSIG OR 359 CFM @ 150 PSIG, PIRATE BRAND (WITH INITIAL DESICCANT FILL FREE)

888-1310-041PB

AIR DRYER ADPB-400 CFM @ 100 PSIG OR 574 CFM @ 150 PSIG, PIRATE BRAND (WITH INITIAL DESICCANT FILL FREE)

MODEL	MAXIMUM WORKING PRESSURE	Dryer Flows - SCFM (Nm^3/hr)*						
		60 PSIG 4.1 Bar	80 PSIG 5.5 Bar	100 PSIG 6.9 Bar	125 PSIG 8.6 Bar	150 PSIG 10.3 Bar	175 PSIG 12.1 Bar	200 PSIG 13.8 Bar
ADPB 250	200 PSIG 13.8 Bar	163 262	206 331	250 402	304 489	359 577	413 664	468 752
ADPB 400	200 PSIG 13.8 Bar	261 419	330 531	400 643	487 783	574 923	662 1064	749 1204

DRY-O-LITE® DESICCANT

We stock our desiccant by the truck load so weather you are purchasing replacement desiccant for an existing air dryer or for a new system, we have you covered. Click on the link below for more info.

- Prevents condensation
- Prevents wintertime air line freeze-ups
- Environmentally safe
- Low cost of operation
- Little or no maintenance on drying equipment

HOW DESICCANT WORKS: Dry-O-Lite® is a dense hygroscopic tablet that absorbs water vapor from streams of compressed air. The surface of the desiccant tablet dissolves slowly, forming a brine solution which drops from the surface. The tablet continuously dissolves, or deliquesces, until the desiccant is fully consumed.

When operating within the rated CFM of our air dryers, Dry-O-Lite® will establish relative humidity of 55% which equates to a dew point of approximately 20°F lower than the temperature of the compressed air at the inlet of the dryer.