



**Flexible Solutions** | Quality Air



**IQ**™  
**SYSTEM**



**Portable Power**

## Doosan Portable Power understands the importance of clean air

Clean air is essential to the safety and efficiency of countless compressed air applications. Without it such harmful contaminants as oil, dust, dirt and water can attack your system and lead to downtime, instrument damage and even product liability.

Your best defense against these contaminants is Doosan Portable Power. We offer the clean air systems — compressors, aftercoolers and dryers — that enable you to precisely meet ISO standards for your industry. Our modular approach lets you and your Doosan Portable Power dealer develop a customized clean-air solution.

### Key Applications

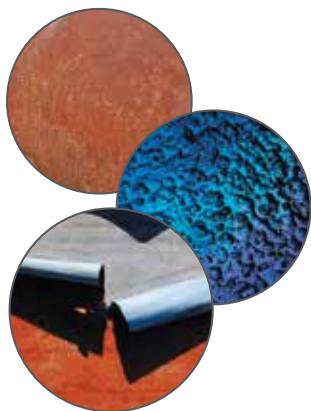
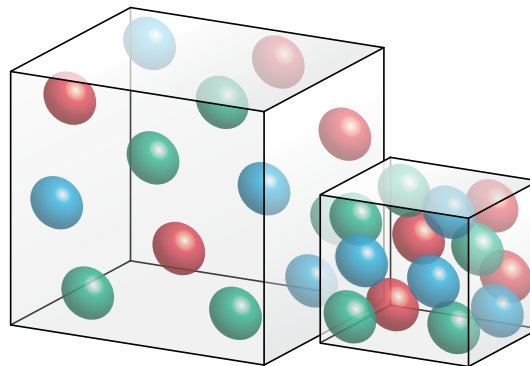
- Abrasive blasting
- Oil and gas, chemical and electronics
- Instrument regulation
- Pharmaceutical and food
- General manufacturing
- Snowmaking



## The consequences of contaminated air

Dirt, moisture and oil are unavoidable in the air around us. When that air goes into a compressor, so do the contaminants — and that's when trouble can start.

Look at it this way. The large box shows the typical amount of contaminants in ambient air; the smaller box shows the same contaminants compressed to 125 psig. Imagine that high concentration of contaminants banging through your compressed air system, and it won't be hard to predict the results: premature wear and tear, rust and corrosion in your tools, damaged instruments, spoiled paint surfaces and more. That's why clean, dry air is crucial to your productivity.



## Each contaminant has its own special set of problems

### Moisture

- Rust and corrosion in the air system piping
- Inadequate air tool lubrication
- Loss of productivity
- Damage to labeling, packaging and the finished product

### Dirt, dust and other particulates

- Premature wear
- Scored surfaces
- Clogged orifices
- Ruined finishes and instruments

### Oil, unburned hydrocarbons and compressor coolant

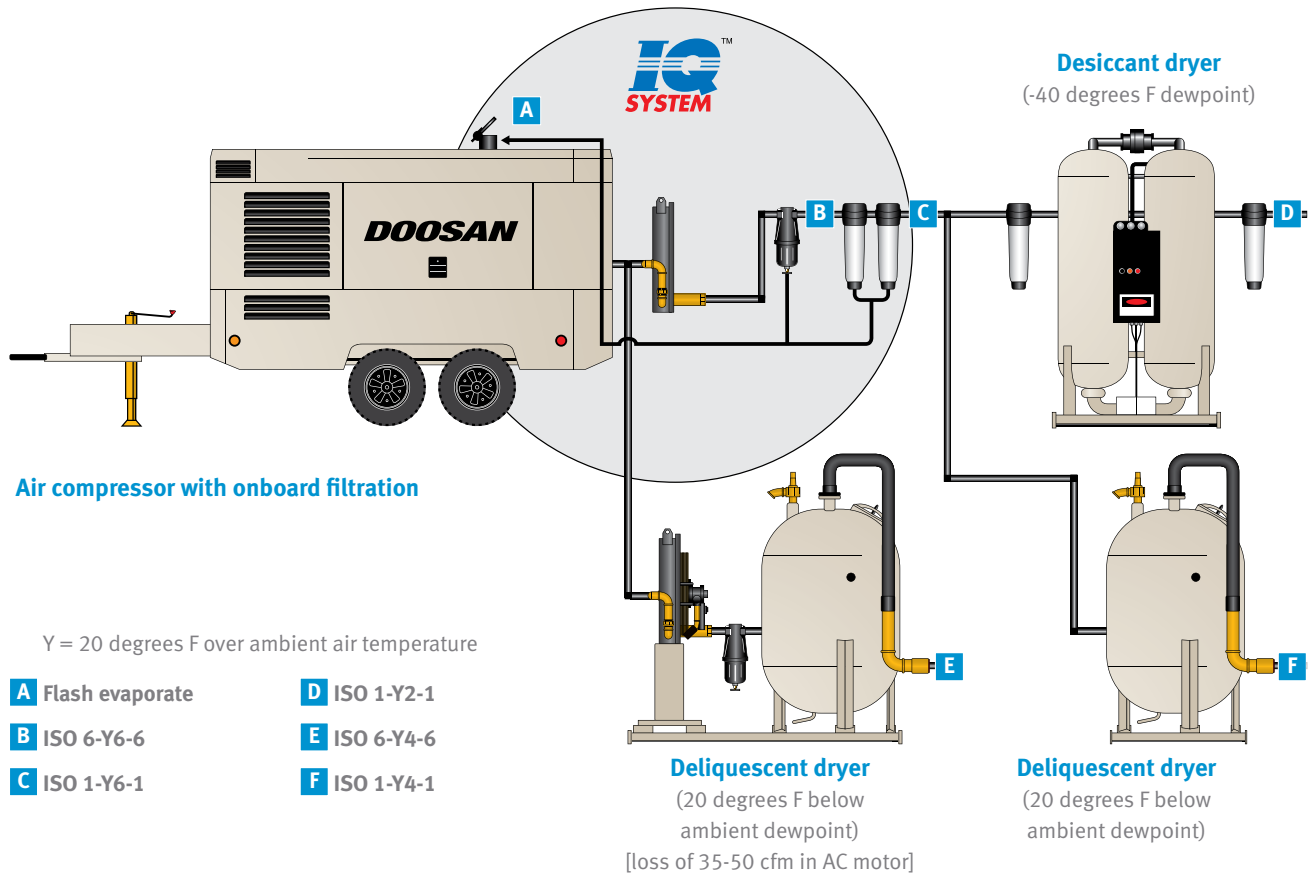
- Batch spoilage
- Poor quality of finished product
- Unwanted color / odor in finished product
- Messy, hazardous work environment

**The bottom line: Dirty air wreaks havoc on your equipment and your end-products alike**

ISO 8573-1:2010 Air Quality Classes

QUALITY CLASS	SOLIDS			WATER		OIL AND OIL VAPOR
	Quality Class	Max Number of Particles Per m <sup>3</sup>		Pressure Dew Point		mg/m <sup>3</sup>
	0.1 – 0.5 micron	0.5 – 1 micron	1 – 5 micron	°F	°C	
0	As specified by the end-user or manufacturer, and more stringent than Class 1					
1	100	1	0	-100	-70	0.01
2	100000	1000	10	-40	-40	0.1
3	—	10000	500	-4	-20	1
4	—	—	1000	37.4	3	5
5	—	—	20000	44.6	7	—
6	—	—	—	50	10	—

Protecting your system from bad air



ISO CLASS	COMPRESSOR	AFTERCOOLER	DRYER
1-Y2-1	375 IQ		Desiccant
6-Y6-6	375	Aftercooler/Water Separator	
6-Y6-6	915	Aftercooler/Water Separator	
1-Y2-1	915 IQ		Desiccant
1-Y2-1	1600 IQ		Desiccant
6-Y4-6	1600		Deliquescent

## The Doosan Portable Power product lineup for clean, reduced moisture air

### The IQ System®

Imagine a complete instrument air system that provides clean, reduced moisture, portable compressed air with no condensate waste. That's a perfect description of our IQ System® compressors.

IQ System® compressors provide instrument-quality air without the addition of bulky non-efficient, skid-mounted after filter packages. These self-contained, portable compressors range in size from 300 to 1,300 cfm and offer up to 150 psi and 750 to 1,170 cfm at 350 psi — along with features not found in more expensive oil-free compressors. (Dessicant dryer required for Instrument Quality Air)

These compressors feature a lockable valve system that lets you switch instantly from instrument-quality air to standard rotary screw air. In addition, they can be used for abrasive blasting and painting one day and provide clean, drier air the next.

### IQ System features

- Rated for continuous-duty operation
- Condensate flash system vaporizes all condensate for zero discharge
- Integral aftercooler discharges air at only 20 degrees F above ambient
- Simple, lockable valving allows versatility of running the unit in instrument-quality or standard rotary screw modes
- Redundant circuit safety shutdown system with pressure differential switches assures the proper air filtrations and indicate need for routine filter maintenance
- Particulate size < 0.01 micron; oil/water aerosol < 0.01 ppm

### A clean step above the rotary screw

IQ System® compressors solve both the air quality and waste removal problems typical of standard rotary screw compressors. All of our IQ System® units feature an onboard aftercooler with 20 degree F approach, a coalescing dual filtration system and an exclusive, zero-discharge condensate removal system.

Our dual filter system includes built-in monitoring and safety shutdown features to assure a consistent, reliable source of high-quality air. An early warning indicator informs the operator when filters need maintenance, while a pressure differential feature senses buildup in the filters and will shut down the unit to prevent harmful levels of oil carryover.

Our patented condensate removal system injects the oil/water condensate waste into the super-hot engine exhaust, where it is flash-evaporated. This eliminates any concern about collecting, treating and disposing of condensate waste. So whether you're producing instrument-quality air or air for general purposes, this feature will save you time and money.

Please note: A pressure drop of 4 to 8 psi is common depending on flow, operating pressure and ambient conditions.



Experience Doosan Portable Power and our industry-leading support and service. Whatever the job, we have the solution. From our comprehensive range of air compressors, lighting systems and generators to our rugged and reliable light compaction equipment, we have a solution to fit your needs. Running a successful business takes more than powerful equipment. That's why Doosan Portable Power partners with an experienced global dealer network to stand beside you every step of the way. Doosan Portable Power — more than 100 years of providing excellence.



Air compressors from Doosan Infracore Portable Power are not designed, intended or approved for breathing air. Compressed air should not be used for breathing air applications under any circumstances.



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