

## CASE STUDY TECHNOLOGY



# Portable compressor keeps dry ice blasting moving for IceTech

IceTech, a world leading manufacturer of dry ice blasting equipment for industrial cleaning applications is using the CompAir C105-14 unit as its preferred portable compressed air source - impressed by the machine's compact design, guaranteed air quality and high air delivery rate.

## Overview

### ▶ Client

IceTech A/S

### ▶ Location

Bramming, Denmark

### ▶ Application

Industrial cleaning using dry ice blasting technology

### ▶ Products

C105-14 portable sir compressor

### ▶ Customer Benefits

Highly portable for easy manoeuvrability/ guaranteed air quality and delivery

## Application Details

Ice blasting uses dry ice pellets, accelerated in a jet of compressed air to clean a wide range of surfaces, in numerous applications, without abrasion or the need for toxic chemicals.

The C105-14 compressor can be hitched to any suitable vehicle for transportation and its compact and lightweight design makes it easy for just two people to manoeuvre through a factory. Zinc coated, powder painted panels provide

high protection in harsh outdoor environments and the control panel is protected against corrosion and the ingress of water. The unit can operate in temperatures up to 45°C and at high altitudes for complete reliability in any location.

Franz Weisbrod, Sales Director Northern Europe added, "CompAir has been working in the dry ice blasting sector for more than ten years and now has an 80% market share in Europe. During this time, our team has developed a full range of compressors to suit market requirements, which includes the proven C105-14, C65-10, C55-14 and C35-10, which are

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compatible with all machine sizes and nozzle types. Our knowledge and experience in this sector extends to our international distribution network where our dealers receive constant training in all sales and service aspects. They are familiar with the complexities of iceblasting technology and also offer a complete range of hire machines for the application, for those customers that prefer to rent a compressor."

### High Quality Air

Dry ice blasting is proven to be faster and more effective than traditional industrial cleaning methods and can help prolong the life of the equipment being cleaned. It is easier to reach hard-to-access parts and, as the ice vaporises on contact, the surface material is left dry and undamaged. However, to maintain such high standards and prevent corrosion, the compressed air supply must be dry and oil-free. The C105-14 first treats the air in an aftercooler and then a condensate separator before it is passed through two microfilters to remove any contaminants and limit the oil content to less than 0.01 parts per million.

### Guaranteed Air Delivery

The technology requires a minimum of 5.5 m<sup>3</sup> of airflow at 14 bar pressure to propel the ice pellets, which can increase to 10.5 m<sup>3</sup> depending on the size of the project. CompAir's advanced screw technology offers the highest free air delivery in its class, helping to guarantee supply in a more compact and efficient unit.

### Easy, Economical Operation

Using the electronically-controlled Cummins diesel engine and a 24 Volt electric system, the compressor has excellent cold starting ability, combined with economic fuel efficiency. The machine will also shut down automatically in fault conditions to prevent damage to component parts. An electronic, menu driven display makes it easy for the operator to vary the working pressure and to check operating parameters such as oil pressure, fuel levels and engine water temperature.

### Benefits at a glance

- ▶ **Highest free air delivery in its class - machine designed specifically for dry ice blasting**
- ▶ **Highly durable, portable compressor - for reliable operation in any application**
- ▶ **Guaranteed oil-free and 14 bar pressure - ensures productivity**
- ▶ **Large capacity fuel tank - compressor runs for an entire shift without refueling**
- ▶ **Electronically-controlled Cummins diesel engine - delivers high energy efficiency**
- ▶ **Electronic control system - easy operation and simpler fault finding for less downtime**
- ▶ **Good ground clearance of 250mm - for easy towing on uneven ground**

### Simple Maintenance

As the C105-14 is always on the move, it is both robust and quick to service. Large opening side doors enable easy access for servicing of the air end and engine and the front and rear door panels can be removed by unscrewing four bolts for cleaning of the coolers.

The canopy panels can also be replaced individually rather than replacing the entire housing, reducing the cost of impact damage repairs significantly.



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