

CHILLING OR CLEANING WITH DRY ICE



DRY ICE CHILLING OR CLEANING?

New technology = increased profitability

Dry-ice mobile pelletizers for quick, efficient production of high density CO₂ pellets on-site or in process lines in exact quantities needed.

Recovery unit for recapturing escaping CO₂ gases now becomes an affordable tool for increasing profits/reducing cost.

Mobile high performance blasters with improved airlock to assure better and more reliable cleaning.

AQUILA

TRIVENTEK

NOW...

Manufacturing of dry-ice is basically an easy operation. Problems start from the time of manufacturing to the time of usage. Typically only 50% of the expensive CO₂ gas is actually used. Handling, storage and transport are the main problems since dry-ice is mostly manufactured off-site and almost immediately starts to sublime or melt. Once sublimation starts, the pellets begin to lose their hardness and solidity and therefore their power and strength. The revolutionary solution developed and patented by Triventek is on-site production by the new pelletizer with integral recovery unit, at the point of usage, in exact quantities.

MAKING DRY-ICE

The manufacture of solid CO₂ (dry-ice) has been known for the past 50 years. In the process of manufacturing dry-ice pellets, liquid CO₂ at high pressure will be released into a cylinder. By releasing the gas into atmospheric pressure half the gas will turn into snow and the rest will escape. The snow is then compressed into solid dry-ice pellets.

THE TRIVENTEK SOLUTION

The escaping gas is directed back to the unique recovery unit and reused. This is an on-going process which eliminates gas losses to almost zero and as a result reduces the price of dry ice by half. A further significant advantage is the capability to move the equipment for producing dry-ice to the point of local operation whether for a chilling process or for cleaning purposes. The equipment comprises a pelletizer and recovery unit for chilling processes with the addition of a blaster for cleaning. All the equipment is fully mobile. They can all pass through any standard door opening and only require a standard power supply.

NEW MARKETS...

Dry-ice has long been considered an alternative media for chilling and cleaning. But until now it has not been possible either logistically or commercially. With the new patented Triventek range of equipment new market opportunities are now emerging.



AQUILA

TRIVENTEK

CHILLING...

Dry ice is twice as good as ice-water when used as a chilling medium.

It has always been popular in the catering, delivery, transport and shipping industries where normal electrical power supply is not available. In the food industry, the pelletizer and recovery unit can be integrated directly into the process line reducing losses due to sublimation during transport, storage and handling. In an automatic process system handling can be now almost eliminated.

The absence of water gives both bacterial and food quality benefits.



CLEANING...

Dry ice when used as a cleaning medium in the same way as high pressure water or sandblasting has many distinct advantages.

Dry ice leaves nothing behind but the dirt which has been removed. Dry ice dissolves back into CO₂ after use, thus there is no polluted water, sand, grit or other blasting media to be disposed of.





THE TRIVENTEK SELECTION

PELLETIZER PE80

The pelletizer enables the user to manufacture dry-ice directly into the blaster or for chilling on site. High density pellets are produced in any size from 1 mm to 16 mm.



RECOVERY UNIT RE80 OR RE150

All escaping gas from the pelletizer is collected and compressed back into liquid CO₂ and reused to produce more dry-ice pellets.



BLASTER BL-60

The blaster with new improved rotary air-lock system and a 23 kg large hopper gives a continuous flow of dry-ice.

