



LIXSHOOTER® installation

**General**

The LIXSHOOTER® from Linde Gas is a cryogenic bottom injection system working with either liquid nitrogen or liquid carbon dioxide. Wherever fast and efficient cooling without additional process equipment is needed, the LIXSHOOTER® is the answer. It can be installed in new or existing process machines with minimum space requirements and cools the product directly. This leads to high product quality due to low phase separation, low product stress and reduced aroma losses, as a result of quick cooling.

The LIXSHOOTER® works by injecting a defined amount of coolant directly into the product mass. The coolant evaporates in contact with the product, absorbing the heat from it, and the cold gas then continues to cool the product, as it passes through to the top of the process container.

**Typical applications**

The LIXSHOOTER® can be used for a wide product range requiring fast cooling, such as:

- Meat and vegetable products prior to forming
- Soups
- Sauces
- Paste and pulp products
- Baby food
- Purees

These are just some of the possible applications. If you would like to know whether the LIXSHOOTER® suits your application, please contact us.

**Hygiene** The LIXSHOOTER® has been designed to meet the highest hygiene requirements:

- All product zone surfaces are inert
- All product zone surfaces are smooth
- Dead space avoided
- All surfaces in contact with the product are self-emptying or self-draining

**Features**

- High efficiency up to 98 %
- High capacity
- Inhibition of microorganism growth due to fast cooling of warm products
- Reduction of aroma losses
- Can be installed in existing or new equipment
- Very low space required for installation
- Is cleaned with vessel surface
- No extra cleaning needed

<b>Technical data</b>	Dimensions H x L x W		240 x 220 x 150 mm
	Performance/tank pressure	N <sub>2</sub>	approx. 3.5 kg/min at 3 bar g
		CO <sub>2</sub>	approx. 13 kg/min at 16 bar g

<b>Application example</b>	Product	Minced meat in a mixer
	Volume	1,400 kg
	Temperature in	+4.5 °C
	Temperature out	-1.5 °C to -2 °C
	Injection time	100 seconds
	Exhaust gas temperature	-15 °C
	Efficiency	90 %
	Gas used	Carbon dioxide
	Number of shooters	6

**Options**

- Safety package
- Control instructions
- Stainless steel cylinder
- Installation kit



**Treating food better** Other leaflets about our complete range of applications and products are available in all sales offices. Our experts are available for consultation.