

Getting ahead through innovation.

With its innovative concepts, Linde Gas is playing a pioneering role in the global market. As a technology leader, it is our task to constantly raise the bar. Traditionally driven by entrepreneurship, we are working steadily on new high-quality products and innovative processes.

But Linde Gas offers more. We create added value, clearly discernible competitive advantages, and greater profitability. Each concept is tailored specifically to meet our customers' requirements – offering standardized as well as customized solutions. This applies to all industries and all companies regardless of their size.

If you want to keep pace with tomorrow's competition, you need a partner by your side for whom top quality, process optimization, and enhanced productivity are part of daily business. However, we define partnership not merely as being there for you but being with you. After all, joint activities form the core of commercial success.

Linde Gas - ideas become solutions.

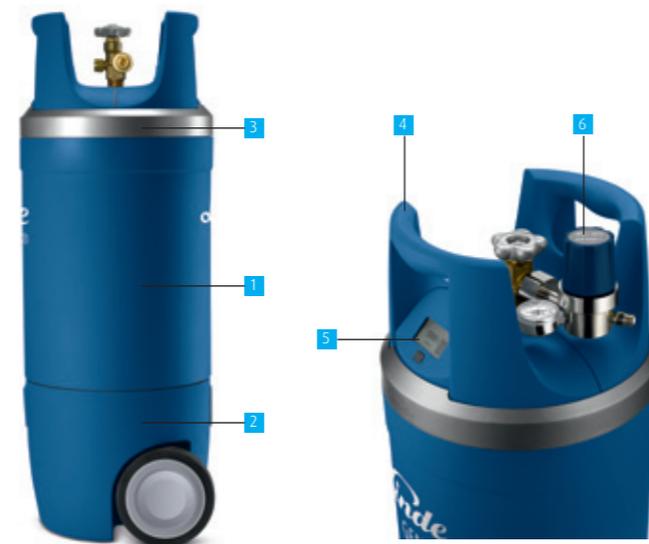
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Damage

Check the GENIE cylinder for damage before leaving your Linde collection point. When returning the cylinder, the unit will be checked for damage. The store will have a set of acceptable and unacceptable damage standards to which your item will be assessed.

Know your GENIE



- 1 HDPE jacket
- 2 Rugged detachable wheel unit
- 3 Colored gas hazard identification ring
- 4 Ergonomically designed handles and valve protection
- 5 Digital Information Unit (DIU)
- 6 High performance regulator

Troubleshooting

The Digital Intelligence Unit will not display? Press the button once, firmly in the centre.

If the unit fails to display, then return the GENIE cylinder to where you bought it from. The cylinder will be safe to use but no contents information will be available.

FAQ's

Q: Does a normal regulator fit within the handle area?

A: No, existing regulators are too big to fit within the space between the handles of the GENIE cylinder. GENIE regulators are compact versions of the larger regulators, specifically designed to meet the requirements of this type of cylinder. The small size of the GENIE regulator has the advantage of being within the handle area, which means the regulator should not get damaged, should the cylinder be pushed over.

Q: Do the GENIE regulators fit on the current steel cylinders?

A: Yes, although they have been specifically designed for use with a GENIE cylinder, they will fit on a standard steel cylinder if that cylinder is fitted with the same valve.

Q: Are the wheels only for the larger cylinder?

A: No, the wheels can be fitted to any size of the GENIE cylinder.

Q: Why is the cylinder more stable?

A: The diameter of 320 mm gives the cylinder more stability, the cylinder is less likely to topple over.

Q: Where can I buy GENIE?

A: Contact Linde on 088 262 62 62, or on our HiQ desk at 0313 49 04 40. In Belgium call 02/890.95.10, or our HiQ desk on +31 (0)313 49 04 40.

Q: Where can I buy GENIE accessories?

A: Contact Linde on 0313 49 04 40. In Belgium please call +31 (0)313 49 04 40.

Q: Who should I contact to report a damaged/faulty cylinder?

A: Contact Linde on 088 262 62 622. In Belgium please call 02/890.95.10.

Customer service/Information and support

To explore the full range of GENIE gas cylinders, regulators and accessories, please visit www.linde-gas.nl/genie.

For orders and other queries please call our Customer Service Center on 088 262 62 62. In Belgium please call 02/890.95.10.



GENIE®

Cylinder user manual

Smart • Convenient • Portable - making life easy

Safety

The GENIE cylinder has been designed to the required EN and ISO standards. It contains either a gas at high pressure or a gas stored as liquid and should be treated with care and caution. It is important that you read this manual before using this product for the first time to ensure you are familiar with all the product features, operating instructions and guidelines for use.

Handling and transportation

The GENIE cylinder handle has also been designed as a guard to protect the cylinder valve from accidental damage. GENIE cylinders should always be transported and used in an upright position, never on their side or inverted. Cylinder handles should never be used as lifting points for cables, straps, crane hooks or anything other than hands.

For more detailed information on the handling and transportation, visit our website at www.linde-gas.nl/genie.

Stacking

GENIE cylinders are designed to stack together. This should always be done on flat, even ground.

- Never stack more than two cylinders.
- Always place the largest GENIE cylinder at the bottom of the stack
- Never stack cylinders with the regulator attached or with the wheel unit attached
- Never use GENIE cylinders whilst stacked

If you would like to use two cylinders at the same time then use the GENIE twin cylinder stacking adaptor.*

* Will be available in the future.

Displays

Digital display

The Digital Intelligence Unit (DIU) display differs, depending on the gas supplied. It provides information on how much gas is left in the cylinder. When gas levels get below 25% and 10%, an alarm and flashing light indicate this.



Operation

To start push the button on the DIU to initiate the display. After 3 seconds the start up screen will change to one of the versions below, depending on the type of gas the cylinder contains. The DIU only remains active for 40 seconds before shutting down if no further operations have been carried out.

Start up screen for the nitrogen (N₂) GENIE cylinder

- 1 Cylinder pressure when full – this valve doesn't change when in use
- 2 Percentage of contents left
- 3 Gas type
- 4 Number of black bars indicates the contents remaining



Start up screen for the Shielding gas GENIE

- 1 Flow rate units
- 2 Welding flow rate
- 3 Arrow shows direction of next flow rate
- 4 Gas type
- 5 Value is the number of minutes welding time left
- 6 Number of black bars indicates the contents remaining



 Shielding gas screen showing welding time left at 16 l/min.

Arrow denotes if button is pressed next value will be 15 l/min.

 Shielding gas screen showing welding time left at 15 l/min.

Arrow denotes if button is pressed next value will be 16 l/min.

Alarms

There are three audio and visual alarms on the DIU:

- At 25% full, the alarm sounds and warning LED flashes twice for 0.2 seconds followed by a 1 second gap then twice again. The bars on the cylinder graphic also flash.
- At 10% full, the alarm sounds and warning LED flashes twice for 0.5 seconds with a 0.5 second gap. The bars on the cylinder graphic also flash.
- At empty the alarm sounds and warning LED flashes twice. Cylinder symbol also flashes.

Please note: These alarms only occur the first time the GENIE cylinder is turned on after an alarm condition is met.

Error screen

Should a problem occur with the DIU an error screen will appear. The GENIE is still safe to use but no information about the contents will be available.

Example of an error screen

- 1 Cylinder pressure when full
- 2 Version number
- 3 Error code
- 4 Serial number



DIU has no user serviceable components and under no circumstances should any attempt be made to open or interfere with the DIU unit.

Accessories

Use only approved GENIE accessories, as non-approved items may damage the cylinder and you may be charged a fee to repair the cylinder. Each accessory comes with its own instructions and warranty. Please ensure that you read these thoroughly before using the product.

Using your GENIE

Before using your GENIE cylinder, you will need to attach a regulator. The regulators come with their own instructions.

GENIE cylinder regulators

Safety is priority for Linde. Therefore, the GENIE cylinder handles have been specifically designed to protect the valve and regulator. Only GENIE gas and pressure specific regulators should be used to guarantee performance and genuine products should be used at all times.

Fitting regulators

Regulators are designed for use with specific gases or groups of gases and must only be fitted to their respective cylinders. Detailed instructions on how to fit and check your regulator can be found on www.linde-gas.nl/genie.

Main instruction points are:

1. Ensure the regulator is in good condition before fitting to the cylinder. Gauges should be intact with threads and seats undamaged.
2. Clean the cylinder valve and regulator threads using a dry, clean piece of lint free cloth to remove dirt, moisture, oil and grease particles.
3. Carefully thread the regulator onto the valve, ensuring that you do not cross thread, and tighten with the appropriate spanner.
4. **Do not overtighten**, as this will damage your regulator.
5. Turn the regulator knob counter clockwise until it stops.
6. Slowly open the cylinder value.
7. Turn the regulator knob clockwise to set normal delivery pressure or flow.

- Never dismantle or modify a regulator to make it fit
- Never use adaptors between the cylinder valve and the regulator to make it fit
- Never use oil or lubricants on the cylinder valve or regulator threads. Oil or lubricants can trap dirt and make the regulator difficult to fit or leak, they can also be carried into the regulator and cause a malfunction. If the cylinder contains oxygen then any oil or lubricants will ignite in the presence of oxygen
- Only just enough force should be used to provide a leak tight seal between the cylinder valve and the regulator. If excessive force is used the cylinder may move within its outer jacket. While this is not a safety hazard, should this occur it is an indication that excessive force has been used in tightening the regulator to the cylinder.

Removing regulators

1. Close the cylinder valve.
2. Release all gas from the regulator and system until the gauge(s) read zero.
3. Turn the regulator knob counter clockwise until it stops.
4. Loosen the regulator using the appropriate spanner and then remove the regulator.
5. Store the regulator in its box, in a clean, dry environment.

Attaching the wheel unit

The GENIE wheel unit is suitable for any size of this cylinder type. The instructions are:

1. Place the wheel unit on a flat surface.
2. Ensure the two (2) clips **A** are in the open position with their upper faces away from the side of the wheel unit.
3. On the inside of the wheel unit you will see three locating pillars, two at the front and one over the axle. On the underside of the cylinder you will see three indents which you need to align with the pillars. (Note: If your GENIE cylinder is fitted with a DIU this will always face away from the axle.)
4. Lift the cylinder and place it into the wheel unit.
5. Push the claw of the clip into the opening on the base of the cylinder and push down to lock in position.
6. To release the wheel unit from the cylinder simply open the clips and lift the cylinder from the wheel unit.



Daily cylinder use

GENIE cylinders are designed for either continuous or intermittent use. At the end of any period of use, or when you are leaving the cylinder unattended, close the cylinder valve by turning the wheel in a clockwise direction.

Children and GENIE cylinder

Children should never be allowed to use or operate a GENIE cylinder.

Maintenance and care

The GENIE cylinder has been designed to require no maintenance from the customer at all. While the HDPE cylinder jacket has been made as strong and durable as possible, it can still be damaged by misuse. Should you wish to clean the cylinder, use a mild detergent such as washing up liquid diluted with warm water. Use a clean cloth to sponge the cylinder clean. **Never** immerse a GENIE cylinder in water, **never** use a power washer on a cylinder and **never** use chemicals or solvents on a GENIE cylinder.