



Specialty Gases from Messer

Messer is a leading industrial gas company and is active with about 60 operative subsidiaries in more than 30 countries in Europe, Asia and also Peru. The international activities are controlled from near Frankfurt am Main, Germany, while the central technical functions Logistics, Engineering Production and Technology Management are provided from Krefeld, Germany. Messer is the largest owner managed industrial gas company and has more than 4.400 employees.

Individual and nearby

In the case of the Messer Group, you can take this heading literally. Thanks to more than 120 own locations in the important markets of Europe, Asia and Peru, we are always near by you. Specialty gases are manufactured in Europe in five main regional production plants in Austria, Belgium, France, Hungary and Switzerland, as well as in Wujing and Chengdu in China. Advantages for you: Short delivery distances and products which exactly meet your requirements.

Specialty gas plant Messer Schweiz AG in Switzerland



Our program „made for your success“

From Acetylene to Xenon, the Messer Group offers much more than just the gases required. Our know-how on the subject of "gas" is both comprehensive and specialized, offering a key to optimization of processes from the point of view of quality, economy and innovation.

Messer offers an extensive product range of pure gases, standard mixtures and, on customer request, individually produced gas mixtures in nearly any technically possible composition.



The same applies for the forms of delivery: From a cylinder to a tube trailer or an on-site production on the customer's plant. We can help to find the supply variant which best meets the individual requirements. Gases can be supplied in liquid or gaseous form, in the quantities requested and in precisely the quality needed. We supply specialty gases in quantities from a pressure can up to a 300 bar cylinder bundle. Of course, you will also find the corresponding hardware in our portfolio for the optimum use and application of our products.

You can profit from this whether you are at home in the world of automotives, food, chemicals, petrochemicals, metallurgy, environmental technology, electronics, medicine or welding technology.

Discover our efficiency for your success!



**Specialty gases ...
... from „A“ for Analysis
to „X“ for Xenon lamps**

Companies which choose specialty gases from Messer can not only rely on the highest quality standards, but also profit from a problem-solving competence which is proved every day by the experts from Messer, together with their customers. Added to this is a product range just as varied as the applications for specialty gases.

Experience is the key

It is only through their applications that gases become useful. Helium, for example, is used in gaseous form to fill balloons or, cryogenically liquefied, to cool the superconductors in magnetic resonance tomographs. Of course these two applications make completely different demands on the product, the delivery form, the hardware used and the service provided. The experts from Messer, together with the customer, work out the optimum concept for each application. Additional there is the perfect supply of the gases you require. The range of solutions here spans from a gas mixture in a pressure can to a pure gas in a trailer, from technical grade to 6.0 quality.



High purity process gases and precise calibration gases for sensitive analytical procedures

For safe and efficient operation, today many technologies require pure gases or standard gas mixtures. Thus, the output performance of an excimer or CO₂ laser depends to a great extent on the quality of the operating gases used. Light bulbs as we know them would be unimaginable without inert gases. Special characteristics are obtained here by the selection of the gases employed. Xenon lamps or Argon or Krypton filled insulating glass windows are just two other examples.



Liquid helium for magnetic resonance tomographs



Insulating glass windows filled with noble gases ensure high thermal and sound insulation

The highest demands are also made on the gases, for example, when they are used for the operation of highly sensitive analytical instruments in environmental analysis, safety technology or quality assurance. Most of the analytical instruments in use today operate comparatively, like the balance scales often seen in street markets in the old days. Just as these require precise weights in order to weigh correctly, high precision gas mixtures with defined compositions are used to calibrate the instruments. Of course the highest precision is also essential for the lowest concentrations.

On the basis of its many years of experience in the manufacturing and analysis of gas mixtures, Messer is in a position to deliver virtually any gas mixture in the desired composition and to the required precision. The concentrations of the most important components here are based on international reference standards. Optionally, calibration gases can also be supplied with a certificate from an accredited laboratory.

Knowing how it is done

The manufacturing of specialty gases comprises several stages, from cylinder pretreatment to filling technology and analysis. Only well-founded know-how in each individual area and secure control of the whole process chain allow the constant high quality of Messer products.



Gravimetric production of high-precision gas mixes

Specialty gases also demand special know-how in their application. For example, in order to make sure that the required quality from the storage vessel actually reaches the application, special precautions are necessary in the installations. Not every valve, although proven in the technical field, can also be used for specialty gases. But, here too, the experts from Messer stand by their customers with advice and assistance.

You can obtain brochures from Messer on the following subjects:

- High-purity gases
- Gas mixtures – specifically for your application
- Gas supply systems and components for specialty gases
- Helium – the special element
- Balloon gas
- CANgas, the "smaller" alternative
- Gas purification systems - for the highest level of purity
- Process gases for analytical applications
- Handling of gases - safety instructions
- Accreditation
- Environmental control



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