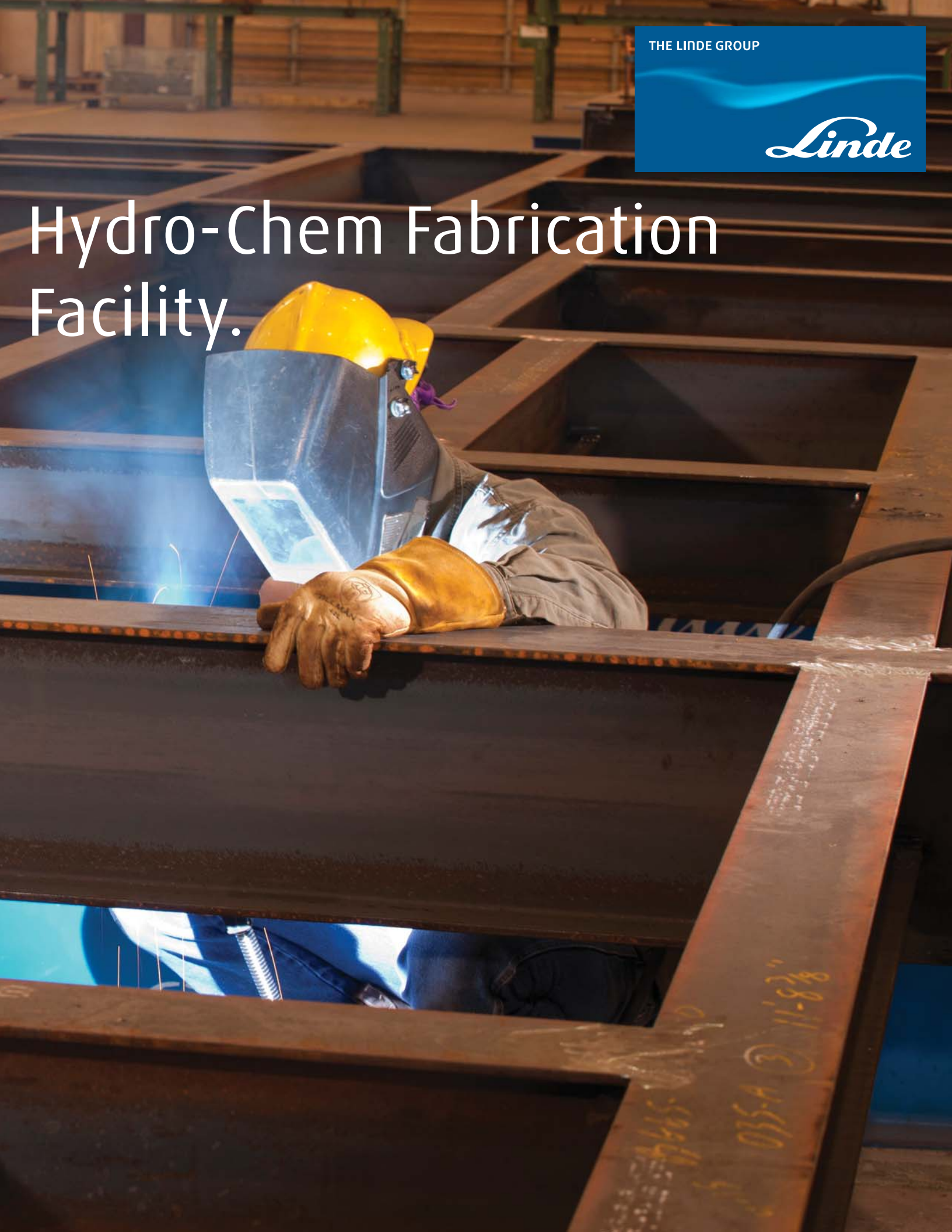


THE LINDE GROUP

Linde

Hydro-Chem Fabrication Facility.



An experienced, trusted source for fabrication and modularization.

Hydro-Chem has fabricated and modularized engineered products for over 40 years. We serve companies across a broad range of industries by meeting their high quality, safety and availability requirements.

Hydro-Chem's 76,000 sf (7,060 m²) fabrication facility located north of Atlanta in Holly Springs, GA was constructed to meet the highest quality standards dictated by modular designs. In addition to modular system fabrication and assembly, our capabilities include:

- Convection superheaters
- Boilers and pressure vessels
- Heat exchangers
- Piping
- Structural steel
- Machining
- Insulation
- Painting and coatings
- Instrumentation and electrical
- Testing

In our facility, you'll find highly qualified fitters and welders working alongside a dedicated quality control team. Our customer-centric focus ensures your project is delivered consistently on time and on budget.

"Understanding our customers' needs, offering a value-creating solution and executing are key capabilities at Linde Engineering."

Jürgen Nowicki
Managing Director
Member of the Board of Directors



Hydro-Chem's fabrication facility and offices in Holly Springs, GA.

Modularization.

It doesn't have to be complicated.

A growing number of refining and gas processing companies recognize the benefits of modular fabrication over traditional field fabricated process systems. Hydro-Chem designs and fabricates unique modules to optimize site layout and fit available space.

Benefits:

- Streamlined project execution
- Shorter, predictable schedules
- Fewer safety and operating risks than constructing in an operating plant
- Less down time associated with on-site construction

Single sourcing

Utilizing Hydro-Chem's unique capabilities, clients benefit from having all tasks - from conceptual design through commissioning - in one organization. This single-source responsibility provides unparalleled opportunities for quality control and customer satisfaction.

Components such as vessels, heat exchangers, boilers, furnaces and piping assemblies are manufactured into compact, low cost and easy to install modular units. These pre-assembled (equipment pre-piped and instrumentation pre-wired to junction boxes) units offer the most economical layout without sacrificing access for operation or maintenance.

Over
225
modular hydrogen and
synthesis gas plants
delivered.



Fully modularized HYDROPRIME® hydrogen generator.

Fabrication capabilities.

Detail fabrication

- 76,000 sf (7,400 m²) shop
- Vessels and piping according to ASME, PED, Chinese, Korean, Indian standards
- TEMA shell and tube exchangers
- Fire tube boilers
- Steam and mixed feed superheaters
- Reactors and secondary reformers
- Thick plate rolling, 2" x 10' wide plate
- In-house X-ray

Standard materials

Plate Material	A36	Carbon steel
	516 gr. 70	Carbon steel
	SA335 P11	Chrome moly
	A240 304/304H	Stainless steel
	AMS5536N	Hastelloy stainless
	S31803	Duplex stainless
Pipe Material	SA387 gr. 11	Chrome moly
	SA106 gr. B	Carbon steel
	TP304/304H	Stainless steel
	TP347/347H/316/316H	Stainless steel
	SB407/800HT	Incoloy



Pipe rack and 15-ton bridge crane.

Capacities.

Structural steel shop

- 8,442 sf (784 m²) shop
- Plate roll - 5/8" thick x 8' wide
- Three overhead cranes, 5 tons capacity
- Crane hook heights: 16'4" and 26'5"

Boiler and vessel shop

- 30,000 sf (2,787 m²) building
- Plate roll - 2" thick x 10' wide
- Three semi-automatic welding (SAW) machines
- Overhead cranes - one 30-ton, two 10-ton, three 5-ton
- Crane hook heights: 24'4"

Blast and paint shop

- Commercially available paint coatings (galvanizing off site)
- Climate controlled forced air ventilation and heating
- Simultaneous blast and paint capabilities

Piping and assembly shop

- 21,000 sf (1,951 m²) building
- Overhead cranes - two 15-ton bridge with dual 7.5-ton hoists, one 10-ton with dual 5-ton hoists
- Crane hook heights: 20'5", bridge clearance 24'

Below are Hydro-Chem's normal maximum capacities. Please check with us to confirm fabrication requirements exceeding these capacities.

Vessels:	13'6" diameter x 85' long 70,000 lbs. weight
Stress relieved vessels:	45' long 85,000 lbs. weight
Skid modules:	14' wide x 13'6" high x 50' long 100,000 lbs. weight
Plate bending:	1/2" thick x 12' wide
Drilling:	3" diameter hole 60" maximum plate diameter
Milling:	64" maximum plate diameter
Oven size:	19'wide x 16' high x 48' long

Limited by

Truck shipping
Hydro-Chem equipment

Oven size
Contract lifting capacity

Truck shipping
Truck shipping



Steam drum.

Qualifications.

At every step, we use tried-and-tested processes and procedures, state-of-the-art technology, clear lines of responsibility and accountability together with robust internal and third-party audits to ensure we meet the most demanding QHSE standards. Hydro-Chem is certified to the ISO 9001 standard.

Codes and certificates

License Name	Category	Scope
ASME Boiler and Pressure Vessel Code Certificates	U, U2, S and PP	Boiler and pressure vessels according to ASME VIII, Divisions I and II. Piping according to B31.1 and B31.3.
National Board Certificates	NB R	Boilers and pressure vessels according to ASME Divisions I and II. Repairs and alterations at the location and extended for the field controlled by this location.
AWS	D1.1	Steel and duct fabrication
Pressure Equipment Directive (PED)	PED 97 / 23 EC	Marking Permission Category II, Module AI
Chinese Manufacturing License	A2	Stationary Pressure Vessels
Korean License		Pressure Vessels and Heat Exchangers
India	IBR Code	Boilers, Heat Exchangers, Steam Drum and Steam Systems
Australia		Country Regulatory Review



Process skid ready for delivery.

Quality, health, safety and environment.

Our commitment to quality, health, safety, and the environment (QHSE) guides our day-to-day operations and serves as an important benchmark for continually improving our performance.

Accountability and visible leadership are key to QHSE, and QHSE experts provide guidance, advice, and technical support throughout the organization.

Our QHSE activities are split into the following main areas:

- Process plant and equipment design
- Manufacturing
- Construction sites

At Hydro-Chem, we take QHSE very seriously and strive to meet the following objectives:

- Zero incidents
- Safe, secure and healthy working conditions for everyone who works with and for us
- Safe, high quality and environmentally responsible products and services
- Responsible use of natural resources



Hydro-Chem modularized hydrogen plant, fabricated and modularized in our facility.

Collaborate. Innovate. Deliver.

Hydro-Chem has been the global leader in providing modular hydrogen plants since 1975. With more than 225 hydrogen plants in operation worldwide, Hydro-Chem has established key clients in the refining, food, steel, glass, electronics, hydrogen peroxide, and petrochemical industries.

We perform total quality control from the design and engineering stage through final testing and installation for each system. Hydro-Chem is committed to delivering the best possible product to meet your requirements and performance parameters.

Hydro-Chem's modular design minimizes the customer's need for construction time, management and resources. With in-house expertise and demonstrated modular fabrication techniques, Hydro-Chem delivers industrial gas plants, components and modules on time and at low cost.

Our attention to detail not only elevates the standard of our products, but also extends to the personal attention provided to the customer - every step of the way.

You can always rely on us to deliver the solutions and services that best fit your needs - anywhere in the world.

[Discover how we can contribute to your success at www.hydro-chem.com](http://www.hydro-chem.com)

Get in touch with our team:

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