World-scale demand? Linde can deliver.

Linde has the technical knowledge, operating capability and financial resources to design, construct and operate world-scale air separation units (ASUs) to meet the most demanding requirements.

We have built and are building several ASUs with oxygen capacity greater than 2,000 tpd (tons per day). Whether the application is gasification, enhanced oil recovery, oxyfuel, steel or chemicals, Linde has the know-how to get the project done on-time and on-budget.

Our global engineering staff has been recognized for expertise in process design, compression, cryogenic systems, and advanced process controls.

Linde’s depth of experience, world-class engineering and rigorous focus on safety and reliability enable us to meet and exceed our customers’ evolving requirements from plant design to operation.
Linde Large ASUs
Delivering a Competitive Edge 2 of 4

Optimized Design

→ Meets customers’ needs
→ Operations focused

Linde provides highly reliable plant designs meeting customer requirements, while maintaining capital discipline, energy efficiency, and plant constructability.

The use of repeatable and modular designs minimizes construction time in the field and facilitates cost-effective project completion. Linde uses a global network of suppliers and fabricators who understand and meet our quality standards.

Disciplined Execution

→ Collaborative organization
→ Experienced professionals

Linde adheres to a regimented project execution process. By choosing our team, you can be assured that the project will be completed to the high standards of quality and efficiency that your business requires.

The Linde Global Supply Systems (GSS) organization is comprised of 1,100 engineers and project managers who have successfully designed, constructed and commissioned air separation facilities around the world.

Operational Excellence

→ Proven reliability
→ High energy efficiency

We have 100+ years of experience operating commercial air separation units and today we operate over 400 cryogenic plants globally. Linde’s core strength is safe, efficient and reliable operation of its plants.

Customer Value

→ Low cost of ownership
→ Flexible business models

Our business is to build and operate high quality air separation units and we have thousands of employees dedicated to doing just that.

Your industrial gas supplier should be able to provide more than just cost-effective products. At Linde we explore ways to create additional customer value by combining our knowledge of air separation with customer operational needs. Our goal is to meet and exceed your expectations.

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Our pipeline complex in Northwest Indiana is a great example of the scope of operations Linde is capable of designing and operating; the complex can supply 12,000 tpd of oxygen and is the largest industrial gas complex in North America.
Designing Plants for the Future

Linde’s depth of experience has enabled the company to respond swiftly to ever-growing demand for industrial gases in key industries and applications. In addition, Linde systems use advanced technologies meant to provide customers with greater system flexibility and enhanced performance.

Select Linde ASUs

<table>
<thead>
<tr>
<th>Customer Location</th>
<th>Size (tpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSN, Brazil</td>
<td>2,100</td>
</tr>
<tr>
<td>Praxair, IN, USA</td>
<td>2,500</td>
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<tr>
<td>JSW, India</td>
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<td>3,300</td>
</tr>
<tr>
<td>Huayl, China</td>
<td>3,300</td>
</tr>
</tbody>
</table>

Advanced Technology Development

→ Cryogenic distillation designs
→ Advanced thermal integration
→ CO₂ capture, purification, and compression
→ In-house turbo machinery manufacturing

Industries / Applications

→ Gasification → Metals
→ Refining → Oxyfuel
→ Chemical → Enhanced Oil Recovery

Drive Technologies

→ Electricity → Electricity
→ Steam → Steam
Gasification – Steam drive

PEMEX, Mexico: Enhanced oil recovery – Natural gas drive