Fine Chemicals
Manufactured in Oregon
Company History

- Established in 1985
- Founded by Dr. Allen Erickson, current President & CEO
- Several key products started the company
- Growth and expansion every year since inception
- Privately owned with solid financial resources (i.e., self-sufficient for Capital needs)
Site and Facilities

4.5 Acre (1.8 Hectares) Site

3 Manufacturing Buildings
   12600 ft² (1170 m²)

Office and Laboratory Facilities
   4000 ft² (370 m²) Laboratory Area

3 Warehouses 19000 ft² (1760 m²)
   Raw Materials
   In-Process
   Finished Product
Production Manufacturing Capabilities

- 8 Production Lines of 1000 and 2000 gallon reactors (4000 and 8000 L)
- >32,000 gallons (120,000 L) GL, Hastelloy & SS reactors
- Hydrogenation: 500 gallons up to 300 psi
- Hastelloy C and Tantalum Overheads
- Hastelloy C Centrifuges
- Variety of dryers
- Heating and cooling from -40 to >200°C
- High capacity vacuum to <1 Torr
## Distillation Capabilities

<table>
<thead>
<tr>
<th>Continuous Fractional Distillation</th>
<th>Thin Film Distillation</th>
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<td>Engineered Packing</td>
<td>Thermally sensitive materials</td>
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<td>26 Theoretical Plates</td>
<td>Short contact times</td>
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<tr>
<td>High resolution</td>
<td>High vacuum, &lt;1 Torr</td>
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<tr>
<td>High efficiency</td>
<td>High capacity, 8 kg per Minute</td>
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<tr>
<td>High capacity</td>
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</tbody>
</table>

![Distillation Diagram](image)
Quality Systems

Lacamas maintains effective quality systems that:
- Meet customer requirements
- Comply with applicable current Good Manufacturing Practices (cGMP)
- Focus on continuous improvement

Quality Unit
- Quality Assurance
  - OOS/Deviation Reporting
  - CAPA Program/Internal Audits
  - Supplier Qualification
  - Change Control Program
  - Validation Program

Quality Control
- Raw Material, Intermediate and Final Product Testing
- Analytical Methods Development
- Full Analytical Capabilities including NMR
Technical Expertise

- **R&D and Process Development**
  - Laboratory process optimization (up to 5 Liters)
  - Pilot front-run (400 Liters)
  - Commercial production (up to 8,000 Liters)

- **Chemical engineers and process chemists on staff**
  work together to scale up new processes
Synthetic Strengths

- $N,N$-Dimethylacetamide
- Dimethyl acetal
- Alkylations
- Halogenation
- Formylations
- Substituted Thiazoles $X = Cl, Br$
- Chloroformates
- Bromo Compounds
- Grignard Reagents
- Phosphorous Compounds
- $N$-Methyl-3-pyrrolidinol
- Sodium
- Potassium
- Sodium-thioacetate
- Calcium
- Sodium-borohydride
- Hydrogen
- Sodium-thiocyanate
Diboc and Custom BOC Derivatives

- Dicarbonates
- BOC-Amines
- Di-t-butyl dicarbonate (DIBOC)
- Bis-BOC-Amine
- BOC-Amino acids
Visit us Online and in Portland

For any questions or inquiries please contact:

Jim Tung, Marketing

j.tung@LacamasLabs.com Office: (503) 285-0360 Mobile: (971) 808-8105

Upcoming Events: