



LCI TESTING SERVICES

Pelleting

LCI's testing program allows clients to evaluate the Pellet Mill technology in meeting their agglomeration objectives. LCI's fully equipped and staffed Test Center is located in Charlotte, NC, where we offer the following test services:

➤ **Preliminary Evaluation Study (PES):**

The objective of a PES is to determine general application feasibility using LCI's Pellet Mill technology. A PES is performed on LCI's laboratory scale equipment, which has the same forming techniques as production scale equipment. In most cases, product samples generated at the PES level closely resemble those generated on large-scale equipment in performance and appearance. PES product samples are not necessarily optimized. No scale-up data is collected at this stage.



LCI's Laboratory Pellet Press Model 14-175

Pilot Plant Test (PPT):

The objective of a PPT is to confirm the results from the PES on pilot scale equipment, generate a larger quantity of product, and obtain scale-up data.



LCI's Pilot Plant



Preliminary Evaluation Study (PES)

Description

Based on LCI's experience, a die is selected and installed in the Pellet Press. Feed material is manually metered into the Laboratory Pellet Mill Model 14-175. The material is pelleted and various parameters are observed and recorded. During a PES, various die plates may be tested to evaluate the most appropriate die for the given application. A small sample of pellets is collected.

In some cases, the material may require conditioning before pelleting by adding additives or wetting agents.

Upon test completion, test samples, unused material, and any waste generated during the test, will be returned to the client. A brief report will be sent within two weeks outlining testing parameters, observations, and recommendations.

Requirements

- Completed Product Questionnaire
- 20 lbs. of feed material. In some cases, additives or wetting agents (besides water) could be required.
- Material safety data sheets for all ingredients shipped to LCI

Ship to:

LCI Corporation
Attn: Bryan Allen
4404-C Chesapeake Drive
Charlotte, NC 28216

Test Charges

PES (Unattended by client): \$1,000

PES (Attended by client): \$1,500 and is limited to 8 hours

To schedule a test, please fax a PO to 704-392-8507. A test is not confirmed unless a PO in the correct amount is received.



Pilot Plant Test (PPT)

Description

A PPT can confirm the results from the PES and demonstrates process feasibility using the pellet press model 33-390. Additional testing may be required to optimize process parameters. We invite our clients to attend this stage of testing. A PPT can be completed in 1 day, however, can last up to 3 days, depending on product quantities and client objectives.

A PPT generally involves the following steps:

1. Feeding: The feed material is manually metered into the pellet press. In some cases, a solids feeder is used to meter the material into the pellet press.
2. Pelleting: Based on results from the PES phase, a die is selected and installed in the Pellet Press. The material is pelleted and various parameters are observed and recorded. The pellet press is allowed to reach steady state to measure production rate.

Note: In some cases, the feed material may require conditioning before pelleting by adding additives or wetting agents. A small batch mixer (12 liters) is used to condition the feed material for pelleting. Due to the size of the mixer, only a limited quantity of material can be conditioned.

Upon test completion, test samples, unused material, and any waste generated during the test, will be returned to the client. A detailed report will be sent within two weeks outlining testing parameters, observations, and recommendations.

Requirements

- 200-400 lbs. of feed material (depending on bulk density). In some cases, additives or wetting agents (besides water) could be required.
- Material safety data sheets for all ingredients shipped to LCI

Ship to:

LCI Corporation
Attn: Bryan Allen
4404-C Chesapeake Drive
Charlotte, NC 28216

Test Charges

PPT (Attended by client): \$3,000/day and is limited to 8 hours

Test charges do not include freight charges for shipping materials and samples to and from LCI's test facility.

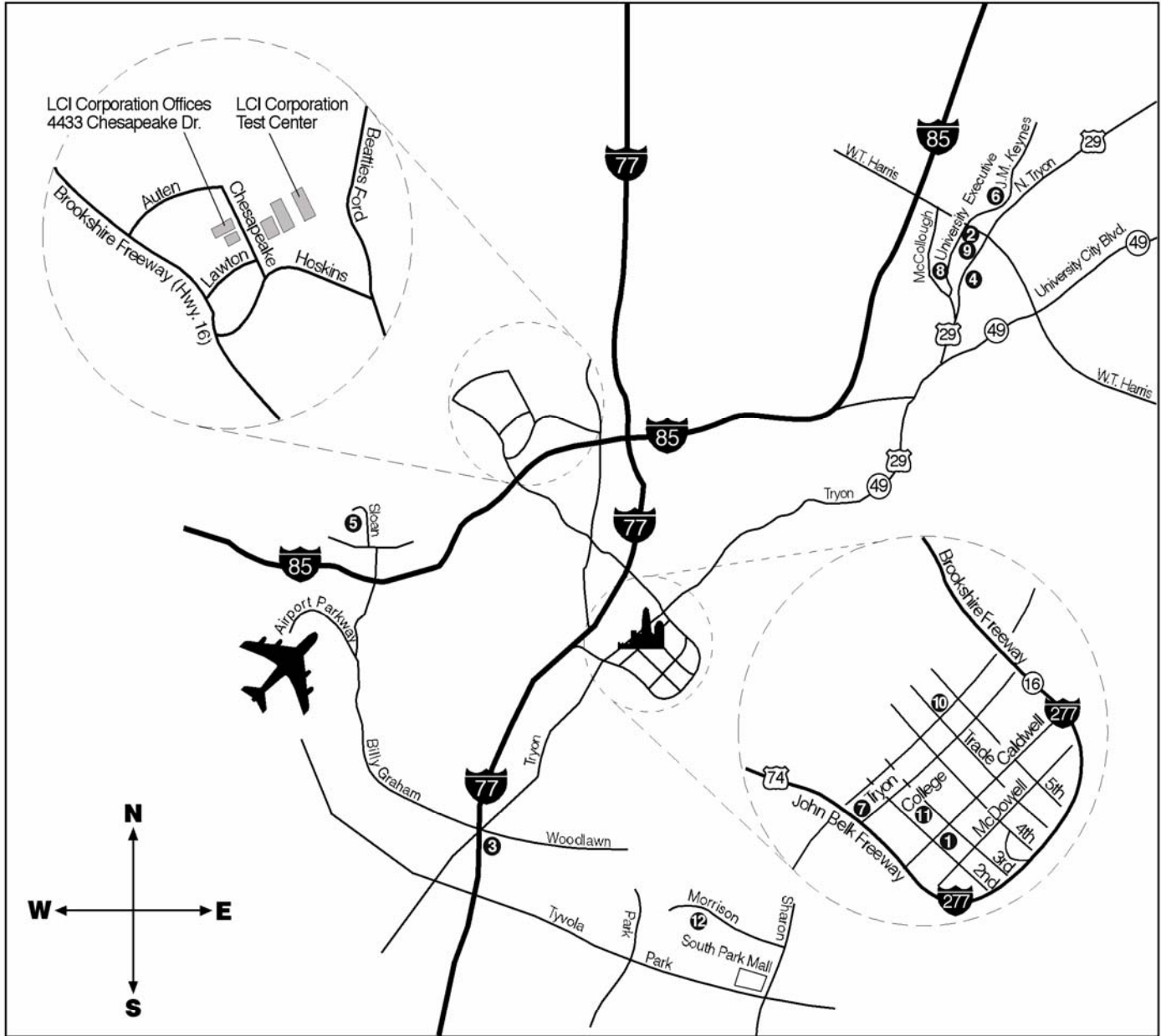
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4433 Chesapeake Drive • Charlotte, NC 28297
 704 394 8341 • Fax 704 392 8507
 www.lcicorp.com

Directions from airport to LCI Corporation Offices:

Follow airport parkway to Billy Graham Parkway (85 north). Take Billy Graham to 85 north. Head north on 85 to Brookshire Freeway (Hwy. 16) exit. Turn left at the top of the exit ramp and continue to first stop light at Hoskins Road. Take a right at the Burger King and continue about 1 mile. Take a left onto Chesapeake. After the second set of railroad tracks, LCI Corporation will be on your immediate left. Enter the 2-story building with blue windows and call from the lobby.



Listed below are some of the more popular hotels and motels in Charlotte located no more than twenty minutes from LCI Corporation.

	<u>Miles</u>	<u>Rating</u>		<u>Miles</u>	<u>Rating</u>		<u>Miles</u>	<u>Rating</u>
1 Hilton Garden Inn 508 E 2nd Street 704 347 5972	4.4	★★★★	5 La Quinta Inn 3127 Sloan Drive 704 392 1600	3.6	★★★	9 Homewood Suites 8340 North Tryon Street 704 549 8800	7.1	★★★★
2 Courtyard by Marriott 333 W.T. Harris Blvd. 704 549 4888	7.2	★★★★	6 Hilton-University Place 8629 J.M. Keynes Drive 704 547 7444	7.3	★★★★	10 Marriott City Center 100 W. Trade Street 704-333-9000	4.0	★★★★
3 Embassy Suites Hotels 4800 South Tryon Street 704 527 8400	6.9	★★★★	7 Holiday Inn-Center City 230 North College Street 704 335 5400	4.1	★★★★	11 The Westin Charlotte 601 S. College Street 704 375 2600	4.2	★★★★
4 Hampton Inn 8419 North Tryon Street 704 548 0905	7.1	★★★	8 Holiday Inn-Executive Park 8520 University Executive Park Drive 704 547 0999	7.1	★★★	12 Doubletree Guest Suites 6300 Morrison Blvd. 704 364 2400	8.8	★★★