
Technology Fact Sheet



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BCPL Utilizing Novolen Polypropylene Technology

- Owner :** Brahmaputra Cracker and Polymer Limited (BCPL)
- Location:** Lepetkata, Assam, India
- Process:** Polypropylene
- Capacity:** 60,000 metric tons per annum
- Production:** Homopolymers and random copolymers for standard and advanced applications, including the production of film and fiber grades
- Technology:** Novolen[®] advanced gas-phase polypropylene technology
- Description:** The Novolen polypropylene process utilizes one or two vertical, stirred bed, gas-phase reactors. Homopolymers and random copolymers can be manufactured either in a single reactor, with two reactors in parallel, or in a reactor cascade. Depending on the required product range, capacities up to 600 KTA in one single line are possible. For the production of impact copolymers, two reactors are required to be operated in cascade or in a switchable mode. With the Novolen technology, licensees are capable of producing the complete product range which is required in the market including specialties such as bimodal products, random block copolymers, etc.
- CB&I Advantage:** With this second award in India, Novolen continues to serve the polypropylene market successfully. We are providing BCPL an economically advantageous technology which will enable BCPL to produce state-of-the-art products to serve its local and export markets.

Benefits:

FEATURES	BENEFITS
Produces full range of homopolymers, random and impact copolymers in only two reactors with a selection of catalysts, including metallocene	Covers broad range of products for all markets/applications, including ultra-high (up to 50%) rubber-content impact copolymers and terpolymers
Exceptional lot-to-lot and within-lot uniformity	Necessary for film and fiber applications, which need consistent and tight specifications
Exclusive pellet degassing	Products with the lowest volatile content in the marketplace. Very low taste and odor level for highly demanding applications (e.g. food packaging)
Simple, gas-phase, solvent-free process	Among the lowest operating and maintenance in the industry
Small reactor volume minimizes reactor residence time	Rapid grade changes generate minimal "off-specification" product. Reduced inventory results in inherently safer process. Minimizes capital investment.

About BCPL

Brahmaputra Cracker and Polymer Limited (BCPL) is a joint venture company of GAIL India Ltd., OIL India Ltd., Numaligarh Refinery Ltd. and the Government of Assam.

About Lummus Novolen Technology

Lummus Novolen Technology is a leader in polypropylene technology, with 40 years of experience and more than 7 million metric tons of worldwide licensed capacity.

About CB&I

[CB&I](#) combines proven process technology from its Lummus Technology business, with global capabilities in engineering, procurement and construction to deliver comprehensive solutions to customers in the energy and natural resource industries. With more than [70 proprietary licensed technologies](#) and 1,500 patents and patent applications, CB&I is uniquely positioned to take projects from conceptual design, through technology licensing, engineering and construction and final commissioning. Drawing upon the global expertise and local knowledge of approximately 18,000 employees in more than 80 locations, CB&I safely and reliably executes projects worldwide. For more information visit www.CBI.com or access technical details at [Lummus Technology Fact Sheets](#). If you would like to be added to CB&I's news release email distribution list, visit www.cbi.com/ir/email_alerts.htm

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