

InnoTech Alberta is a research and innovation organization, with a range of technologies available for licensing. Our focus is on the growth and development of technology-based sectors and the commercialization of technology in Alberta. We provide business and technical services, and initiatives that encourage a strong science, technology and entrepreneurial culture in Alberta.

LICENSING OPPORTUNITY

Short Fibre Decortication Process

LEVERAGE OUR TECHNOLOGY

InnoTech Alberta has a variety of technologies available for licensing. We will work with companies, from small to large, to set up mutually beneficial licensing deals. With more than 90 years in applied research and development, we are an experienced commercialization partner. InnoTech's licensing opportunities are the result of our world-renowned research programs. Contact us to explore these opportunities.

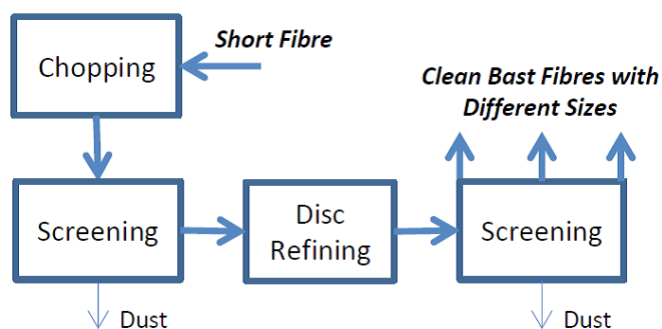
TECHNOLOGY OVERVIEW

A process of decortication for separating the bast from the inner core of fibre plants using a disc refiner includes the steps of (a) cutting the straw to a predetermined length; (b) refining the straw by passing the cut straw of the predetermined length through a disc refiner with an applied energy less than about

150 kWh/t; and (c) screening the refined straw to separate the bast fibres from the inner core.

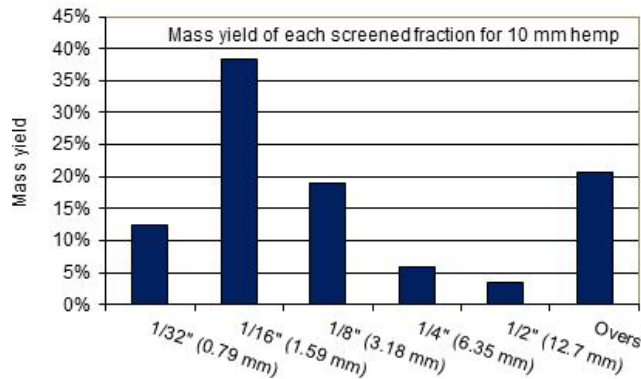
ADVANTAGES

- » Produces shorter fibres: Most current decortication processes are focused on producing long strand lengths of bast fibres (50-150 mm). However, the non-textile industries such as the cellulose based industry and composite moulding industries do not require long strand lengths and in fact, often have to cut the bast fibres into shorter lengths prior to use.
- » Energy efficient: Compared to conventional disc refiner operation, much lower refining energies are required for the InnoTech process.
- » Multiple applications for final products: Clean bast fibres can be used for the cellulose and composite markets. Clean core fibres can be used in the food, chemical, board, absorbent, or polymer markets. The dust may be used for the energy or composite markets (wood flour equivalent).



Process flow diagram for short fibre decortication

Short Fibre Decortication Process



Yield from short fibre decortication process

STATUS

Issued patents in various jurisdictions, including US patent:

» US 7669292

This technology is available for licensing.

WANT TO EXPLORE THIS OPPORTUNITY?

Licensing@albertainnovates.ca

COMMERCIAL APPLICATIONS

- » Non-woven mats and carpets manufacture
- » Composite materials production
- » Manufacture of automobile interior panels
- » Pulp and paper production

Our province is blessed with abundant natural resources, world-class infrastructure and research institutions, a highly skilled workforce, and a dynamic, entrepreneurial business community. Alberta Innovates harnesses these strengths by acting as the catalyst between government, industry and academia, to solve some of the biggest challenges facing our province.

TECHNICAL SERVICES

Helping organizations develop their technologies faster and smarter through a subsidiary, InnoTech Alberta.

- » 100,000 m2 of product/process development and scale-up facilities in the areas of petroleum, environment and carbon management, bio and industrial technologies
- » 300 hectare research farm, three greenhouses, and 36 growth chambers

FUNDING PROGRAMS

- » Fostering an entrepreneurial culture and increasing Alberta's critical mass of innovation talent
- » Post-secondary investment programs offer a broad range of support to researchers at all stages of their careers, from graduate students to the world's top researchers

- » Industry investment programs offer support to Alberta-based SMEs in a variety of ways to help accelerate their growth and success

REGIONALLY ACCESSIBLE COMMERCIALIZATION SUPPORT

- » Making connections and pointing businesses and entrepreneurs in the right direction
- » Alberta Regional Innovation Network System - an integrated province-wide system ensuring SMEs and innovators have access to vital services and resources to help them succeed

LICENSING SERVICES

- » Managing the translation of Alberta Innovates intellectual property into business solutions
- » Facilitating licensing deals with industry anywhere in the world