

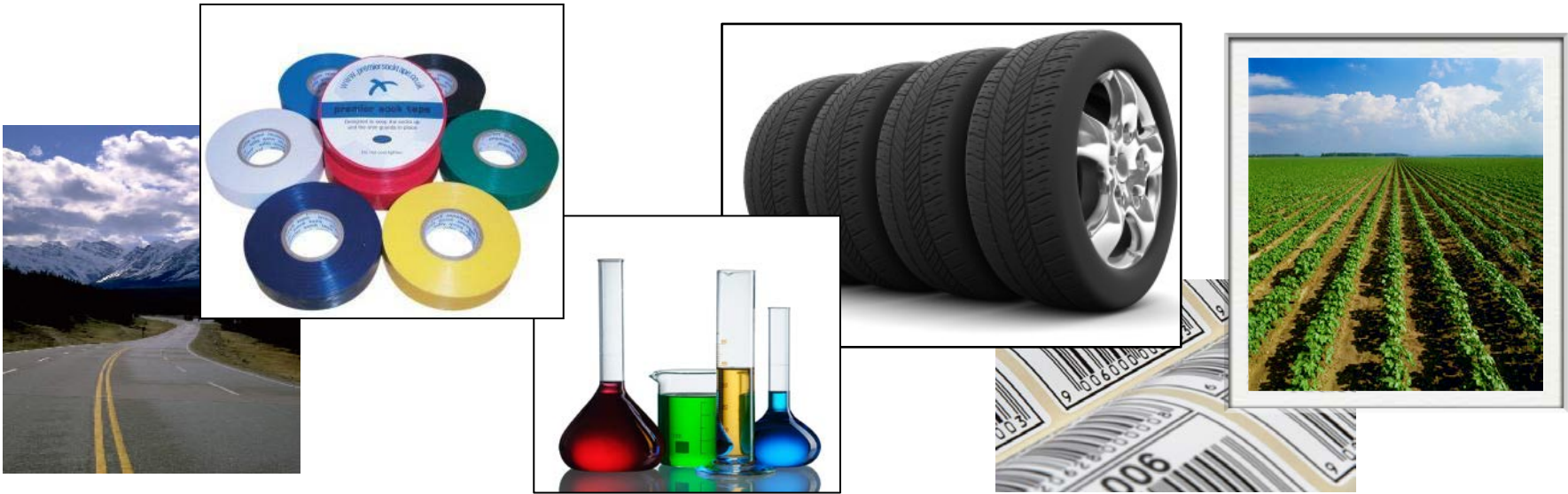
Pinova Performance Specialties

Business, Market and Product Overview

Pinova Performance Specialties :

At a Glance

- A division of Pinova Holdings, a portfolio company of TorQuest Partners
- Established in 1911 in Brunswick, GA - the Birthplace of Rosin Chemistry
- Provide premium technology solutions for high performance applications
- Aligned with the global leaders in the Adhesives, Construction, Tire and Rubber, Agriculture and Industrial markets



Pinova Performance Specialties :

A Century of Innovation Drives our Future Growth



- For over a century, Pinova has provided premium performance resins made from renewable, sustainable raw materials to meet the exacting standards of customers worldwide.
- Pinova manufactures state-of-the-art specialty resins for many of the world's essential industries and well-known brands.
- Pinova is dedicated to innovation, sustainability, enduring quality and customer service.

Pinova Performance Specialties : Key Moments in Our History

1911 Using a patented process for pine rosin extraction, Homer Yaryan builds the Brunswick, GA plant. This is the birth of The Yaryan Naval Stores Company.

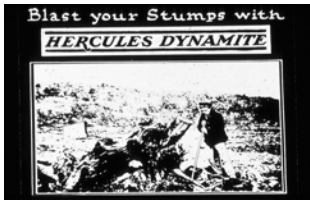


1938 Vinsol® resin production begins and becomes the industry standard for the concrete air entrainment and asphalt emulsion markets.



1920 Hercules acquires the Yaryan Naval Stores business

1910	1920	1930	1940	1950
-------------	-------------	-------------	-------------	-------------



1913 Hercules is formed as a dynamite producer

1928

The Brunswick plant implements a new patented process for refining wood rosin called Pexite®, which becomes the building block for all future wood rosin derivatives development.

1942 Rosin esters receive initial regulatory approvals for use as food additives.



Pinova Performance Specialties :

Key Moments in Our History



1968 Hydrogenation technology becomes a core competency with the production of Staybelite® and Foral® AX hydrogenated rosins. Both products are rapidly formulated into pressure sensitive adhesives.

1982 Piccolyte® polyterpene resins are manufactured and gain broad regulatory clearances for use as ingredients in food contact applications and as agricultural adjuvants



1960	1970	1980	1990	2000
-------------	-------------	-------------	-------------	-------------

1969 Pinova® Ester Gum 8BG is authorized by the US FDA as a weighting agent in oil and water based beverages. Ester Gum 8BG becomes the preferred weighting and clouding agent for the beverage industry.



2002 The stump milling process is automated to improve yield and efficiency. Less water and energy are used to grind pine stumps.

Pinova Performance Specialties :

Present Day – Investing for Growth

- TorQuest Partners acquired the Brunswick plant in 2010, and Pinova was formed
- Invested across the business to position for success :
 - Increased capacity in wood processing and grinding
 - Consolidated process control rooms
 - Improved systems infrastructure
 - Increased resources focused on innovation and growth



Pinova Performance Specialties :

Products for Demanding Performance Applications

■ Adhesives :

- Pressure Sensitive Adhesives
- Hot Melts Adhesives
- Tapes and Labels
- Non-wovens



■ Agricultural :

- Adjuvants



■ Industrial :

- Foundry Resins
- Polymer Modification



Pinova Performance Specialties :

Products for Demanding Performance Applications

■ Construction :

- Asphalt
- Concrete
- Road markings
- Stucco



■ Inks

■ Paints and Coatings

■ Tire and Rubber



Pinova Brunswick Plant :

Two Primary Product Streams based on Natural Resources

- Pinova has two primary production streams, both of which utilize natural and renewable resources as feedstocks
- Rosin Resins based on wood rosin from pine stump wood and gum rosin from live pine trees
- Polyterpene Resins based on limonene and crude sulfate turpentine (CST)

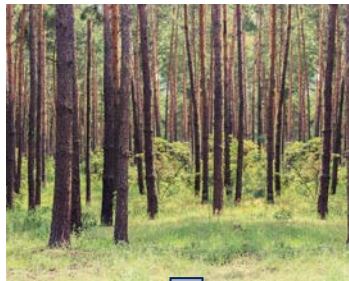
Rosin Products

Pine Stumps



Wood Rosin

Pine Trees



Gum Rosin

Terpene Products

Kraft Pulp



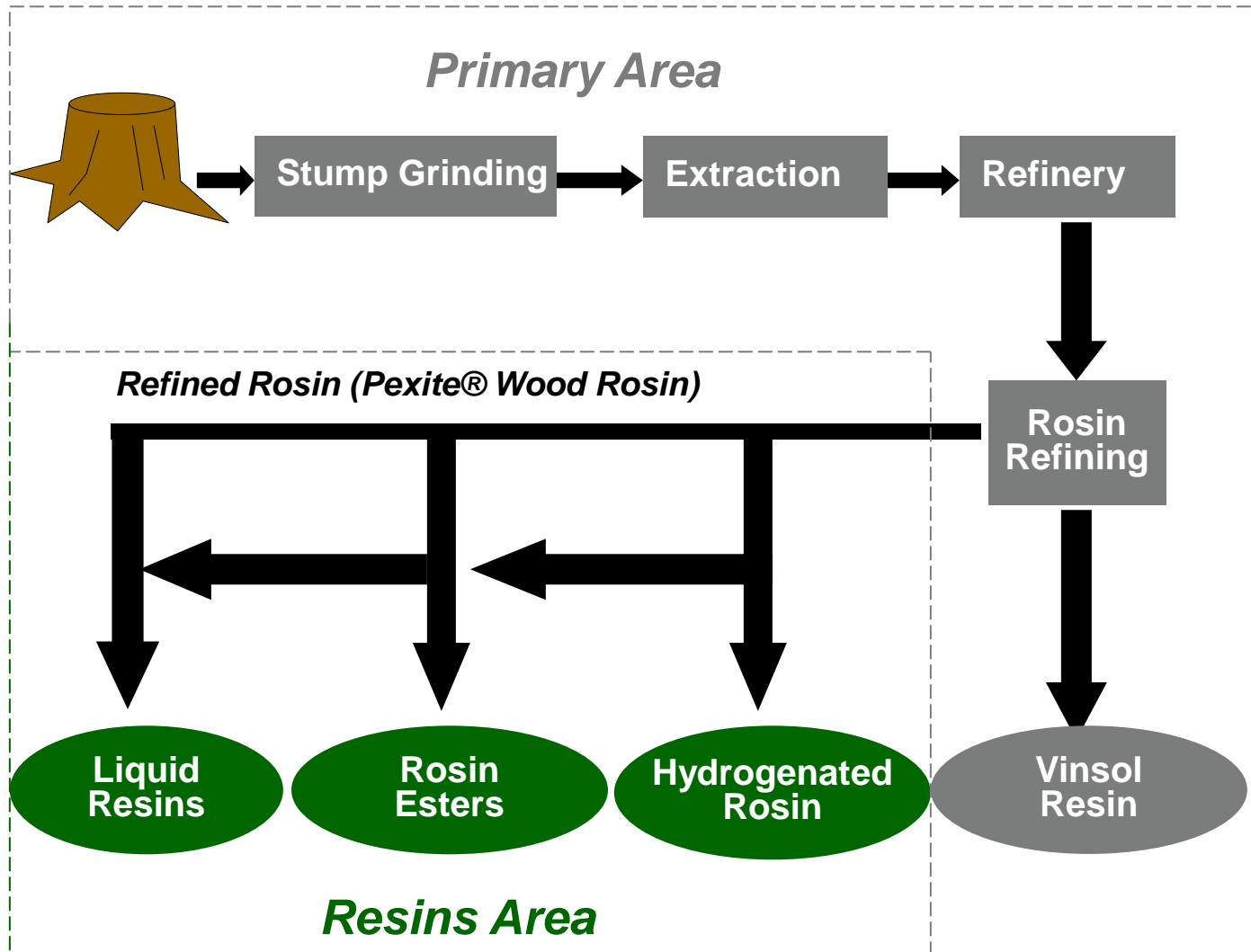
CST

Citrus Processing



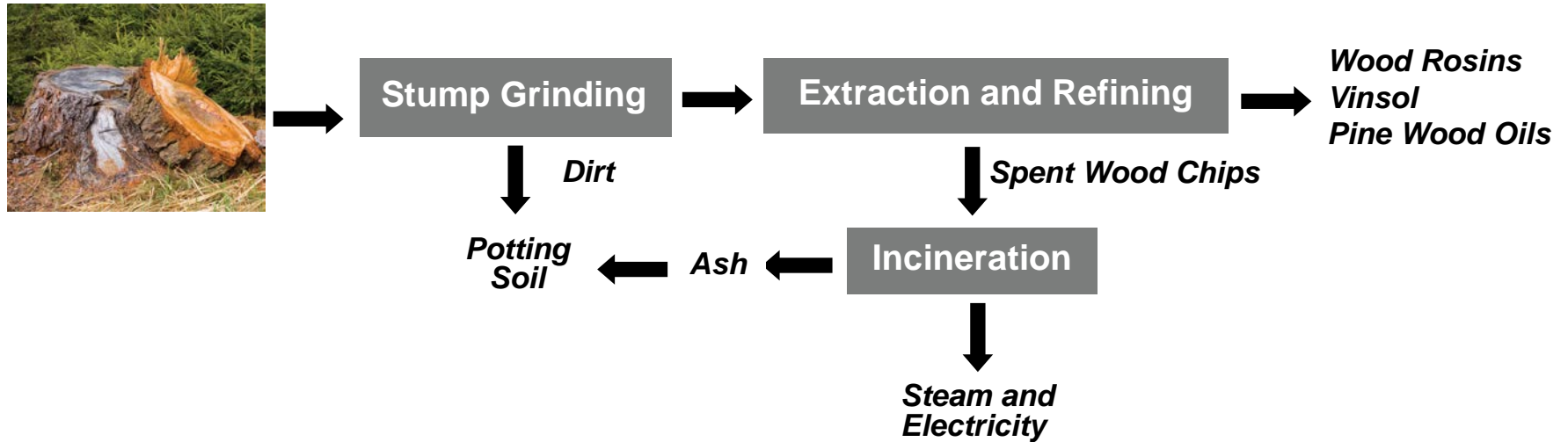
d-Limonene

Pinova Brunswick Plant : Rosin Production Process and Product Flows



Pinova Brunswick Plant :

Utilizing our By-Products to Maximize Efficiency



We maximize efficiency by using all of the by-products from stump processing :

- To fuel our facility : Spent wood chips are burned to generate 100% of the steam and 25% of the electricity required to operate the Brunswick plant.
- To beautify and benefit our community : Dirt removed from the incoming pine stumps is combined with the ash from the incinerator to create potting soil provided to a local business in support of our community.

Pinova Brunswick Plant :

By-Products are Upgraded to Provide Terpene Feedstocks

- Feedstocks for Polyterpene Resin production are derived from by-products that are generated from other industries :
 - Crude Sulfate Turpentine (CST) generated from the kraft paper pulping process
 - Citrus peels from juice production
- Polyterpene Resins are based upon alpha / beta pinene monomers produced from CST and d-limonene monomers produced from citrus peels
- Renessenz, our sister company, has the world's largest CST fractionation capacity

Terpene Products

Kraft Pulping



**Crude Sulfate Turpentine
(alpha and beta pinene)**

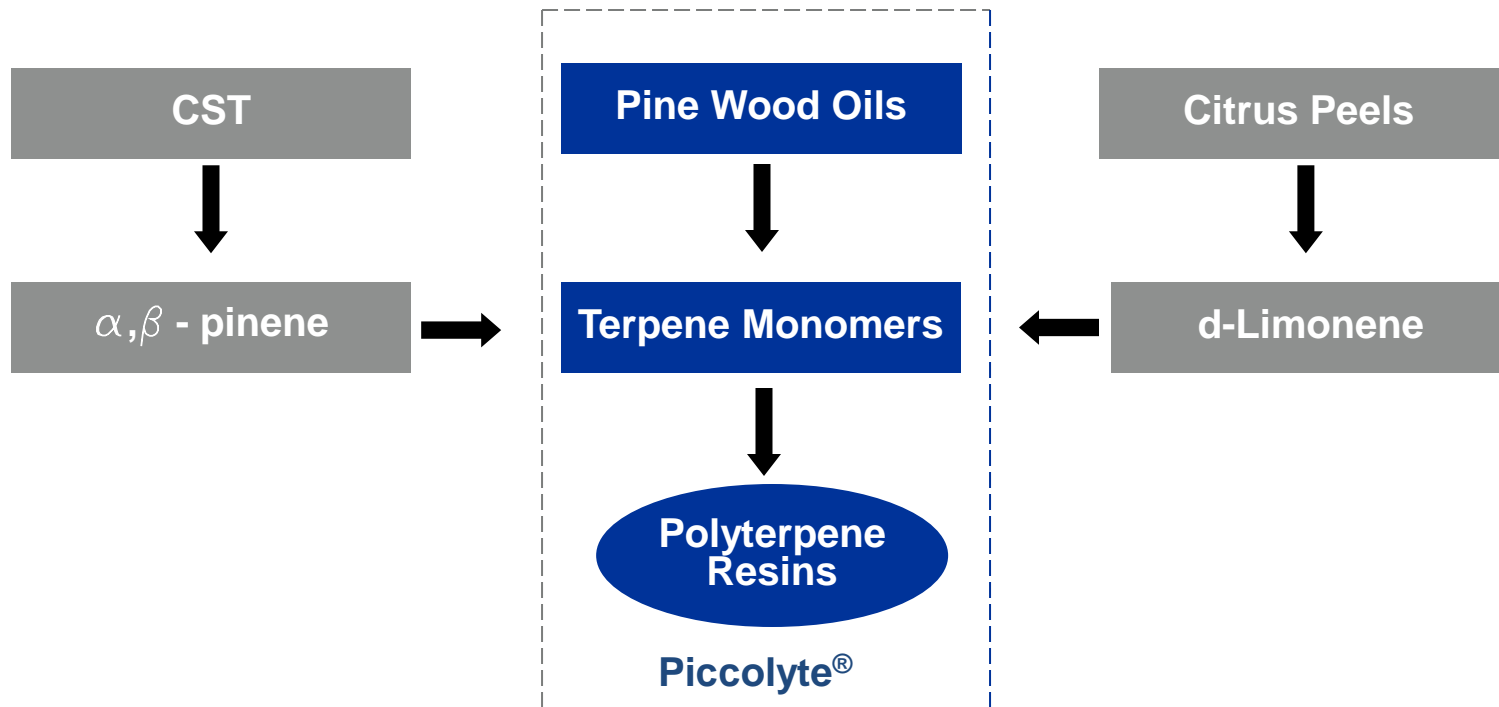
Citrus Processing



d-Limonene

Pinova Brunswick Plant :

Polyterpene Production Process and Product Flows



Piccolyte® Polyterpene resins are produced by :

- The cationic polymerization of high purity resin grade monomers
- A food grade process which is unique to Pinova
- A proprietary technology that enables the customization of product properties

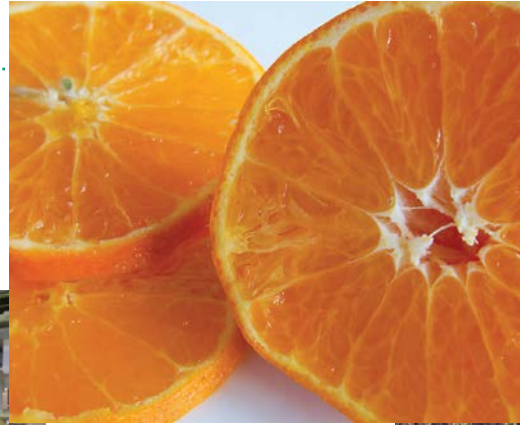
Pinova Brunswick Plant : Process Quality Certifications

Demonstrated commitment to quality processes and systems :

- ISO 9001
- Responsible Care 14001
- Global Food Safety Initiative and SQF 2000



*ISO 9001 is a registered trademark of International Organization for Standardization.
Responsible Care is a registered trademark of the American Chemistry Council.
SQF is a registered trademark of Safe Quality Foods.*



Global Leadership in Specialty Ingredients and Performance Chemicals from Natural and Renewable Materials

Thank You

Unless otherwise restricted by applicable law, nothing contained in this presentation shall be deemed a representation or warranty of any kind, either expressed or implied. The recommendations and suggestions given in this presentation are presented for your own investigation and verification. Products discussed are sold only on the basis of conforming to specifications, but without warranty, expressed or implied, in the law or in fact, of merchantability or fitness for a particular purpose and upon the condition that purchasers make their own tests to determine the suitability of such products for their particular purposes. Statements concerning the possible use of our products or processes described are not intended as recommendations or permission to use the same in the infringement of any patent, or to practice a patented invention without a license. By reason of lack of knowledge as to specific end uses of this product, no representation or warranty is made as to the conformance of the product with food contact laws or regulations. See the Material Safety Data Sheets (MSDS) for all products for safety information prior to use.