

*Proudly*  
**Making Life  
a Little Sweeter.**



American Crystal  
Sugar Company

# We are *American Crystal* Sugar Company.

This is a rare example of when our name *doesn't* say it all.

Because we're more than a company. We're a cooperative. It started in 1973 when a group of Red River Valley growers decided this business, industry, and way of life were too important for growers not to have a voice.

Today we're a world-class, grower-owned force in the agricultural economy. Our 2600 shareholders and 1800 employees, not only produce the world's best sugar, sugar-related products, and byproducts, we sustain families, communities, and a close-knit, rural lifestyle that we hold dear.



# *Our story* so far.

- 1890** | Henry Oxnard, a wealthy cane refiner from Brooklyn, New York, founds Oxnard Beet Sugar Company in Grand Island, Nebraska.
- 1899** | The company changes its name to American Beet Sugar Company.
- 1926** | The company opens its first Red River Valley factory in East Grand Forks, Minnesota.
- 1934** | The organization updates its name to American Crystal Sugar Company.
- 1972** | Red River Valley sugarbeet growers first propose buying the privately held American Crystal for \$86 million.
- 1973** | 1300 sugarbeet farmers successfully transform American Crystal as America's largest grower-owned beet sugar cooperative.
- 2023** | American Crystal Sugar celebrates its 50th year as a cooperative.



# We are the *Tastemakers.*

There are no substitutes for pure sugar. Its distinctive taste and texture is the benchmark for all things sweet – and it’s exactly what our customers rely on. From time-honored recipes to trusted consumer brands, our sugar makes a flavorful impact.

## CRYSTAL-CLEAR QUALITY

With a history going back to 1890, American Crystal Sugar Company has earned its place in the production lines of commercial bakers and food manufacturers as well as retail shelves and home pantries. From raw material purchasing through manufacturing, packaging, warehousing, and delivery, we uphold the highest quality and food safety standards, ensuring sugar products that are as close to perfection as you can find.





## **PRODUCING PROSPERITY**

Research by North Dakota State University shows the region's beet sugar industry supports nearly 20,000 jobs and contributes more than \$6 billion to the region's economy.

## **GROWING STRONGER CAREERS**

Ongoing training helps advance the abilities of our employees and provides growth opportunities for personnel. The actions of our talented workforce clearly demonstrate that safety and an accident-free workplace are our first priorities.

## **SUSTAINING A SWEET WAY OF LIFE**

For American Crystal, being an agricultural and food manufacturing leader means actively participating in the communities where we live and work. It means being a responsible agribusiness, a good steward of the environment, and an organization dedicated to the safety of its people and its products. Our community spirit and strong values set us apart.

# Deep Roots

## in the Red River Valley.

Nestled in eastern North Dakota and northwestern Minnesota, the Red River Valley is home to nearly half of the nation's sugarbeet-growing acres. Our grower-shareholders produce about 400,000 acres of sugarbeets each year.

As the largest beet sugar manufacturer in the United States, we operate sugar factories in Crookston, East Grand Forks, and Moorhead, Minnesota; Drayton and Hillsboro, North Dakota. Our corporate headquarters and technical services center are also located in Moorhead.



Drayton

NORTH DAKOTA

Hillsboro

East Grand Forks

Crookston

Moorhead

Corporate Headquarters  
& Tech Services

MINNESOTA

SOUTH DAKOTA

## SOLID PARTNERSHIP. SWEET SUCCESS.

We're a member of United Sugar Producers and Refiners, which markets our sugar products, and Midwest Agri-Commodities, the marketer of our agricultural byproducts. As a grower-owned cooperative working with other grower-owned cooperatives, we safeguard a strong supply chain of quality ingredients – and we're steadily growing capacity to exceed the changing needs of our customers. When it's all said and done, we're here to help customers reliably produce and sell their own tasty products.



### United Sugar Producers and Refiners

- United Sugar Producers and Refiners markets nearly one-third of the sugar manufactured in the U.S.
- United Sugar Producers and Refiners has an extensive, nationwide distribution system for timely, in-specification sugar deliveries to leading food manufacturers and major retailers.

### Midwest Agri-Commodities

- Midwest Agri-Commodities is a leading marketer of sugarbeet byproducts around the globe.
- From beet pulp pellets and beet pulp shreds to beet molasses and betaine, Midwest Agri-Commodities annually distributes about 1.5 million tons of livestock, poultry, and pet feed products to customers around the world.





# Nothing beats *Our Beets.*

## **What is a sugarbeet anyway?**

Sugarbeets are – without a doubt – the world’s most popular root vegetable. They have a high concentration of sucrose, making them especially suitable for sugar production. This unique row crop has broad green leaves above the ground where sugar is made and cone-shaped roots below the ground where sugar is stored.



## Sugarbeet Agriculture

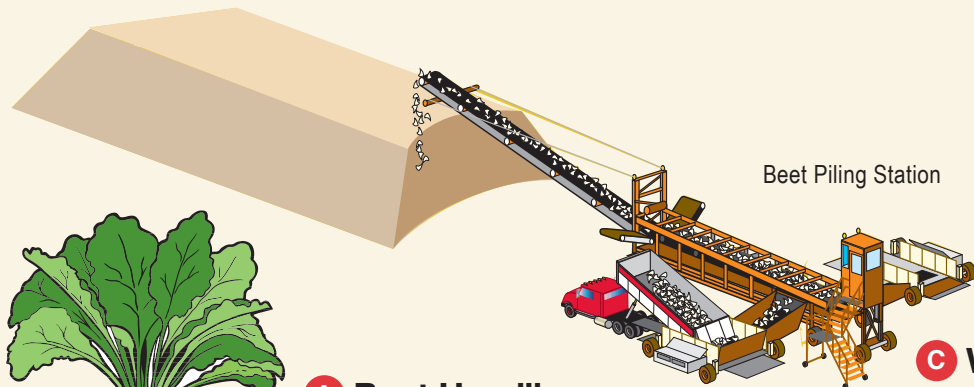
In the field, sugarbeets are planted in early spring and take about five months to mature. Toward the end of the growing season, cool autumn nights cue the sugarbeets to begin storing sugar in their roots. The sugarbeets are left in the ground until the sugar content peaks and then are harvested quickly.

During the harvest, leaves are removed by a topper or roto-beater. Next, the sugar-filled roots are lifted out of the ground with a specialized harvester and loaded onto waiting trucks. From the field, the trucks haul the sugarbeets to numerous receiving stations where they are carefully stored in large piles until being transported to our sugar factories.

## Crystal Sugarbeet Seed

By focusing on genetically superior variety characteristics that advance biotechnology, disease resistance, and stand establishment, Crystal Sugarbeet Seed helps farmers plant, grow, and reap the rewards of the highest-quality, highest-yielding sugarbeet crops.



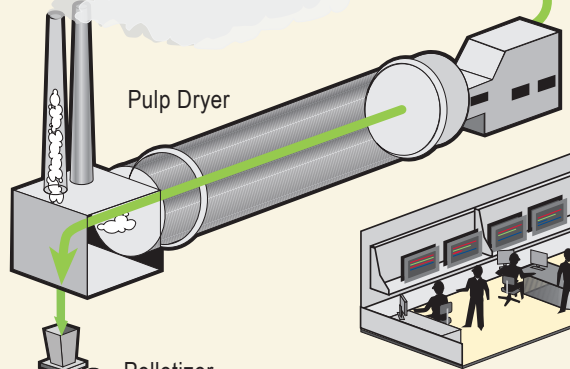
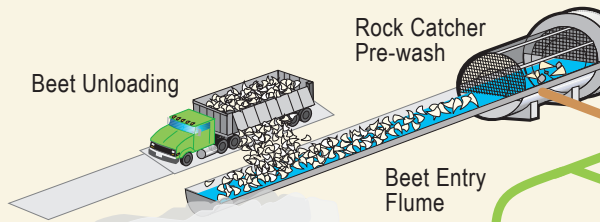


**A Beet Handling**

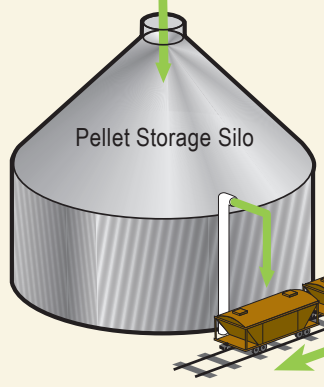
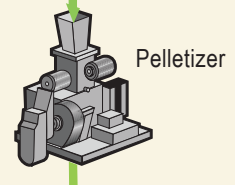
**C Wash**



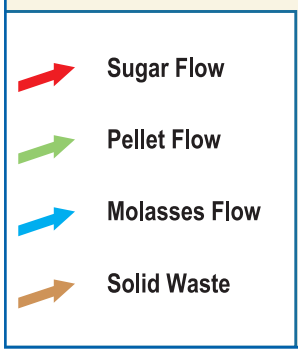
Sugarbeet Harvest



**B Factory Control**



**H Crystallizati**



**D Slicing**

**E Diffusion**

Beet Slicer

Diffuser Tower

Lime Kiln

Spray Tables

Cossette Mixer

Shing

To Solid Waste

Purification

Pulp Presses

Evaporators

**G Evaporation**

Su

Purification Filters

Sugar Dryer

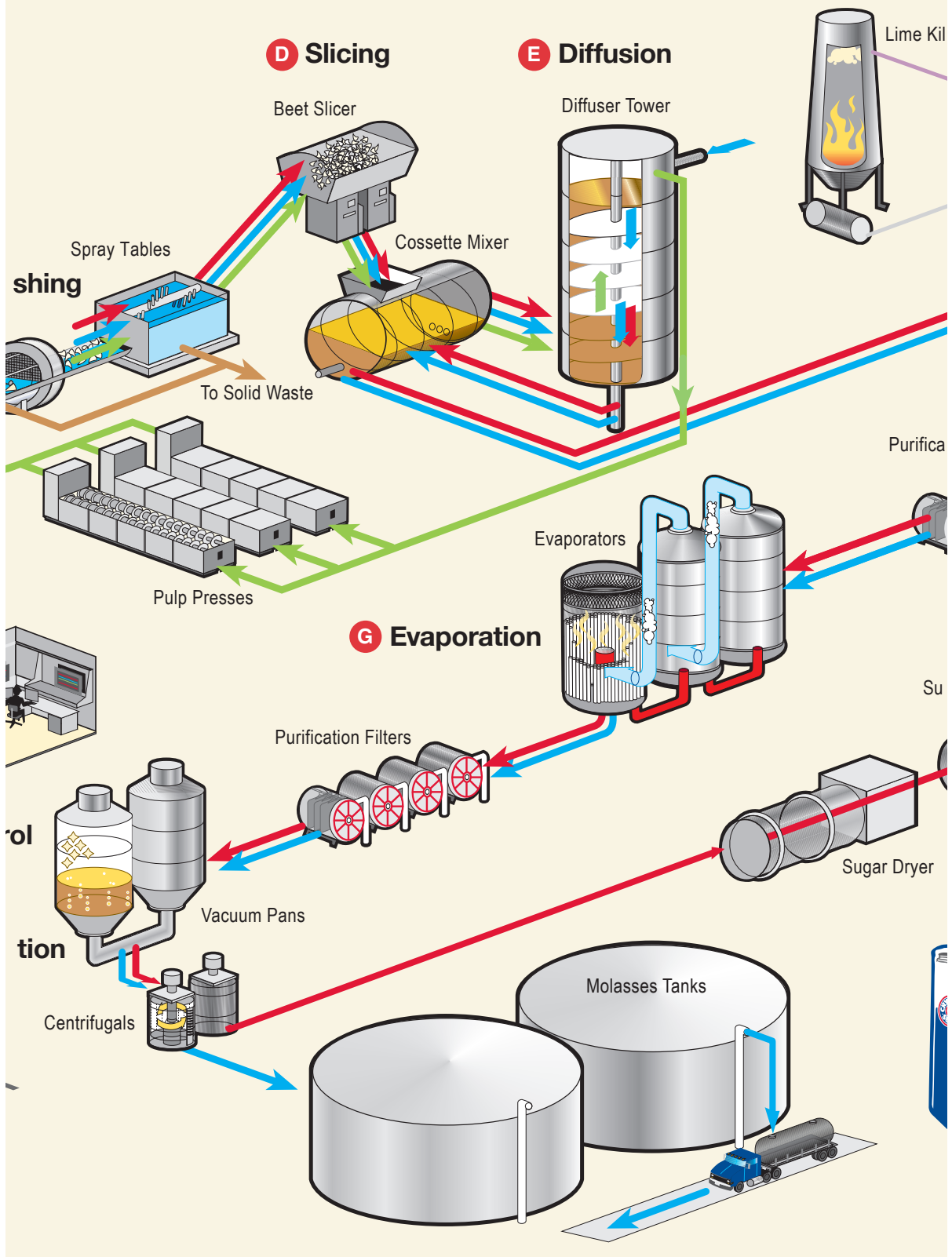
Vacuum Pans

Molasses Tanks

Pol

tion

Centrifugals



e Kiln

First Carbonator

## F Purification

Separation Tank

To Solid Waste

Second Carbonator

purification Filters

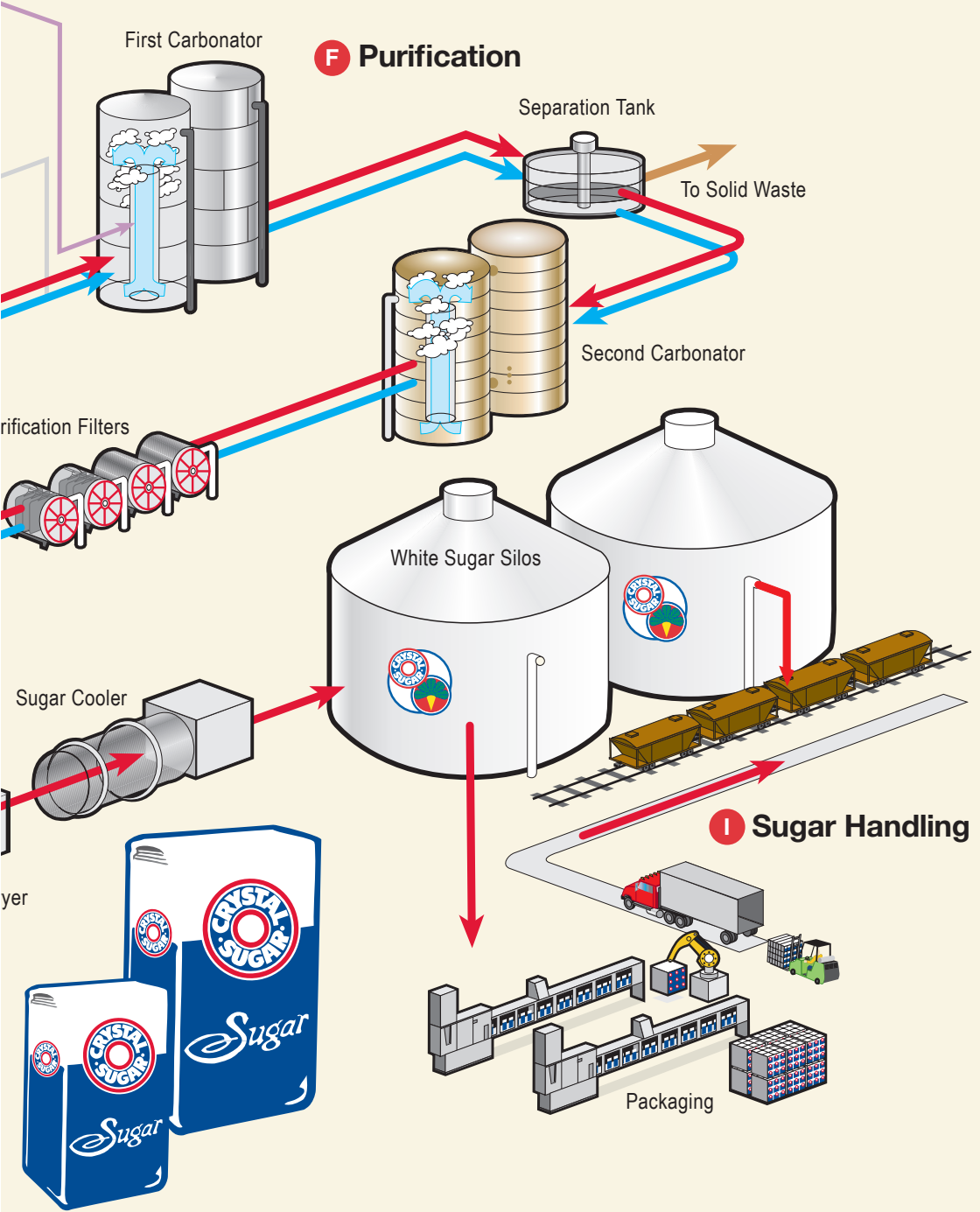
White Sugar Silos

Sugar Cooler

## I Sugar Handling

yer

Packaging



# From *Beet* to Bite.

Turning a root vegetable into the world's most essential natural sweetener only seems like magic. It's part science, part manufacturing, part people, and the biggest part of what we do. Once processing begins, our factories operate 24/7 turning out 150 pounds of sugar every second of each processing day until all the beets are finished. In total, we produce about 3.5 billion pounds of sugar and 800,000 tons of key byproducts.

## **A Beet Handling**

Autumn harvest brings sugarbeets from the field to one of 38 outdoor receiving stations, where they will be inspected, stored, and distributed to factories.

## **B Factory Control**

State-of-the-art flow and monitoring systems control and optimize the sugar production process.

## **C Washing**

Dirt and debris are removed from sugarbeets.

## **D Slicing**

Beets are cut into long, white strings, similar to French fries, called cosettes. They will be mixed with hot juice in the cosette mixer.

## **E Diffusion**

Very hot water helps to separate raw sugar juice from the beet cosette pulp. Sugar pulp is pressed, dried, and shaped into livestock feed.

## **F Purification**

Raw sugar juice is clarified and filtered to remove impurities, solids, and fine particles.

## **G Evaporation**

Juice is heated with steam, concentrating the purified sugar juice into a dark, caramel syrup.

## **H Crystallization**

Syrup is boiled and seeded with microscopic sugar crystals, forming a rich mixture of crystals and molasses syrup. Centrifuges separate the molasses and sugar crystals while a granulator dries, cools, and separates the crystals.

## **I Sugar Handling**

Sugar is shipped in bulk rail cars and trucks or packaged in bags for delivery to industrial and retail customers.

## **Desugarization**

Remaining sugar is claimed from molasses syrup. Remaining molasses is sold as a liquid livestock feed additive.





American  
Crystal  
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Company

101 3rd St N, Moorhead, MN 56560