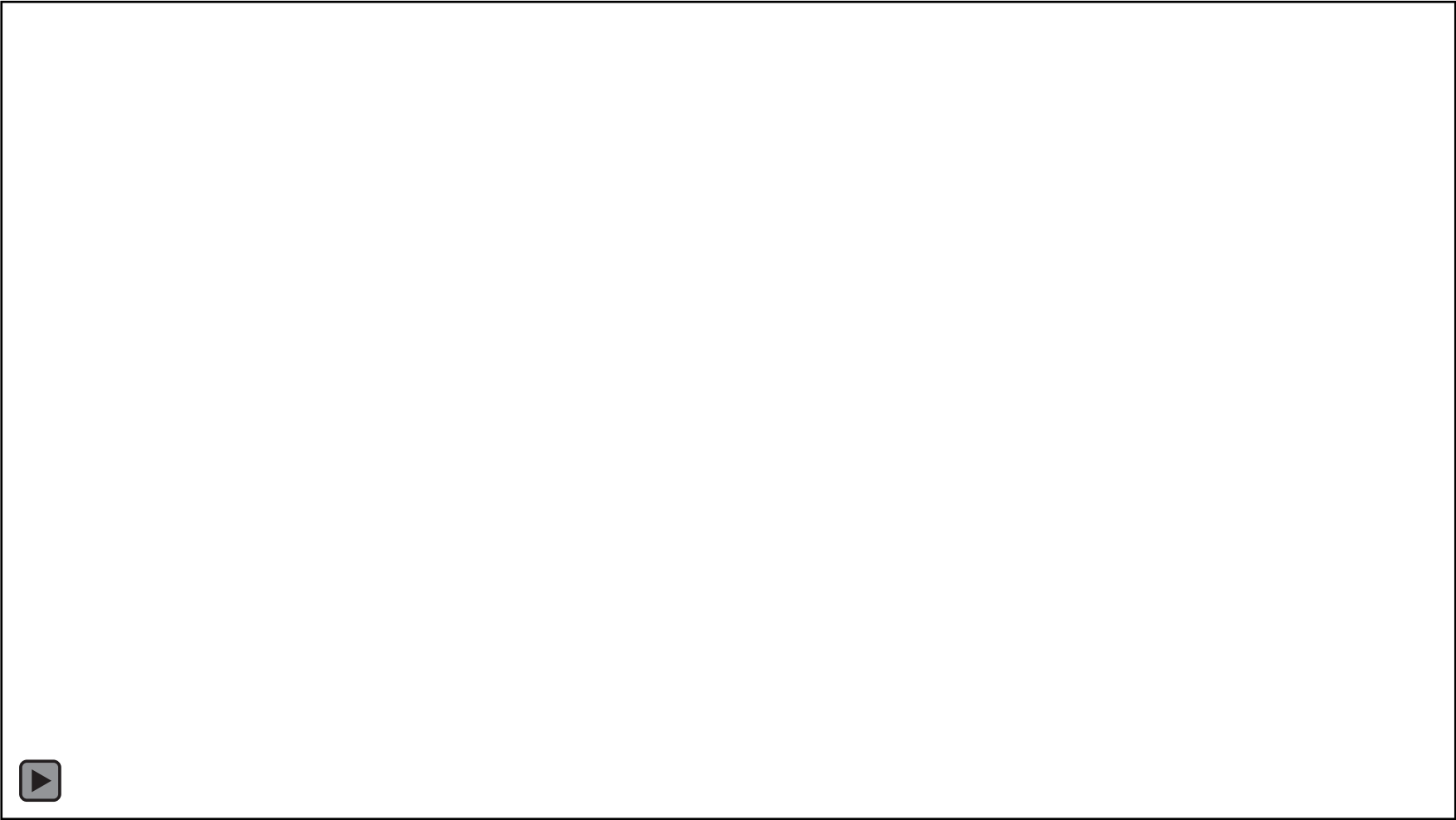




Showcasing Innovation



Our Mission

The Ag Innovation Campus serves as an incubator for agricultural, with a goal to foster new and novel products, create jobs and increase the value of agriculture in the region, state, and nation.

Founding Members

The Minnesota Soybean Growers Association, the Minnesota Soybean Research & Promotion Council, the Agricultural Utilization Research Institute

Our Vision

AIC will be a host to a variety of private and public groups with agriculture by providing the tools and technology to expand value-added agricultural products while offering a campus suitable for real-world learning both in production agriculture as well as the technologies serving the campus.

History

- Original idea conceptualized in 2018
- Received \$5 million grant from state in 2019
- Broke ground in October 2020
- Construction began in Spring 2021
- Construction Completed Fall of 2023
- Turned the switch on January 2024!



By the Numbers



Tons per Day

240

The estimated amount of soybean meal produced daily, processed by 3 mechanic crush systems.

Short Tons per Year

65,500

The amount of soybean meal to be processed annually.

Days of Operation

350

Number of days the AIC will operate the crushing facility.

Specialty Crush line Tons per day

40

A new specialty crush line is undergoing the planning phase.

By the Numbers



8

Bean Semi Trucks

Raw soybeans

6

Meal Semi Trucks

High-quality livestock feed shipped to local farms per day.

2

Oil Semi Trucks

Oil to be shipped to local businesses per day.

2

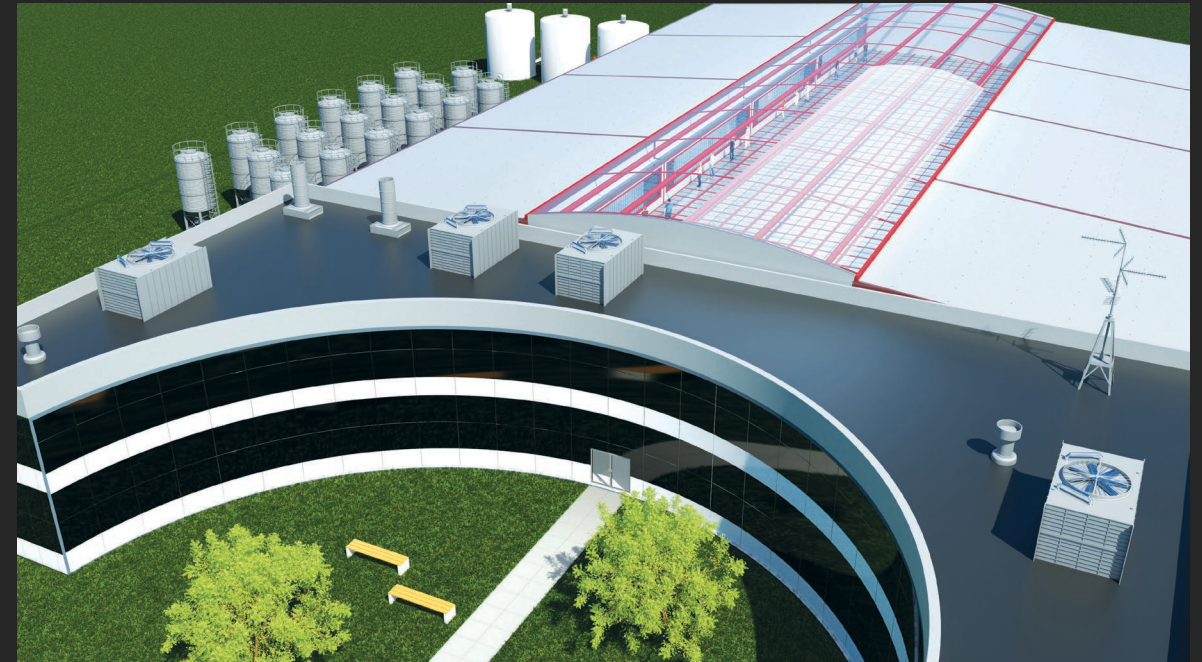
Hulls Semi Trucks

Hulls per week

The Next Phases

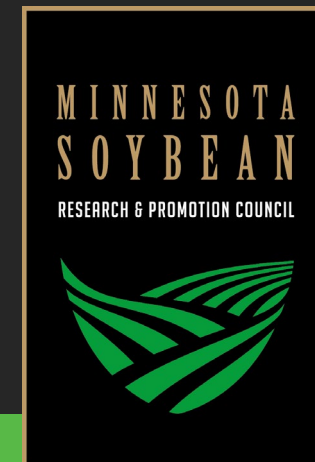
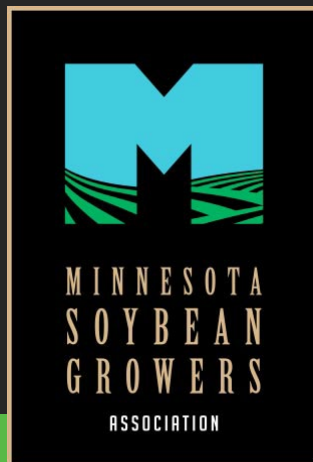
Phase II & III

- **AURI Office Complex**
- **Collaborative Spaces**
such as meeting rooms,
classrooms and event space
- **Up to 10 research bays for use by
both private and public entities**
- **Incubator space for new
businesses**

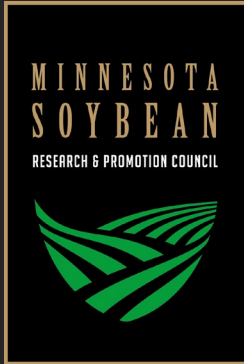


Support of Soybean Breeding at UMN

- In 1962, MSGA lobbied the MN legislature to provide \$500 for the support of the purchase of a pickup for the UMN soybean breeding genetics program.
- The UMN soybean breeding program is the oldest MSR&PC supported research project. It has been financially supported since the inception of the MN soybean checkoff.



TrueSoya®



- TrueSoya® high oleic and low linolenic soybeans will be the first value-added soybeans to be crushed at AIC
- Developed by the Minnesota Research & Promotion Council

Benefits

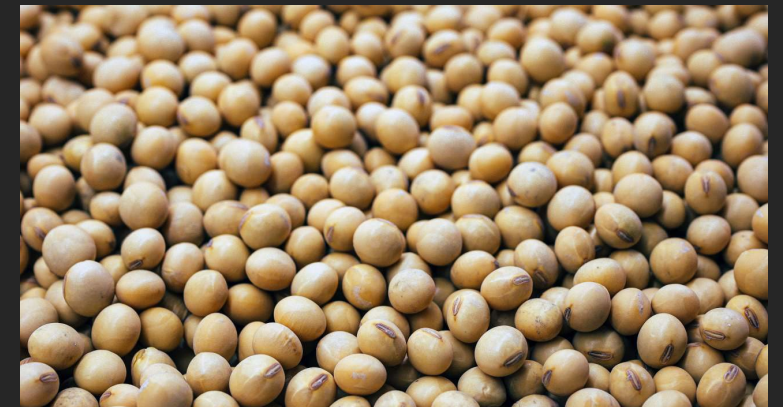
- Low in saturated fat
- Superior high-heat stability
- 2.5X Fryer Lifetime
- Neutral flavor profile
- Extended shelf life for baked goods and snack foods
- 1-1 ratio of omega-6/omega-3 fatty acids
- Great for Natto & Tempeh

InnerSoy

- **Groundbreaking technology developed by InnerPlant**
- **Genetically engineered soybean plants that can visually signal stress conditions such as water scarcity, nutrient deficiencies, or attacks from pathogens like fungi.**
- **Unapproved overseas, would need to be crushed at AIC to keep out of U.S. soy exports**

Moolec Real Meat-Protein

- **Inserting pig genes into soy plants to make better tasting soy-based meat substitutes**
- **Unapproved overseas, would need to be crushed at AIC to keep out of U.S. soy exports**



New Corteva Varieties

- Higher Methionine/Lysine soybean varieties for poultry and swine
- Will need processing of multi-ton small batches for feeding trials and determining processing parameters for larger processing plants



Low Raffinose/Stachyose

- **Would be useful towards implementing soymeal as ingredient in dog food by eliminating gas issues, which is currently limiting use of soymeal in dog food products**
- **Would also allow for increased daily feed intake for swine**

High Stearic Acid

- **Helps reduce heat stress in dairy cattle**
- **Plant-based stearate would avoid fears of mad-cow disease in beef production**

Corporate Pressure & Climate Change

- Increasing corporate pressures to reduce emissions of nitrogen, phosphorus, reduce fertilizer runoff, etc...
- Increasing regulatory pressure to reduce amount zinc oxide added to swine feeds
- Develop low-phytate soybean varieties would allow monogastric animals (swine, poultry, fish, humans) to absorb and utilize greater fraction of protein in soybean meal, which will reduce the animal's nitrogen emissions
- 11S/7S ratio soybean varieties with better taste and mouthfeel for soy-based meat products (Impossible burger, fake chicken nuggets, etc)



Other New Uses & Products AIC Will Help Process and Develop

- **Biochar**
- **Hulls to plastic**
- **Plasma Blue**
- **Microwave drying**
- **Winter oilseeds for cash cover crops technologies**
- **Gene-edited oil seeds**
- **AND MANY MORE**

Accessing AIC Services

Minimum Processing Unit: 1 trailer truck load

Cost Per Unit: Processing request dependent

**For more information: Contact Tom Slunecka
(507) 720-4052
Tom@agmgmtsolutions**



Questions?