



Mars 2024

 Soucy Baron |  

New Rubber Component Development is Ideal for Innovative Agricultural Machinery

The agriculture industry is undergoing rapid changes. Autonomous-ready vehicles, robotics, and electric vehicles are transforming the way farmers work. However, incorporating new technical capabilities is tricky because agricultural equipment needs to stand up to the high mechanical performance standards demanded by the industry.

Manufacturers that are developing new agricultural equipment have specific challenges, including the following:

- > **Protecting critical parts from vibration, overheating, and other stressors**
- > **Resisting challenging environments and weather extremes**
- > **Minimizing component costs**

Overcoming these obstacles can be done by carefully selecting the right partners to develop and manufacture new components. Specialized engineering resources are indispensable for project success.

Continue reading to find out how engineered rubber solutions support innovative agriculture equipment design.



Simulations predict how new agricultural machinery will operate

Anticipating problems so that they can be solved and prevented is a foundational element of good design. When sourcing rubber components to help protect sensitive electrical equipment, it's important to work with engineers who can simulate different environments.

Innovative designs that use advanced technology often include delicate parts that need extra protection from noise, vibration, harshness, and temperature extremes. Agricultural equipment is exposed to many stressors including the following:

> **Severe weather**

> **Uneven terrain**

> **Crop debris**

> **Corrosive sprays**

With an accurate simulation, designers can develop rubber components that will withstand different types of stress.



Custom rubber formulations meet specific requirements

An advantage of using custom rubber solutions is the flexibility available in both formulation and form. Rubber has unique damping abilities to minimize the impact of rubber terrain while optimizing durability. Rubber also works extremely well as a seal, barrier, or cap to protect delicate electronics.

Custom formulations can be developed to create the required seals and barriers needed by new technology. Experienced custom rubber solutions providers can use an existing library of rubber formulations to speed the product development process while providing the level of customization needed.



Reliable component manufacturing satisfies cost and delivery objectives

To minimize costs, rubber component design should start as early as possible. Even in the earliest stages of product development, rubber component designers can offer suggestions to increase production efficiency and ensure the highest quality. Optimizing production is an objective that must be included in all design considerations.

Soucy Baron, OEMs' partner

OEMs that partner with Soucy Baron are often looking for one supplier that can provide everything from complex to basic molded elastomeric components. Soucy Baron is ISO 9001 certified, and our products comply with REACH, ASTM and other international industry standards.



Soucy Baron helps you:

- Develop new components to protect electronics and sensitive parts in new agricultural equipment
- Validate concepts with 3D-printed prototypes and additional design engineering services
- Increase equipment durability
- Meet production timelines with reliable, quality-tested elastomeric components
- And much more

Soucy Baron has over 50 years of experience designing, testing, and producing custom-engineered rubber parts for new vehicles and machinery. With our technical dominance in materials engineering and experience working directly with OEMs, we provide quality, high-performance compounds for your component needs.

To learn more about using custom rubber solutions in the design of new agricultural equipment, [contact us](#).