

POWERTRAIN SOLUTIONS

CUSTOMER
SUCCESS
STORY

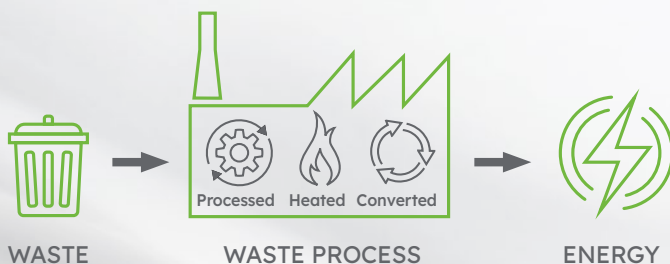


Environmental, social,
and governance (ESG)

Renewable Energy Start-Up Saves Time and Resources by Partnering with Regal Rexnord to Optimize the Design of their Powertrain System

FINDING OPPORTUNITIES

The company is developing new technology with the goal of changing the waste management process to result in safer and cleaner solutions. The new process is seen as an alternative to typical waste storage in the form of landfilling. Being a startup and utilizing a new technology, the company's engineering resources were focused on core technology development; they needed a solid partner to assist in the engineering of the electromechanical components to produce more optimized performance and streamlined manufacturing and logistics processes. The overall design has size limitations due to a desired package size which placed an additional burden on product selection and optimization.



LOCATION

A startup in Connecticut developed a technology that successfully converts waste to burnable fuel.

CHALLENGE

Customer's engineering resources were best served focusing on their core technology and didn't have the expertise or time to select the optimal power transmission components.

GOAL

The customer desired a partnership to share responsibility of the power transmission system design and selection. The goal was to optimize the electromechanical components in their proven concept, while also streamline their manufacturing product procurement.

RESULT

Our collaborative engineering approach resulted in the design of an electromechanical power transmission system — which included motors, gearboxes, couplings, bearings, and torque limiters — optimized to function together at peak efficiency and performance. By using Regal Rexnord engineering services, the customer was able to offload component selection allowing their resources to focus on innovation and developing new core technologies.

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SEEING THE BIGGER PICTURE: THE REGAL REXNORD BENEFIT

Regal Rexnord partnered with the customer to share responsibility in the power transmission system design and selection. The result was a customized electro-mechanical solution to complement their breakthrough process.

By utilizing Regal Rexnord's engineers, the customer experienced various benefits:



Quality of solution development due to Regal Rexnord's engineering expertise and prior experience designing and integrating these components.



Efficiency, speed and logistics benefits through single sourcing; all backed with the strength of Regal Rexnord's extensive product portfolio.



Customer can focus on further developing their new technology by offloading the Powertrain package selection process to Regal Rexnord.



Simplified component acquisition with one source for critical power transmission components.



Predictive failure notification through implementation of sensors to monitor component health.



Ensure the Powertrain functions seamlessly because customer is partnered with a Regal Rexnord Customer Care team.



Received a solution specifically engineered to the unique needs and spatial constraints, and nuances of the new technology.



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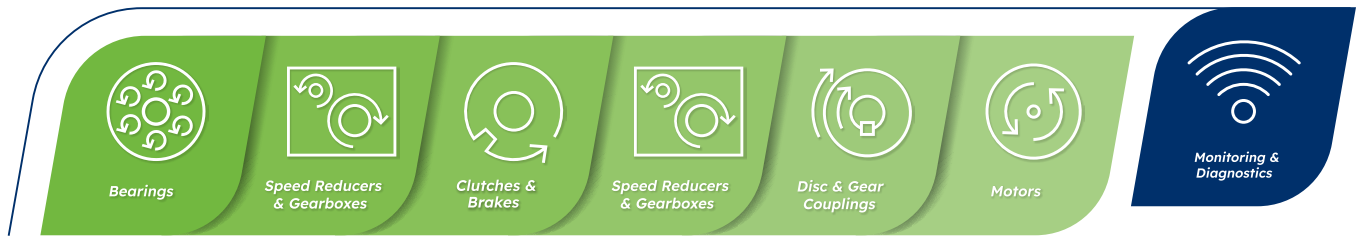


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AN OPTIMIZED OUTCOME

Regal Rexnord worked with the customer to develop the ideal solution, working around various limitations:

- ✓ Spatial constraints
- ✓ Contaminants
- ✓ Temperature



Rollway® T-738 and 23040 CA W33 2HR2 Bearings

Elliptical shaped contact area that is larger than a ball bearing makes them ideal when static and dynamic misalignment is present.



Hub City® Bevel Gearbox

Universal mounting design assures maximum design flexibility allowing for installation in the desired configuration. Hub City Bevel gearing provides efficient (95.7%) operation and durability to maximize uptime.



Rexnord® Autogard® Torque Limiter

Autogard provides disengagement protection to safeguard equipment from damage and can be easily reset, improving uptime and productivity.



Falk V-Class® Right Angle Gearbox

With advanced cooling technologies, optimized gear design, and an exclusive no-leak seal design, the Falk V-Class is designed to help prevent equipment downtime, increase productivity, and deliver dependable operation.



Falk® Lifelign® Gear Coupling

Falk Lifelign couplings are an industry leader in torque density given the allowable torque to bore capacity.



IP55 Integral Electric Motor

Our experienced engineers sourced a motor that is built to withstand tough conditions, and is designed to work with the system.



Perceptiv™ Wireless Sensor

Since the gearbox would not be easily accessible once installed, sensors integrated into the gearbox would monitor oil levels, temperature, and the overall health of the product without having to make elaborate access panels or relocating the components.

Experienced Regal Rexnord engineers were able to create a solution that fit into specific space constraints using wireless sensors to monitor equipment in this configuration.



You have challenges. We have solutions.

To solve your critical challenges, it is essential to partner with a **global company** with **local resources**, **reputable brands**, and a **proven history** of delivering cost-efficient solutions.



**SIMPLIFIED
SUPPLY CHAIN**

**TRUSTED
ADVISOR**

**APPLICATION
ENGINEERING**

**GLOBAL
PRESENCE**

**CONTINUOUS
INNOVATION**

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