In tire manufacturing, as many as 200 different raw materials combine with chemistry, physics and engineering to deliver a product with the highest degree of comfort, performance, reliability and safety.

**PowerFlex drives with TotalFORCE technology** offer solutions for almost the entire tire production process – from raw material preparation, manufacturing and assembly to inspection and shipping in some of the most challenging environments.

The **PowerFlex 755T family of drives** provides a flexible range of high-performance velocity, torque and position control for various AC motors, including induction, synchronous reluctance and permanent magnet motors. Result: the drives help increase the reliability of the equipment and improve production.

### The ideal solution

The data from PowerFlex drives with TotalFORCE technology offers proactive solutions to improve productivity. This smart technology helps make the most of your assets and production. Here are four important advantages offered by PowerFlex drives.

<table>
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<tr>
<th>Predictive Analytics</th>
<th>Exclusive Corrosion Resistance</th>
<th>Reduce Energy Cost</th>
<th>Keep Applications Running</th>
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<tbody>
<tr>
<td>Less unexpected downtime, greater productivity. Real-time operational intelligence delivers diagnostics and predictive analytics to help minimize system failure and downtime. The system notifies operators with proactive equipment repair and replacement alerts.</td>
<td>Reduce the risk of equipment failure from corrosion with PowerFlex drives and XT corrosive gas protection. With proprietary research, Rockwell Automation developed an exclusive solution to help combat the effects of corrosion on VFDs in tire manufacturing facilities.</td>
<td>PowerFlex drives have delivered a payback in energy savings in as little as 6 months. Available active front end technology delivers regenerative energy to the electrical grid. Energy-efficient move profiles help reduce power consumption and wear on mechanical systems.</td>
<td>Adaptive Control is the combination of Adaptive Tuning, Load Observer and Bus Observer working together to monitor drive and machine characteristics as your equipment operates – and automatically adapt to changes to maintain production.</td>
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Smart technology solves challenge

A leading European company in the market for new mixer solutions needed drives that would integrate with their “intelligent” operating system. Rockwell Automation offered the PowerFlex 755T-series drives that feature a modular architecture, predictive maintenance and adaptive control. The features, along with the system compatibility and corrosive gas environment protection, led the customer to add PowerFlex drives as a standard part of their company’s scope. These PowerFlex drives reduced downtime by 10% versus previous production rates.

Main applications in the tire industry

MIXERS

The flexible design of PowerFlex drives makes it easy to configure rapid changes. Plus, the adaptive control feature automatically reacts to changes in the loads, inertia, resonance and vibration. Predictive maintenance minimizes time to repair components.

EXTRUDERS

Predictive maintenance saves time and operating costs. Active front provides solutions that optimize energy use. TotalFORCE technology offers a high torque control even at low speeds, such as when just the machinery is turned on or after a motor stop.

CALENDERS

Calenders work with different formats and materials. That is why the flexible design and easy-to-configure PowerFlex drives are valuable. Simultaneously, these drivers help offer reliability, energy optimization and improved uptime.

Turn manufacturing into a strategic advantage

Leverage PowerFlex drives to help reach your energy savings and sustainability goals. These solutions are designed to maximize motor efficiency, reduce energy use and improve application performance.

For information about PowerFlex 755TS, 755TL, 755TR, 755TM and 6000T drives with TotalFORCE technology, speak with your local Rockwell Automation sales representative or click to connect or learn more.