Central Tire
Inflation System (CTIS)
Enhanced Mobility For Agricultural Vehicles

With the press of a button inside the cab, Spicer® CTIS maximizes agricultural vehicle mobility by adjusting tire pressure to provide the optimum footprint on any terrain.
Optimizing Tires to the Working Environment  Spicer® CTIS allows farmers to adjust tire pressure to suit prevailing conditions when traveling either on- or off-road. This allows for an optimized tire pressure setting depending on terrain type, and provides enhanced tire preservation, better tractive performance, reduced soil compaction, improved fuel consumption, and reduced overall operating cost. Additionally, the system reduces downtimes associated with tire malfunctions, such as minor punctures, leaks, or immobilization in muddy terrain.

During on-road operation, the system inflates the tires to 1.6 - 1.8 bar and a 10 - 13 percent tread deflection to minimize tire contact with the road surface, improving fuel efficiency up to 3.3 percent and greatly reducing tire wear.

When the vehicle travels off-road, the system deflates the tires to 0.6 - 0.8 bar and a 20 - 22 percent tread deflection to increase tire contact with the soil, improving traction and reducing soil compaction. When the vehicle returns to the road, the system inflates the tires from 0.6 - 0.8 bar to 1.6 - 1.8 bar and returns the tread deflection to 10 - 13 percent, increasing overall tire life by up to 10 percent.

During tractor idle status, the system periodically checks tire pressures.
Benefits

- Increased traction
- Longer tire life
- Reduced fuel consumption
- Protection against soil compaction
- Increased driving stability
- Enhanced productivity for field work
- Improved pulling performance

Emergency

If a tire leak occurs, an alert is issued to the operator. The system then automatically switches to emergency mode, which (within the limits of the compressor) activates a continuous flow of air to the affected tire to maintain a 30 percent tread deflection until the operator is able to have it repaired.

The Spicer® CTIS package consists of:

- Front axle and final reductions with special seals
- Electronic control unit (ECU) plus software
- Pneumatic control unit
- Operator control panel
- Wheel valves
- Pressure switch

The Spicer CTIS system is available as an Original Equipment (OEM) package for agricultural equipment manufacturers globally.
About Dana Holding Corporation

Dana is an integral partner for virtually every major vehicle and engine manufacturer worldwide. Dana is a leading supplier of drivetrain, sealing, and thermal technologies to the global automotive, commercial-vehicle, and off-highway markets. Founded in 1904, the company employs thousands of people across five continents.

About Dana Off-Highway Driveline Technologies

Dana Off-Highway Driveline Technologies includes research and development, manufacturing, and assembly operations in Belgium, Brazil, China, Hungary, India, Italy, Mexico, the United Kingdom, and the United States. It designs, manufactures, assembles, and markets Spicer® axles and transaxles, driveshafts and end-fittings, transmissions, torque converters, electronic controls, and brakes. The group also provides genuine replacement parts and service.

Dana Off-Highway Driveline Technologies serves more than 1,000 vehicle assembly and manufacturing facilities in 30 countries. It also has two global distribution centers and more than 60 authorized service centers supporting customers in more than 100 countries. Construction, agriculture, forestry, underground mining, material handling, outdoor power, leisure/utility vehicles, and industrial equipment are just some of the markets that demand the quality found in Spicer products and genuine service parts.

All applications must be approved by the Application Engineering Department. Specifications and/or design are subject to change without notice or obligation.