

Full-System Solutions for Tractors

With more than a century of knowledge in agricultural tractors, Dana offers proven products and unmatched capabilities. Our Spicer® front axles and Graziano® components and synchronizers are designed for the unique demands of agricultural tractors. Each drivetrain component is tested and manufactured to meet our customers' specific needs.



Spicer® Independent Front Suspension Axle

Designed for open field tractor with increased torque limits up to 295 to 370 kW (396 to 500 hp)
 Deliver Improved traction and increased speed
 Decreased body vibration and enhanced maneuverability
 Transit speed up to 60 Km/h



Spicer® Standard Suspension Axle

Designed for tractors from 96 to 296 kW (129 to 397 hp)
 Active suspension system
 Improved vehicle control, traction and handling
 Transit speed up to 60 km/h
 Easy of assembly



Spicer® Modular Axle

Designed for tractors from 33 to 301 kW (45 to 410 hp)
 Flexible platform assembled from three interchangeable modules
 Cost-effective technology reduces product development lead times
 Geared to meet specific regional and global needs



Spicer® Portal Axle

Designed for compact utility tractors from 19 to 41 kW (25 to 55 hp)
 Increased ground clearance, enhanced traction and performance
 Smooth turning capability
 Suitable for all terrain application



Spicer® Driveshafts

A century of quality and innovation
 Ideal for the rigorous demand of most off-highway applications
 Multiple driveshaft and end-fitting combinations
 Designed for minimal maintenance, longer life and reduced operating cost



Graziano Synchronizer® DC 95/100

Double cone solution for up to 40% faster synchronization time
 Up to 30% higher engagement torque in the same size
 Reduced axial package up to 10% with overall transmission weight saving
 Improved shifting quality



Graziano Synchronizer® SC 184

Three sizes with single or double cone modular design
 Reduced axial package up to 16% with overall transmission weight saving
 High torque capacity – up to 27,000 Nm
 New integrated activation system improves robustness and ease of assembly



Graziano Synchronizer® TC 102/110/118

First triple cone design for agricultural market
 High power density in compact radial package
 Integrated activation system for long life – up to 1 million shifts
 Special friction material developed for high stress capacity



Graziano Synchronizer® CSS

Roller working ramp obtained on the tooth flank of the sliding sleeve
 25% wider friction surfaces in same envelope
 Simpler and stronger hub geometry minimizes heat treatment deformations
 Optimized synchro ring geometry reduces stress and knocking effect



Graziano® Bevel gear sets

State-of-the art gear technologies – Gleason and Klingelberg
 Fine-tuned microgeometry to minimize noise and optimize durability
 Rigorous quality standards deliver high-performance results



Graziano® Powershift units

Designed for high efficiency, enhanced shifting performance, and driver comfort
 Gear shifting without torque interruption
 Electron Beam Welding Technology minimizes distortions

