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

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 ldeal 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® Bevel gear sets

State-of-the art gear technologies – Gleason and Klingelnberg

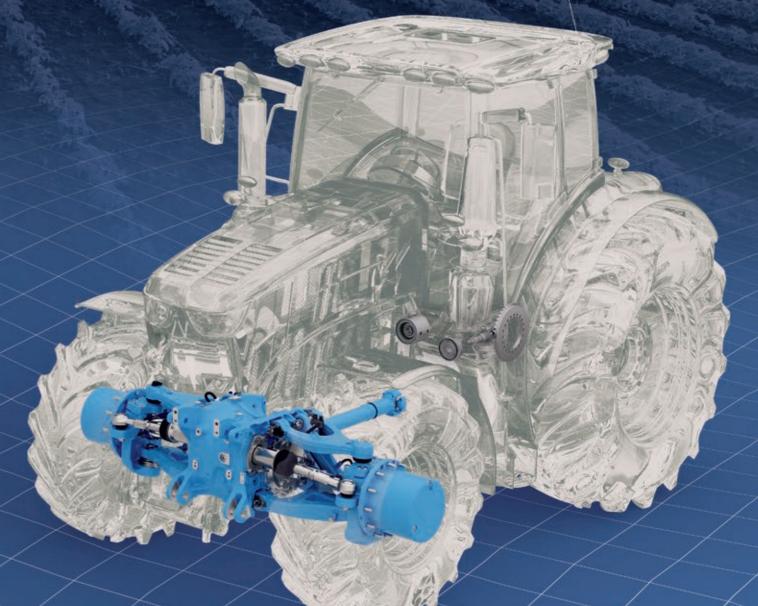
Fine-tuned microgeometry to minimize noise and optimize durability

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





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®

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

