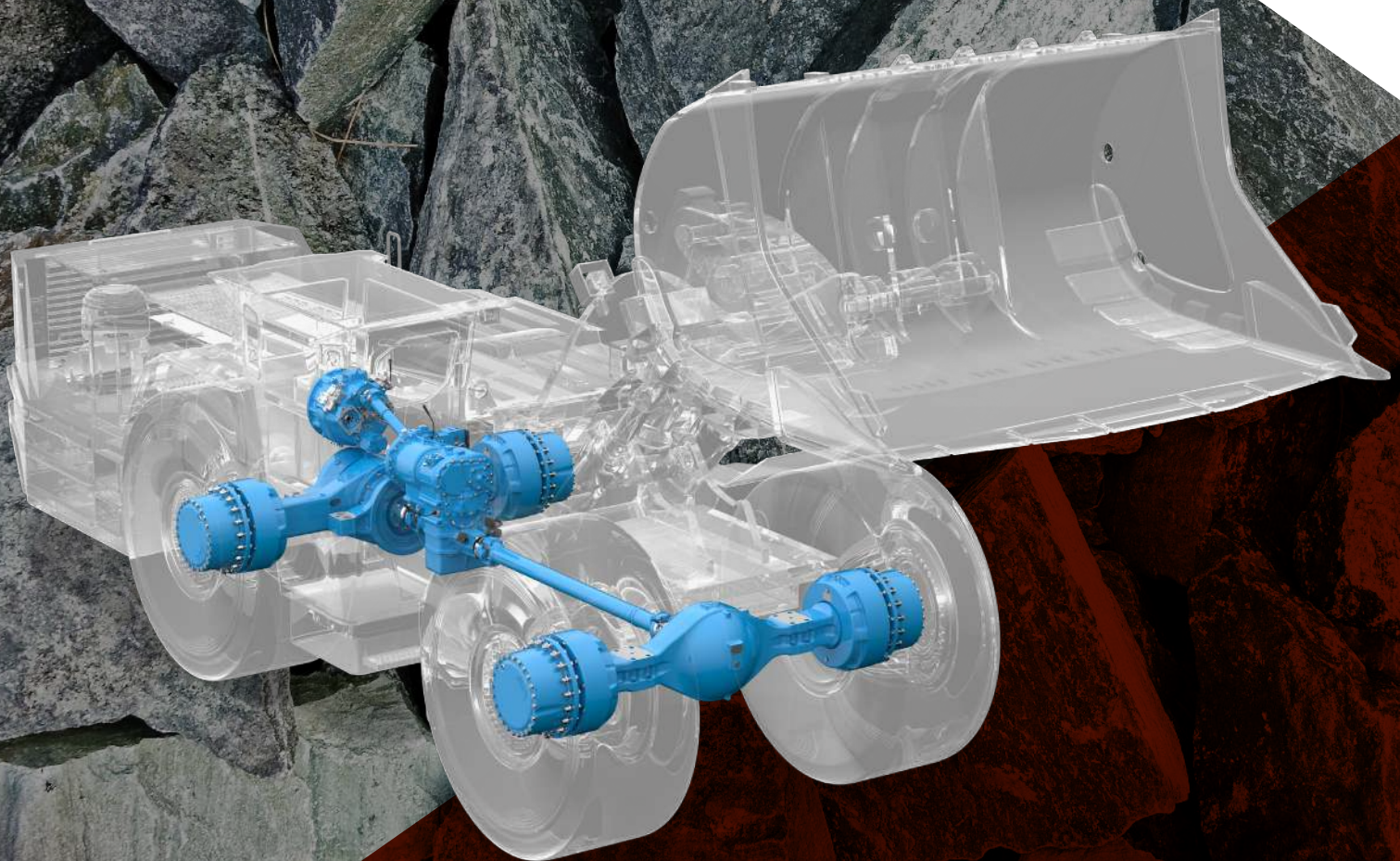




DANA SPICER OFF-HIGHWAY

The power to keep you moving



WWW.DRIVETRAINPOWER.COM

an **Engenco** company



ABOUT US

Drivetrain is a leading supplier of technical products and services to the Mining, Energy, Transport and Defence industries. An extensive network of technical and supply capability across those markets allows Drivetrain to provide excellence in service to our customer base, along with an outstanding representation and support for our market leading brands. At Drivetrain, our customer's needs are the driver of all aspects of our business and our focus on flexibility, dependability and rapid service has allowed us to grow and develop as a true partner throughout our thirty years of operation.

From the engineering and supply of new mining and energy assets and equipment through to service, maintenance repair and overhaul, parts support and advanced fleet diagnostics, Drivetrain are positioned to provide through life support to industrial companies spanning the full product life cycle.

Make Safe

At Drivetrain, safety is our number one priority. With the deployment of our safe work systems, smart technologies and enduring commitment to employee education and training, we ensure a safe work environment for all who work in and visit our facilities. Our people are the strength that allow us to achieve. The passion and pride of our workforce is the driver of the quality and dependability that our customers rely on.

DRIVETRAIN'S SERVICES INCLUDE:

- Maintenance, repair and overhaul of drivetrain components
- Supply of utility vehicles to the mining industry
- Asset health diagnostics and management
- Application engineering
- Supply and maintenance of fixed plant and mobile engines
- Environmental Solutions
- Field service maintenance

Call **1800 999 922** for your nearest Drivetrain branch or visit www.drivetrainpower.com for more information.



Off-Highway Drive and Motion Systems

Product Range

The background is a collage of images. At the top right is a large open-pit mine. Below it is a field of green crops. To the left of the crops is a busy port with many colorful shipping containers and cranes. To the right of the crops is a construction site with heavy machinery. The bottom half of the image features horizontal light trails in blue, green, and orange. In the bottom left corner, there is a stylized white circuit board pattern.

Mobile

Industrial

Electrification. **Delivered.**[™]



People Finding A Better Way®

Established in **1904**. Employing **38,000** people across **141** major facilities in **33** countries. Shipping to **14,000** customers in **141** countries. Leveraging a global network of technology centers across **9** countries.

Vision

To be the global technology leader in efficient power conveyance and energy-management solutions that enable our customers to achieve their sustainability objectives.

Mission


Our talented people power a customer-centric organization that is continuously improving the performance and efficiency of vehicles and machines around the globe. We will consistently deliver superior products and services to our customers and will generate exceptional value for our shareholders.

Values

Honesty and Integrity
Good Corporate Citizenship
Open Communication
Continuous Improvement

Corporate Business Units

Dana serves the global light vehicle, medium- and heavy-duty vehicle, and off-highway markets through four business units: Light Vehicle Driveline Technologies, Commercial Vehicle Driveline Technologies, Off-Highway Drive and Motion Technologies, Power Technologies, which is the center of excellence for sealing and thermal management technologies that span all customers in our on-highway and off-highway markets.



Light Vehicle Drive Systems



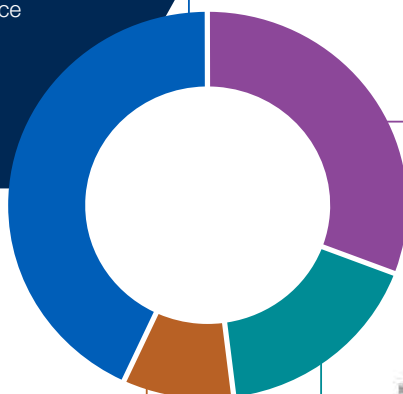
Commercial Vehicle Drive and Motion Systems



Off-Highway Drive and Motion Systems



Power Technologies



Where there is a need, Dana finds a better way.

A new era of mobility is upon us.

Emissions regulations and government policies are manifesting at an ever-increasing pace, and visions of vehicles that reduce operating costs while enhancing productivity and safety are accelerating the need for alternative propulsion solutions.

For over 20 years, our group of highly focused engineers has been dedicated to research and development of new technology solutions aimed at electrification.

We have built a broad portfolio of award-winning, patented technologies, making us a leader in electrification.

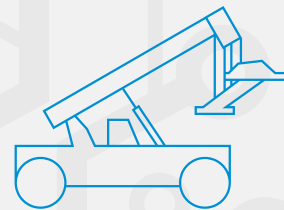
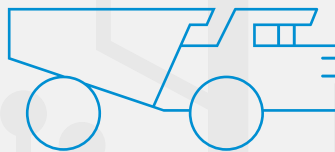
Why should you rely on Dana?

Solutions designed, engineered, and manufactured for maximum efficiency.

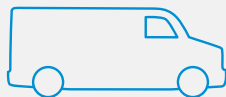
We approach electrification with a trained eye and an insightful, innovative perspective, utilizing market synergies to provide an advantage in electrifying offerings across multiple applications.

A component is only as good as the system in which it operates. That's why we take a systems-focused approach, seamlessly integrating our components into complete electrified systems.

We have an in-house, multi-disciplinary team of system solutions engineers who provide turnkey software and controls for our entire portfolio of technologies. This in-house knowledge and integration produces solutions that provide enhanced performance, packaging optimization, and reduced system weight. All of which results in savings to your bottom line.



OFF-HIGHWAY VEHICLES



LIGHT VEHICLE



COMMERCIAL VEHICLE



WEIGHT REDUCTION
For additional payload
or battery capacity



EFFICIENCY
Reduced energy
consumption means increased
range and cost savings



PACKAGING
Improved vehicle
integration for optimized
packaging space



COOLING SOLUTIONS
Capability to integrate
thermal-management solutions
with power sources

Off-Highway Drive and Motion Systems

As an innovation leader in off-highway drive and motion systems, Dana continuously improves the performance and efficiency of vehicles and machines worldwide. We aim to be the global technology pacesetter in efficient power conveyance and energy-management solutions.

Enhanced Brand Portfolio Off-Highway brands

Drivetrain Systems

**SPICER®***Drivetrain Systems***SPICER®***Torque-Hub™***GRAZIANO™***Transmission Systems*

Motion Systems

**BREVINI™***Motion Systems***FAIRFIELD™***Custom Gears and Drives***PIV™****GLB®**

Gears and Shifting Solutions

**GRAZIANO™***High-Precision Gears***GRAZIANO™***Shifting Solutions*

Thermal Management

**LONG™***Thermal Products*

Sealing

**VICTOR REINZ®***Sealing Products*

Leading the Charge in Vehicle Electrification

Dana is a leading drivetrain and motion systems provider for electrified off-highway applications.

Supported by a legacy of innovation in conventional drivetrains, Dana is at the forefront of integrating mechanical and electrical components for alternative propulsion applications. We embrace evolution to be a step ahead in supporting new applications as they emerge and collaborating with customers as they develop tomorrow's vehicles.

Electrification. **Delivered.**TM

Fully integrated e-Drive and e-Motion systems

e-Drive Systems



e-Motion Systems



Electric and Hybrid e-Drive Systems



Off-Highway Segments

Dana leverages our global expertise to engineer the most advanced, customized product solutions for developed and emerging markets. Our drive and motion products serve a wide range of demanding industries, including applications for equipment with wheel and track drives as well as stationary machines.



Mobile



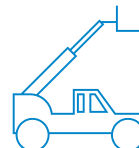
Agriculture

Our products are engineered to support increased crop yields, optimized harvesting operations, lower emissions, improved operator safety and comfort, and reduced total cost of ownership while complying with evolving emissions standards.



Material Handling

Our customized drive and motion systems enhance material-handling vehicle performance, productivity, and power. Spicer® transmissions, axles, and driveshafts are designed to work seamlessly in any vehicle to allow operators to engage, lift, and transport heavy loads with more precision.



Mining

Dana designs complete drive and motion systems to meet increasing industry demands for automation and productivity, coupled with high safety standards. Our solutions are specially engineered to maximize vehicle performance in extremely harsh environments.



Construction and Forestry

Integrated drive and motion systems from Dana enhance construction equipment performance, efficiency, and productivity with a range of solutions for vehicles ranging from 3 to 50 tonnes (4 to 55 tons). Spicer® axles, wheel drives, transmissions, driveshafts, and Brevini™ motion products are integrated with the most advanced technologies for improved machine operation on any job site, in any condition.



Industrial



Bulk Materials

Dana has an extensive range of gearboxes with torque ratings of up to 3 million Nm. Our qualified, experienced engineers provide optimum solutions for heavy-duty applications, and our service team delivers support for the entire life cycle after delivery.



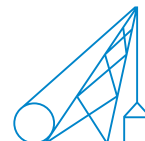
Heavy Industry and Steel

Brevini™ gearboxes have been used in heavy-duty operations from mines to steel production for more than 50 years. Our portfolio of advanced technologies has been engineered to support increased productivity and reliability, improved operator safety, and reduced total cost of ownership.



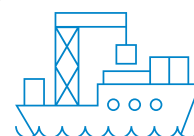
Industrial and Stationary Equipment

Our range of gearboxes and hydraulic products offers reliable solutions for all equipment within the industrial and stationary sectors. Our products enable high productivity and low maintenance costs backed by our aftermarket support and service.



Marine

Brevini™ planetary gearboxes have supported the exacting specifications and certifications of winches and cranes in the marine and offshore market for many years. We also offer a wide range of fluid power solutions that deliver safe and reliable solutions for OEM applications.



Environment - Renewable Energy

Brevini™ gearboxes for yaw and pitch drives are used by many of the major wind turbine OEMs. We provide engineering input offering sustainable and reliable solutions to meet customer requirements, while our service division has extensive experience in optimizing the performance of gearboxes over the long term.



Plastic and Rubber

Brevini™ and PIV™ brand products include single- and twin-screw extruder drives, rack and pinion drives, rack and pinion drives for injection molding machines, planetary gearboxes, and helical and bevel helical gearboxes.



Drive and Motion Solutions

The drivetrain solutions you need,
backed by global expertise and support.

Spicer® Axles and Drives

Spicer® axles are engineered to improve performance, tractive effort, and operator comfort in harsh working environments while also supporting on-road mobility through high torque density, high reliability, and robustness.

Our power-dense designs deliver maximum performance in a compact package that improves reliability, durability, stability, and safety.

Dana has a broad range of dedicated solutions matching the different application needs like torque density, specific duty cycle, braking performances, safety standard and robustness.



Spicer® Driveshafts

Built to withstand the roughest terrains and heaviest loads, Spicer driveshafts efficiently and reliably manage input torque to improve productivity, reduce operating costs, and simplify maintenance. They can be customized with a complete set of end fittings, flanges, and service options for any requirement.



Spicer® Transmissions with Electronic Controls

From basic gearboxes to leading-edge powersplit configurations, Dana supplies a wide range of powerful, efficient transmissions and electronic controls that improve fuel efficiency, handling, tractive effort, and operator comfort while reducing noise and ensuring easy maintenance.

Our advanced electronic controls provide multiple smart operating modes that optimize productivity, monitoring and efficiency at every stage of the work cycle.



Graziano™ Custom Gears and Shifting Solutions

Our custom-designed high-precision gears and shafts improve the performance, reliability, and durability of final reduction components. We also support technically challenging and complex vehicle applications by leveraging our engineering expertise to supply customized crown wheel and pinion sets.

We offer a range of heavy-duty synchronizers and other shifting solutions that help vehicle and transmission manufacturers overcome the limited availability of engineering resources while giving vehicle operators better control, shifting performance and improved productivity.

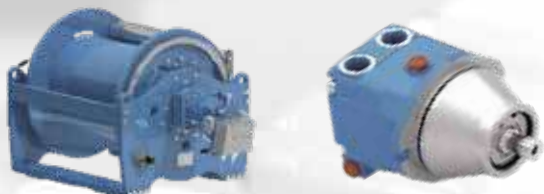
Additionally, we leverage our in-house design, prototype, and validation capabilities to produce custom drive assemblies for highly specialized applications with accelerated development timelines.



Brevini™ Motion Systems

We serve OEMs as a single supplier for the wide variety of components that maximize the productivity and efficiency of vehicle work functions.

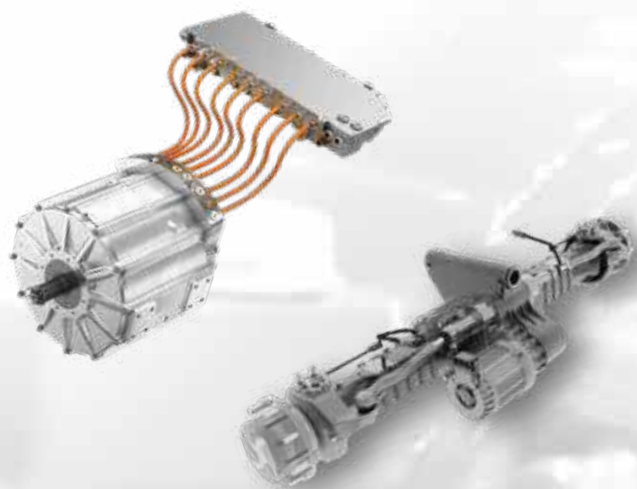
Our comprehensive selection of Brevini™ motion products includes slewing drives, winches, and a complete range of field-proven gear solutions such as gear units, gear motors, and gearboxes. Additionally, we provide full array of reliable hydraulic pumps, motors, valves, powerpacks and controls.



e-Drive and e-Motion Solutions

We leverage our complete portfolio of e-Propulsion Systems — e-Axles, e-Drive Units, and e-Hub Drives — as well as e-Powertrains, e-Motion Systems, and electrodynamic modules to enable vehicles to meet the highest standards for efficiency, reliability, and performance.

We can help OEMs adapt current ICE-driven applications with effective, low-risk, quick-to-market drive solutions today as we plan for future vehicle configurations with fully integrated systems that deliver superior productivity while reducing manufacturing complexity and total cost of ownership.



System Solutions

Vehicle intelligence, autonomous driving systems, AI, electrodynamics, telematics, cybersecurity, and other digital innovations are enabling quantum leaps in vehicle performance and efficiency.

Dana's multi-disciplinary team of system solutions engineers provides turnkey solutions for electric vehicle integration by collaborating with customers. Our holistic approach helps OEMs seamlessly integrate transformative digital technologies with Dana's proven drive and motion systems for the next generation of vehicles.



Drive Systems Spicer® Axles

Agriculture

Tractors



Spicer® Independent Front Suspension Axle

Range		
970	980	990



Spicer® Standard Suspension Axle

Range			
730	740	750	770



Spicer® Portal Axle

Range		
P71	P72	P73



Spicer® Modular Axle

Range					
M20	M30	M40	M50	M60	770

Combines and Harvesters



Spicer® Front Axle

Range	
N07	N09



Spicer® Rear Standard Suspension Axle

Range		
730	740	750



Spicer® Rear Adjustable Axle

Range
733



Spicer® Planetary Steering Axle

Range				
211	212	223	213	214

Telehandlers

Material Handling

Small Forklifts & AGVs



Spicer® Planetary Steering Axle

Range
141

Container Handlers



Spicer® Planetary Non-Steering Axle

Range	
145	147

Forklift Trucks



Spicer® Planetary Non-Steering Axle

Range			
137	138	139	144

Rough Terrain Cranes



Spicer® Planetary Steering Axles

Range
246

Ground Support Equipments



Spicer® Planetary Non-Steering Axle

Range			
111	112	123	113



Spicer® Planetary Steering Axle

Range					
211	212	213	223	214	246

Mining



Underground Mining Loaders



Spicer® Planetary Non-Steering Axle

Range				
182	183	17D	20D	53R

Mining Trucks



Spicer® Planetary Non-Steering Axle

Range				
182	183	17D	20D	53R

Drill Rigs



Spicer® Planetary Non-Steering Axle

Range									
111	112	113	114	115	116	123	125	126	



Spicer® Planetary Steering Axle

Range	
213	223

Construction & Forestry



Compact Wheel Loaders



Spicer® Planetary Non-Steering Axle

Range					
109	111	112	123	113	114

Large Wheel Loaders



Spicer® Planetary Non-Steering Axle

Range			
115	116	125	126

Wheeled Excavators



Spicer® Planetary Steering Axle

Range			
162	262	163	263



Spicer® Planetary Non-Steering Axle

Range			
111	211	112	212

Telehandlers



Spicer® Planetary Steering Axle

Range				
211	212	223	213	214

Single Drum Rollers



Spicer® Planetary Non-Steering Axle

Range		
192	193	194

Motor Graders



Spicer® Bogie Axle

Range					
GA10	GA14	GA17	GA15	GA20	FG65

Forestry Applications



Spicer® Rear Axle

Range			
113	114	115	116

Drive Systems

Spicer® Wheel and Track Drives

Agriculture

Sprayers



Spicer Torque-Hub™
CT Series



Spicer Torque-Hub™
C0 Series

Windrowers



Spicer Torque-Hub™
C0 Series



Spicer Torque-Hub™
HW5 Series

Range

CT11	C016(*)	C021	C024	C030(*)	C036
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(*) = under development

Range

C024	HW5
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Material Handling

Rubber-Tire Gantry Cranes



Spicer Torque-Hub™
RCT Series



Spicer Torque-Hub™
PHC and TH Series

Crawler Cranes



Spicer Torque-Hub™
CTU Series



Spicer Torque-Hub™
RCT Series

Range

RCT9083	RCT9103	RCT9133
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Range

PHC3850	TH510
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Range

CTU3500.1	CTU3700.1
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Range

RCT9083	RCT9103	RCT9133
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Mining

Drill Rigs / Mobile Crushers and Screeners



Spicer Torque-Hub™
CTU Series



Spicer Torque-Hub™
RCT Series

Range

CTU3150.1	CTU3200.1	CTU3300.1	CTU3500.1	CTU3700.1
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Range

RCT9083	RCT9103	RCT9133
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Construction & Forestry



Compact Track Loaders



Spicer Torque-Hub™
CT Series

Range			
CT05	CT07	CT11	CT17

Forestry Applications



Spicer Torque-Hub™
RCT Series

Range		
RCT9083	RCT9103	RCT9133

MEWPs



Spicer Torque-Hub™
H Series Hydraulic

Range					
4H	7H	8H	11H	13H	18H



Spicer Torque-Hub™
eS-AW Series Electric

Range				
eSAW04	eSAW07	eSAW11	eSAW13	eSAW17



Spicer Electrified™ e-Drive Drop Box,
Spindle and Hub Output

Range				
eS04D	eS05D	eS08D	eS10S	eS10H

Road Equipment



Spicer Torque-Hub™
RCT Series

Range
RCT7102



Spicer Torque-Hub™
CTU Series

Range				
CTU3150.1	CTU3200.1	CTU3300.1	CTU3500.1	CTU3700.1

Track Undercarriages



Spicer Torque-Hub™
CTU Series



Spicer Torque-Hub™
RCT Series

Range		
RCT9083	RCT9103	RCT9133

Drive Systems Spicer® Transmissions

Agriculture

Telehandlers



Powersplit Transmission

Range

HVT1



Powershift Transmission

Range

PS09 PSR09 T/VDT12000

Sprayers



Powersplit Transmission

Range

HVT2

Construction & Forestry

Wheel Loaders



Hydrostatic Transmission

Range

312 315 318 319



Hydrostatic Double Speed

Range

358 367



Powershift Transmission

Range

TE32 TE50



Powershift Transmission

Range

TE18 TZL16 TZL18



Powersplit Transmission

Range

HVT2

Mobile Elevated Work Platforms



Hydrostatic Transmission

Range

301

Telehandlers



Powershift Transmission

Range

T/VDT12000



Powersplit Transmission

Range

HVT1



Hydrostatic Transmission

Range

318



Hydrostatic Transmission

Range

319



Hydrostatic Two-Speed Transmission

Range

358 367 368

Forestry Equipments



Powersplit Transmission

Range

HVT2

Wheeled Excavators



Hydrostatic Two-Speed Transmission

Range

358 367



Hydrostatic Transmission

Range

342 343

Motor Graders



Powershift Transmission

Range

TMG14

Material Handling



Forklifts



Powershift
Transmission



Powershift
Transmission

Range						
T/TE08	T12000	TE08	TE10	T/TE14	TE17	TE30

Container Handlers



Powersplit
Transmission



Powershift
Transmission

Range
HVT2

Range		
T/TE14	TE17	TE30

Rough-Terrain Cranes



Powershift
Transmission



Powershift
Transmission

Range	
T20000	24000

Range
T/TE14

Mining



Underground Mining Loaders and Trucks



Powershift
Transmission



Powershift
Transmission



Powershift
Transmission



Powershift
Transmission

Range		
T20000	36000	C8000 + 8000

Range		
T/TE14	TE32	TE50

Utility Vehicles



Powershift
Transmission



Powershift
Transmission

Range		
T12000	T20000	24000

Range
T/TE14

Underground Mining Drill Rigs



Powershift Transmission



Range	
T20000	24000

Range
T/TE14

Mining Electrified



Powershift Electrified
Transmission



Long Drop
Powershift Transmission

Range
eRTE32



e-Powershift
Transmission

Range
eSP502

Drive Systems

Graziano™ Custom Gears and Shifting Solutions

Synchronizers



Graziano™ Synchronizer
DC 95/100



Graziano™ Synchronizer
SC 184



Graziano™ Synchronizer
TC 102/110/118



Graziano™ Synchronizer
CSS

Gears and Shafts



Graziano™ Gears



Graziano™ Shaft



Graziano™ Ring Gears

Powershift Clutches

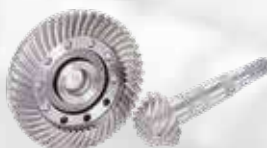


Graziano™ Powershift
Clutches



Graziano™ Powershift Units

Bevel Sets



Graziano™ Crown
Wheel and Pinion



Graziano™ Bevel Gear

Custom Gears



Fairfield® Custom Gears

Drive Systems

Spicer® Driveshafts

Tractors



Spicer® SPL55



Spicer® Wing™ Series 8.5C



Spicer® Centered Double Cardan

Combine Harvesters



Spicer® Double Universal Joint 93B35



Spicer® Wing™ Series 7C

Reach Stackers



Spicer® Wing™ Series 6C



Spicer® Wing™ Series 7C

AGVs



Spicer® Wing™ Series 5C

Forklifts



Spicer® Wing™ Series 5C

Telehandlers



Spicer® Double Universal Joint 82B30



Spicer® 10-Series 1410

Motor Graders



Spicer® Wing™ Series 7C

Compact Wheel Loaders



Spicer® Centered Double Cardan 2015-CDC

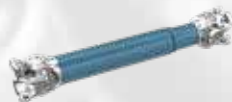


Spicer® SPL55

Large Wheel Loaders

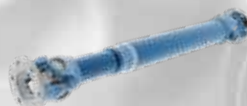


Spicer® Wing Series 15C



Spicer Compact Plus™ 2045+

Wheeled Excavators



Spicer® 10-Series 1410

Forestry Applications



Spicer® Wing™ Series 7C with Bearing Support



Spicer® Wing™ Series 8.5C

Underground Mining Loaders



Spicer® Wing™ Series 9C

Drill Rigs



Spicer® Wing™ Series 9C

Mining Trucks



Spicer® Wing™ Series 14C

Motion Systems

With global expertise in the design and manufacturing of high-efficiency technologies for industrial and stationary equipment applications, Motion Systems fully integrates into Dana offer Brevini™ gearboxes, winches and hydraulic solutions, PIV™ extruders drives, GWB™ industrial driveshafts, Fairfield® custom gears. Supported applications include on- and offshore equipment, green technologies, mining, heavy industries, and earthmoving.



Brevini™ Pumps



Axial Piston Pumps, Variable Displacement, Closed Loop

Range	Displacement [cc/rev]	Max Pressure [bar]
MD10V	14-64	250
HD1	55	450
S6CV	75-128	400



Axial Piston Pumps, Variable Displacement, Open Loop

Range	Displacement [cc/rev]	Max Pressure [bar]
S5AV	32-93.8	350
H1V	54.8-225.1	350



Axial Piston Pumps, Fixed Displacement, Open Loop

Range	Displacement [cc/rev]	Max Pressure [bar]
H1C	6.1-225.1	350
SH11C	10.3-178.1	350



Gear Pumps, Fixed displacement, Open Loop

Range	Displacement [cc/rev]	Max Pressure [bar]
OT series 1 - 2 - 3	0.73 – 90	270
Hercules gr 2	4.1 – 30	270
Silent plus gr 2	4.1 – 30	250

Brevini™ Valves



Pre-Compensated Directional Control Valves

Range	Inlet Flow [l/min]:	Max Pressure [bar]
HPV 41-77-310	160-250-600 (*)	370-370-370

(*) = per Inlet Section



Bankable Valves

Range	Max Flow [l/min]	Type
CDC3 –CD3M – CD3	80	ON/OFF
CX3 - CXQ3 - CXDH - CFS3	55	Proportional



CETOP Valves

Range	Inlet Flow	Max Pressure [bar]
Size 2 (NG4) – Size 8 (NG25)	up to 600 [l/min]	up to 400 bar

Brevini™ Motors



Axial Piston Motors, Variable Displacement, Bent Axis

Range	Displacement [cc/rev]	Max Pressure [bar]
SH7V/VR	61-216	430
SH9V	62-216	430



Axial Piston Motors, Variable Displacement, Swashplate

Range	Displacement [cc/rev]	Max Pressure [bar]
B5VR	25-45	400



Axial Piston Motors, Fixed Displacement, Bent Axis

Range	Displacement [cc/rev]	Max Pressure [bar]
H1C	6.1-225.1	430
SH11C/CR	10.3-178.1	430



Orbital Motors, Gerotor and Roller

Range	Displacement [cc/rev]	Max Pressure [bar]
BGM, BG, BR	13-400	225, 165, 175
HR, HT	80-500	210
AR, BRZV	50-400	210-175



Gear Motors, Fixed Displacement

Range	Displacement [cc/rev]	Max Pressure [bar]
OT series 1 - 2 - 3	0.73 – 90	270
Hercules gr 2	4.1 – 30	270

Brevini™ Power Units



Mini Powerpacks

Range	Type
MC	With 4 cavities for single and double acting circuits
FP	With flexible design thanks to multiple valve seats. Several circuits layout available
DT	Custom Mini Powerpack for presses / telescopic dock levellers
MK	Custom Mini Powerpack for hanged/swing lip dock levellers



Motorpumps

Range	Type
EP	With Ø115 motors and gr1 Gear Pumps
MP	With Ø80 motors and gr0.5 Gear Pumps



Micro Powerpacks

Range	Type
MR	Micro Powerpack for space demanding applications, 3 cavities for single and double acting circuits
MW	Micro Powerpacks for double acting circuits with reversible pump

Motion Systems

Brevini™ Planetary Gearboxes



S-Range

Range	Nominal Torque [Nm]
S300-S20000	34,000-2,170,000



Industrial Slewing Drives

Range	Nominal Torque [Nm]
RPR030-RPR2050	5,000-24,000
SLS300-SLS850	34,000-200,000



Industrial and E-Range Planetary Gearboxes

Range	Nominal Torque [Nm]
E10-E260	1,300-25,000
EM1010-EM1320	1,000-24,000

Brevini™ Helical and Bevel Helical Gearboxes



Helical Bevel Helical Gearbox

Range	Nominal Torque [Nm]
E2H-E3H- E4H-E3B- E4B-E3C- E4C 18 - 56	10,000-290,000



Posired™ 2

Range	Nominal Torque [Nm]
PC-PD-PE-PLC-PLD 60 - 91	340,000-1,100,000
PB / PLB 16 - 45	5,700-113,000



Posired™ N

Range	Nominal Torque [Nm]
ND-NE 18 - 56	8,200-286,000



Posired™ TS

Range	Nominal Torque [Nm]
TS18 - TS63	8,200-400,000



Posired™ D

Range	Nominal Torque [Nm]
ILC14 - ILC25	3,100-22,800

Brevini™ Gearboxes



Gearboxes

Range	Power [Kw]
ML32 - 52	10-100
B580 - 602	30-55
RD33 - 52	6-12

Brevini™ Plano Helical Gearboxes



High Power

Range	Nominal Torque [Nm]
SL2PLB85016 SL2PLB200031	90,000-2,170,000



Posiplan

Range	Nominal Torque [Nm]
PH, BPH 13-28	3,900-35,000

Brevini™ Gearmotors



Gearmotors

Range	Nominal Torque [Nm]
M, N, K, D 00-97	50-18,000

Brevini™ Winches



Hoisting Winches

Range	Max Line Pull at First Layer [kg]
DW 050-090	500-900
BWE 015-160	1,500-16,000



Recovery Winches

Range	Max Line Pull at First Layer [kg]
BWT 10.000-30.000	10,000-30,000



Winch Drives

Range	Max Output Torque [Nm]
PWD 2100-31100	10,000-110,000
SLW 300-850	85,000-190,000
SMW 1200-3500	300,000-850,000
RCW 908-913	80,000-130,000

GWB™ Industrial Driveshaft



Driveshafts for Industrial Applications

Range	Torque Range Tcs [Nm]	Flange Diameter [mm]
687/688-598	35 up to 21,500	00-225 / 600-1,300
687-688	2,400-35,000	100-225
587	43,000-57,000	225-285
390/392/393/492	60,000-1,170,000	225-550
498/598	210,000-15,000,000	600-1,200

Keep Driveshaft - Special Design
super short coupling, tunnel shaft, high speed design, carbon fiber tube
electrical insulation, remote lubrication, automatic lubrication,
condition monitoring

Brevini™ Pump Drives



BZ

Range	Nominal Power [Kw]
BZ265	110-130
BZ290	170-190
BZ340	220-240
BZ470	380-480

PIV™ Extruder Drives



Posirex



Positwin



Special Gearboxes
for Plastic & Rubber

Range	Nominal Torque [Nm]
XC-XD-XE 16 - 80	5,100-720,000

Range	Centre Distance	Torque / Shaft [Nm]
15B2N 146B2N	15-146	40-35,000

Fairfield® Custom Drives



Jacking System Drives



Tram System Drives



Transfer Case



Custom Drive Components

Range	Max Jacking Torque [Nm]
S60A-S2000	82,000-2,260,00

Electrification Capabilities

Dana's comprehensive portfolio of drive and motion technologies helps OEMs efficiently transition toward electrification. Our multi-disciplinary team of engineers develops turnkey solutions ranging from plug-and-play components to fully integrated systems.

Electrification. Delivered.™

e-Drive



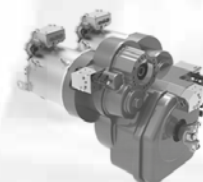
High Efficiency Transmission



High Efficiency Transmission



e-Powershift Transmission



e-Powershift Transmission



e-Axle Compact



e-Axle Heavy



e-Hub Drive Compact



e-Hub Drive Heavy

e-Motion



e-Slew Drive



EHPS System



e-Hydraulic Powerpack

EV Components



Low-Voltage Motors



Low-Voltage Inverters



On-engine Generators



High-Voltage Traction Systems



High-Voltage Motors



High-Voltage Inverters



e-Software

Electronics and Mechatronics

Electronic Control Units



Force Sensors



Position Sensors



Inclinometer



Angle Transducer

CTIS



System Solutions

Dana is a world-class collaborator with OEMs in delivering innovative, best-in-class engineering solutions.

With resources located near our customers, we can leverage our core competencies in systems development to produce ground-breaking technologies that boost business performance.

Our systems approach is combined with our industry-leading portfolio of advanced technologies to help OEMs maximize the value of their offerings and find a better way forward.

System Thinking

We adopt a **holistic perspective** to systems that fortifies our offerings

System Contents

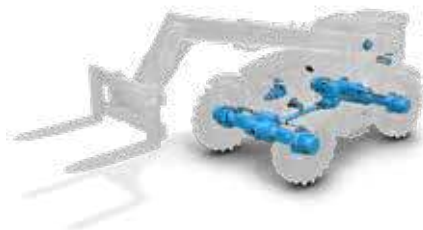
We develop **systems** by using our deep portfolio of innovations to address our **customers' needs**

Knowledge sharing

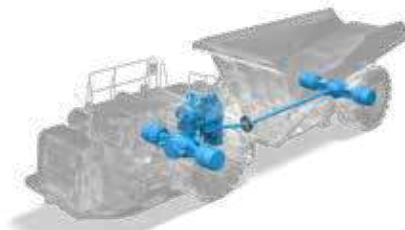
Our culture of **continuous improvement** enables our systems engineering teams to share best practices across markets and geographies

Think Why, Think Wider, Think Systems

Conventional



Telehandler



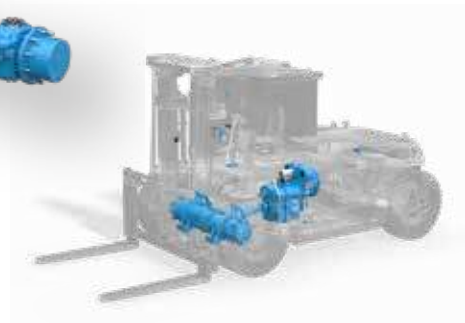
Mining Truck



Tractor

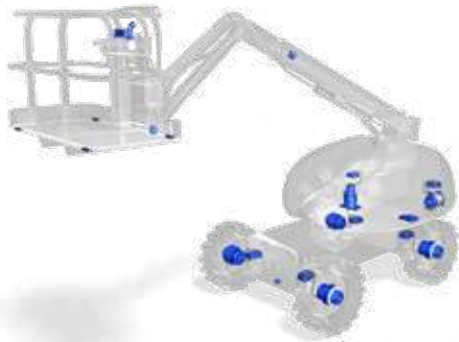


Articulated Boom Lift

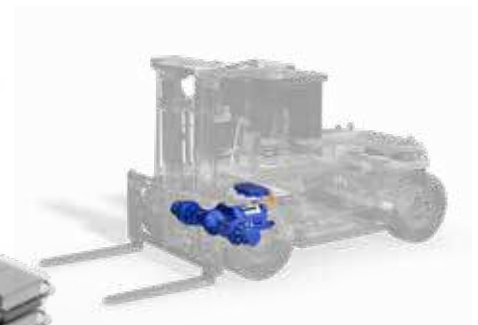


Forklift

Electrified



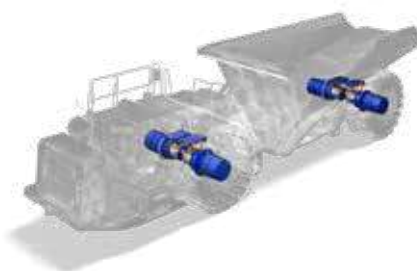
Articulated Boom Lift



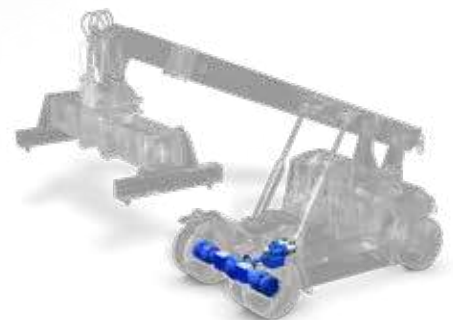
Forklift



Telehandler



Mining Truck



Reach Stacker

Global Strength

One of the ways we create value is by **positioning** our technical and manufacturing resources where customers need us globally.

Today, that's **33 countries** on **six continents**.

To help customers achieve success, top-tier suppliers must have a global perspective that can be adapted to meet local requirements and end-user expectations.



Dana's **worldwide leadership** is the key to serving clients around the world.

We bring our global expertise to the local level with technologies customized to individual requirements through a network of strategically placed technology centers, manufacturing locations, and distribution facilities.

Our strength is being over six continents thanks to our global logistic network.



Market-Driven **Innovation**

Off-Highway Performance Expectations

Safety

Productivity

Maneuverability

Durability

Serviceability

Total Cost of Ownership

About Dana Incorporated

Dana is a leader in the design and manufacture of highly efficient propulsion and energy-management solutions for all mobility markets across the globe.

The company's conventional and clean-energy solutions support nearly every vehicle manufacturer with drive and motion systems, electrodynamic technologies, thermal, sealing, and digital solutions.

About Dana Off-Highway Drive and Motion Systems

Dana delivers fully optimized solutions to customers in the construction, agriculture, material handling, mining, and industrial markets.



Dana.com/oh
Dana-industrial.com/contact-us

Application Policy

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.



The Power to Keep you Moving

30 years of experience creating innovative solutions that respond to some of the toughest conditions on earth.

an **Engenco** company

Our state-of-the-art service centres place us in a strong position as the market leaders in supply, service and support as Australia's only Authorised Dana Spicer Off-Highway Service Centre.



SPICER®



Locomotive and Driveshafts

We have a comprehensive range of engine and powertrain products for diesel-electric locomotives. We can provide driveshaft design, production, modification, and repair services.



Transmissions and Torque Converters

We rebuild transmissions and torque converters to Dana factory specifications using genuine Spicer spare parts each component is rigorously tested to ensure it meets strict quality standards.



Axles and Braking Systems

We supply and service a wide range of axles. Our axle designs incorporate top-level brake safety systems and meet Australasian mine safety regulations.



Maintenance and Repair

We can take care of maintenance, repair, and overhaul (MRO) solutions and genuine parts for hard rock mining's most respected powertrain brands.

Call 1800 999 922 for your nearest Drivetrain branch or visit our website
www.drivetrainpower.com for more information

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