

Solutions for
E-MOBILITY

Product Range

 **Bonfiglioli**



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Engineering Sustainability



WWW.BONFIGLIOLI.COM

E-MOBILITY

ELECTRIC POWERTRAIN AND DRIVE SOLUTIONS

A major force for over 40 years, Bonfiglioli conceives, designs and produces custom powertrains and drives for a wide range of electric applications. Whenever a custom solution is required, manufacturers can benefit from Bonfiglioli's technical expertise. Our teams work closely with powertrain designers and component suppliers to develop innovative and efficient tailor-made solutions. Current emission regulations applied to the automotive industry have been extended to warehouse and material handling vehicles; over the medium term, the concepts and technologies involved are likely to be scaled up to heavy duty applications. We have a dedicated solution for all the heavy duty vehicles manufacturers that are eagerly seeking improvements in efficiency to increase productivity and reduce the total cost of ownership for end-users. In 2021, we expanded and boosted Bonfiglioli's competence center dedicated to electromobility, through substantial investments in the creation of Bonfiglioli Ennowing S.p.A.. Our team has expanded, specifically to support our customers' transition to electric transport, and to develop alternative markets, including the on-highway sector. Our most recent developments include the E-Axle and HydroBEV - two high-tech integrated electric powertrain lines, that mark the beginning of a crucial paradigm shift, from component manufacturers to integrated system suppliers. We are the right partner to support your transition to electric transport, thanks to years of experience in powertrain design for light and medium duty vehicles.



MILESTONES

A LONG HISTORY OF POWER TRANSMISSION AND ELECTRIC SOLUTIONS

1956

Clementino founded Costruzioni Meccaniche Bonfiglioli




1975

Acquisition of Bonfiglioli Trasmital




1976

First electric transmission for class III material handling




2016

200,000 forklifts driven by Bonfiglioli products. Partner of the world's top 3 OEMs




2014

Development of a complete portfolio of class I/II/III electromobility solutions




2012

Dedicated assembly line for mass production of single motor drive axles for top OEMs




2018

Inauguration of Bonfiglioli's Italian plant expansion dedicated to electromobility



2019

Capacity increased by an additional high automation assembly line applying industry 4.0 concepts to mass production of dual motor drive axles for forklifts



1981

First hydrostatic planetary transmission for class IV material handling



1992

First electric planetary transmission for class II material handling



2004

Development of the forklift hydraulic steering system



2009

Establishment of the Bonfiglioli Electromobility Competence Center



2007

First electric transmission for class I forklifts



2020

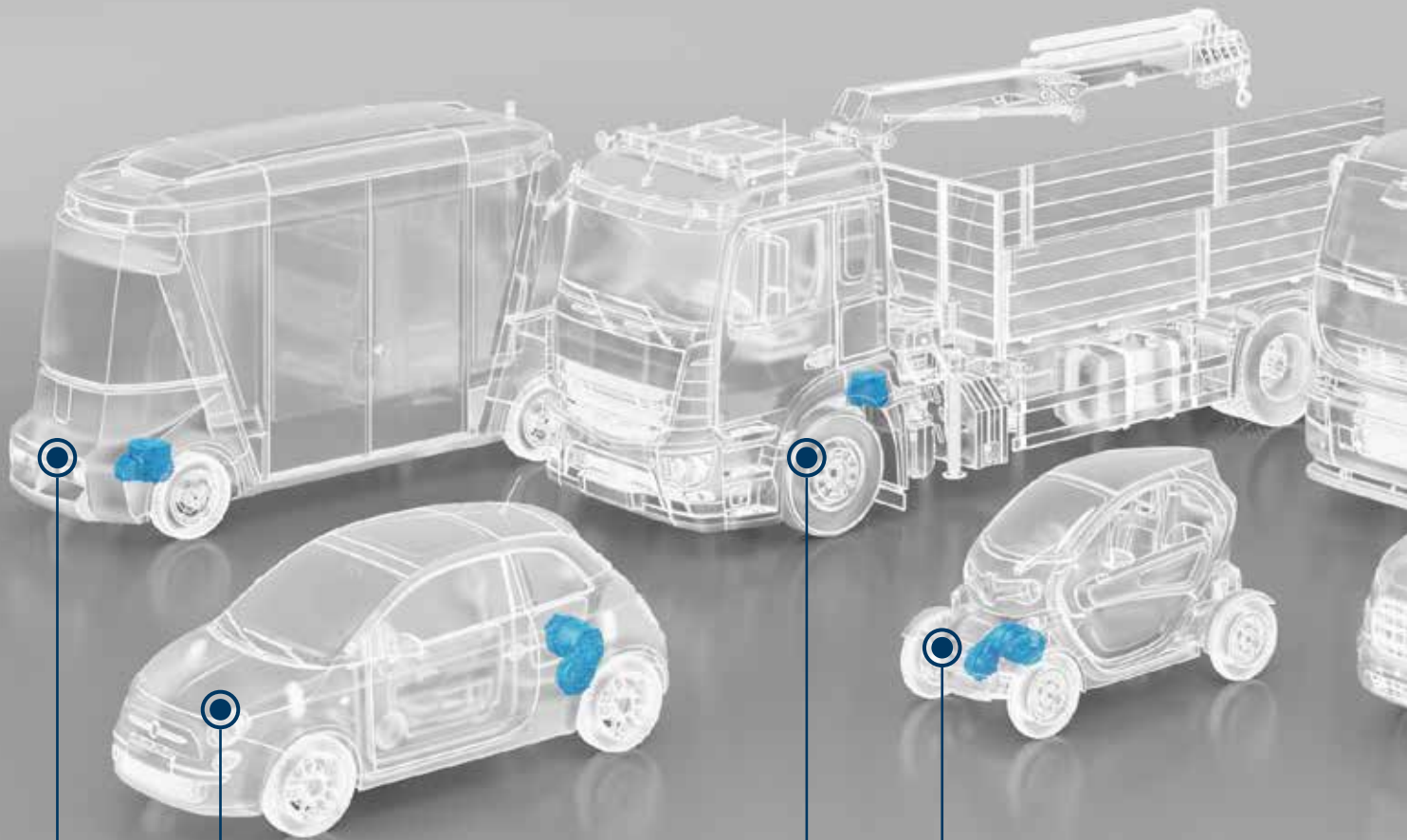
Ramped-up production of differential drives used in commercial vehicles



2021

Bonfiglioli launches E-AXLE & HydroBEV, all-in-one solution





5 AUTONOMOUS SHUTTLE BUS



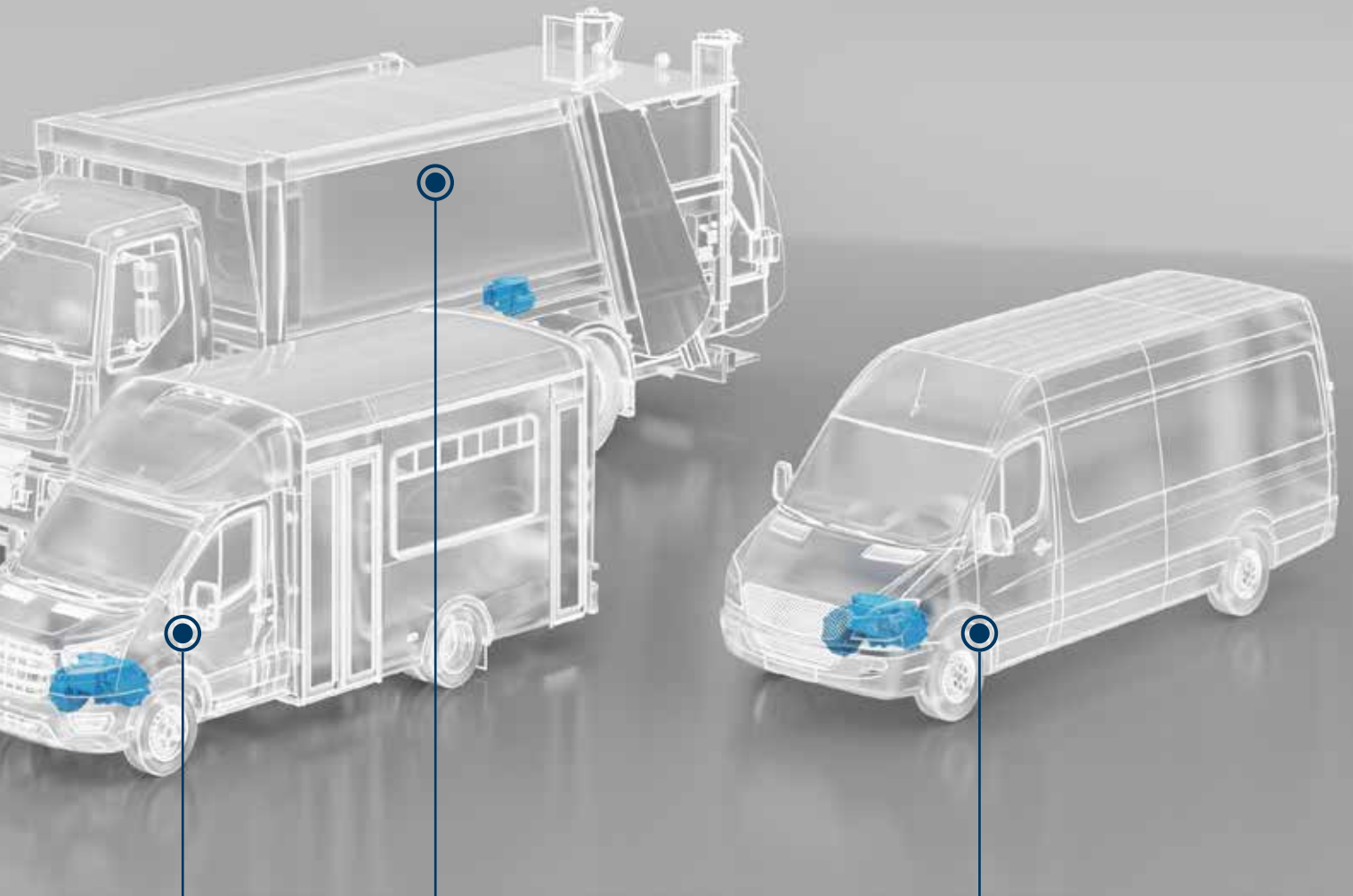
3 SUBCOMPACT VEHICLES



6 TRUCK CRANES



2 URBAN VEHICLES



4 URBAN BUSES

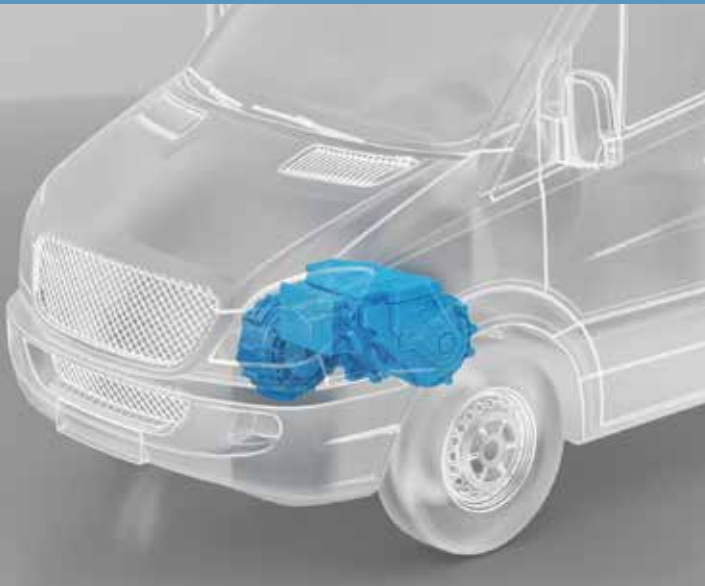
7 GARBAGE TRUCKS

1 CARGO VANS

1

CARGO VANS

Bonfiglioli supplies integrated electric powertrains for battery-powered commercial vehicles. e-Axle is a modular system that guarantees easy installation, 80% less weight and volume compared to internal combustion engines, high power density and easily adaptable to different vehicle architectures with mechanical transmissions. The compact, modular system ensures easier integration and maintenance.



E-AXLES Series
Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

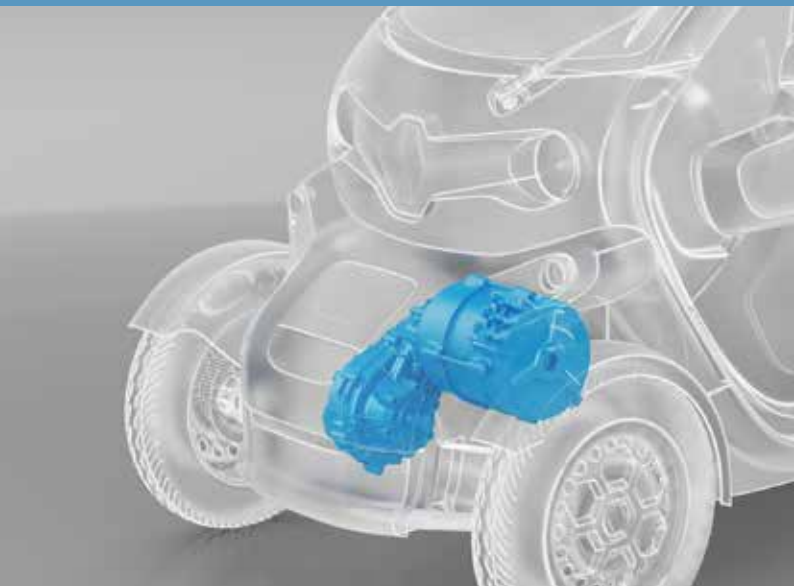
FEATURES

- The E-AXLES series can be configured as:
 - e-Axle - with differential
 - TransAxle - with/without gearbox
 - CentrAxle - with/without gearbox
- Telematics Control Board available as a system option
- System efficiency reaches 93%
- Scalable power from 70kW to 120kW peak
- Permanent magnet synchronous motor technology
- Adaptable to various applications adding a powertrain control unit
- Available with inverter in slave or master configuration, with torque and speed control functions

TECHNICAL DATA

		e-Axle			TransAxle & CentrAxle (with gearbox)			TransAxle & CentrAxle (without gearbox)		
		up to 70kW	90kW	120kW	up to 70kW	90kW	120kW	up to 70kW	90kW	120kW
Torque range	(Nm)	1,732	3,895	3,895	511	728	728	165	260	260
Speed transmission with gear ratio	i:	10.5	14.98	14.98	3.1	2.8	2.8	-	-	-
Motor max Output speed	(rpm)	1,143	734	734	3,870	3,928	3,928	12,000	11,000	11,000





2

URBAN VEHICLES

Bonfiglioli supplies low-noise differential transmissions driven by electric motors for all-electric battery-powered quadricycles, also known as urban electric vehicles. Designed to meet the legal limits of seats, weight and power, urban electric vehicles are a clever solution against traffic jams and parking issues. Helping to reshape city life, quadricycles are perfectly suited for micromobility, short commutes or car-sharing companies.



600D Series
Wheel Drives

BENEFITS

- Optimized gear design
- Maximum efficiency
- Minimum noise
- Lightweight
- Reduced maintenance
- Versatile installation in the chassis

FEATURES

- Multi-stage, parallel shaft gearbox with reduction ratios of up to 1:15
 - Integrated mechanical differential
 - Cast aluminum housing
 - Low voltage electric traction motor with inverter control
- Optional features available on request**
- Input for 2 electric motors
 - Integrated mechanical parking lock
 - Integrated, high resolution Hall-effect speed sensor
 - Matched mechanical joints and shafts
 - Matched electric motors and inverters

TECHNICAL DATA

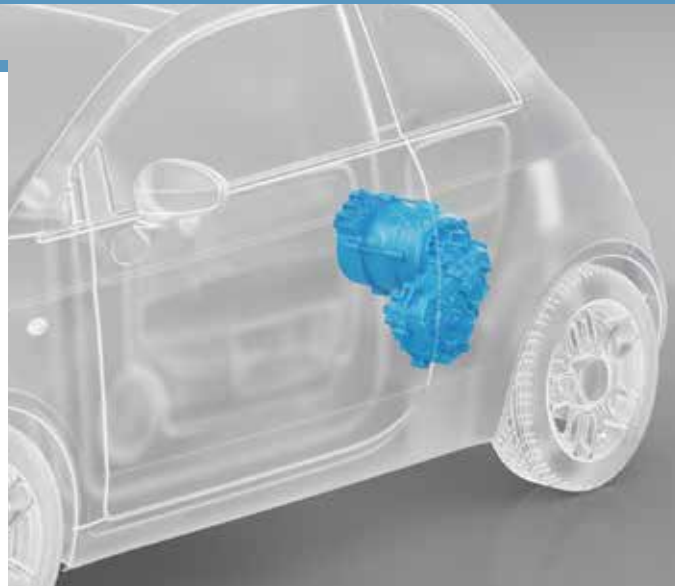
	Torque (Nm)
600 D	1,000
601 D	1,500
602 D	4,500



3

SUBCOMPACT VEHICLES

Bonfiglioli supplies low-noise differential transmissions driven by electric motors for all-electric battery-powered subcompact vehicles, better known as city cars. Agile and fuel-efficient, city cars are a response to increased urbanization and greater interest in green living. City cars are also great candidates for electrification, due to the limited power and battery life typically required.



600D Series

Wheel Drives

BENEFITS

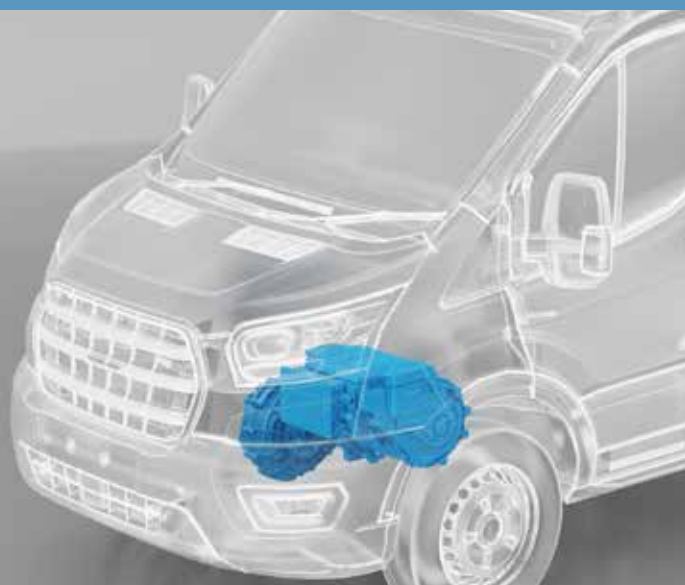
- Optimized gear design
- Maximum efficiency
- Minimum noise
- Lightweight
- Reduced maintenance
- Versatile installation in the chassis

FEATURES

- Multi-stage, parallel shaft gearbox with reduction ratios of up to 1:15
 - Integrated mechanical differential
 - Cast aluminum housing
 - Low voltage electric traction motor with inverter control
- Optional features available on request**
- Input for 2 electric motors
 - Integrated mechanical parking lock
 - Integrated, high resolution Hall-effect speed sensor
 - Matched mechanical joints and shafts
 - Matched electric motors and inverters

TECHNICAL DATA

	Torque (Nm)
600 D	1,000
601 D	1,500
602 D	4,500



4

URBAN BUSES

Bonfiglioli offers integrated electric powertrains for the electrification of urban bus traction for commercial vehicles up to 10 T, with different powertrain architectures. The powertrains have approximately 80% less weight and volume compared to the conventional combustion engines used in the same applications. The powertrain's control electronics facilitate integration with the vehicle system, meeting the safety standards required by current regulations. The "all-in-one" system reduces the complexity of the vehicle architecture, as well as integration costs and times. The compact, modular system ensures easier integration and maintenance.



E-AXLES Series
Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

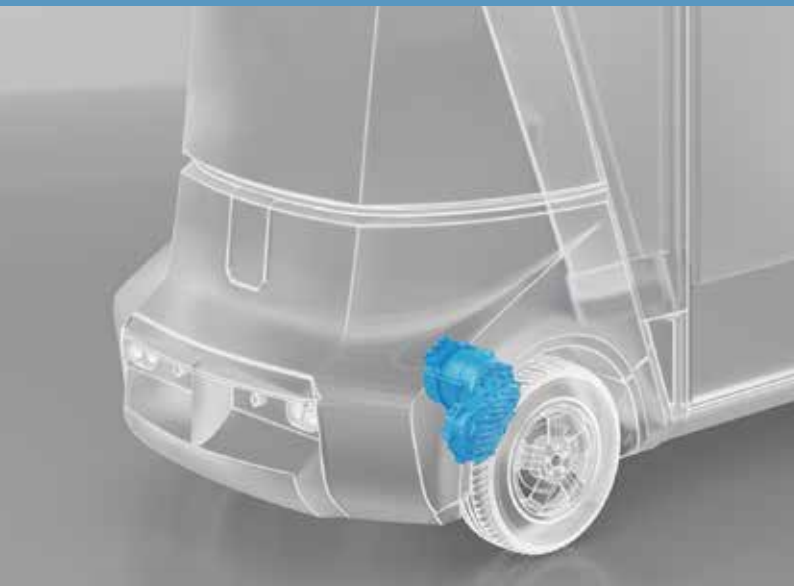
FEATURES

- The E-AXLES series can be configured as:
 - e-Axle - with differential
 - TransAxle - with/without gearbox
 - CentrAxle - with/without gearbox
- Telematics Control Board available as a system option
- System efficiency reaches 93%
- Scalable power from 90kW to 120kW peak
- Permanent magnet synchronous motor technology
- Adaptable to various applications adding a powertrain control unit
- Available with inverter in slave or master configuration, with torque and speed control functions

TECHNICAL DATA

		e-Axle		TransAxle & CentrAxle (with gearbox)		TransAxle & CentrAxle (without gearbox)	
		90kW	120kW	90kW	120kW	90kW	120kW
Torque range	(Nm)	3,895	3,895	728	728	260	260
Speed transmission with gear ratio	i:	14.98	14.98	2.8	2.8	-	-
Motor max Output speed	(rpm)	734	734	3,928	3,928	11,000	11,000





5

AUTONOMOUS SHUTTLE BUSES

Wheel drives

Bonfiglioli supplies low-noise differential transmissions driven by electric motors for all-electric battery-powered autonomous shuttle buses. Designed for a limited number of passengers, both seated and standing, autonomous shuttle buses are common on university campuses and busy city streets to bridge the first or last mile of a trip. Fully autonomous, these buses can harness artificial intelligence to choose the most efficient route based on real time pick-up and drop-off requests, or they may also be driven along a pre-determined route. Thanks to their lightweight design and optimized helical gears, Bonfiglioli transmissions guarantee energy efficiency and an extended battery life. With a single-speed gearbox, the vehicle is also easy to drive and requires low maintenance.



600D Series
Wheel Drives

BENEFITS

- Optimized gear design
- Maximum efficiency
- Minimum noise
- Lightweight
- Reduced maintenance
- Versatile installation in the chassis

FEATURES

- Multi-stage, parallel shaft gearbox with reduction ratios of up to 1:15
- Integrated mechanical differential
- Cast aluminum housing
- Low voltage electric traction motor with inverter control
- **Optional features available on request**
 - Input for 2 electric motors
 - Integrated mechanical parking lock
 - Integrated, high resolution Hall-effect speed sensor
 - Matched mechanical joints and shafts
 - Matched electric motors and inverters

TECHNICAL DATA

	Torque (Nm)
600 D	1,000
601 D	1,500
602 D	4,500



Electric drive system

Bonfiglioli offers integrated electric powertrains for the electrification of shuttle bus traction, with different powertrain architectures. The powertrains have approximately 80% less weight and volume compared to the conventional combustion engines used in the same applications.

The powertrain's control electronics facilitate integration with the vehicle system, meeting the safety standards required by current regulations. The "all-in-one" system reduces the complexity of the vehicle architecture, as well as integration costs and times.

The compact, modular system ensures easier integration and maintenance.



E-AXLES Series
Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

FEATURES

- The E-AXLES series can be configured as:
 - e-Axle - with differential
 - TransAxle - with/without gearbox
 - CentrAxle - with/without gearbox
- Telematics Control Board available as a system option
- System efficiency reaches 93%
- 70kW power peak
- Permanent magnet synchronous motor technology
- Adaptable to various applications adding a powertrain control unit
- Available with inverter in slave or master configuration, with torque and speed control functions

TECHNICAL DATA

		e-Axle up to 70kW	TransAxle & CentrAxle (with gearbox) up to 70kW	TransAxle & CentrAxle (without gearbox) up to 70kW
Torque range	(Nm)	1,732	511	165
Speed transmission with gear ratio	i:	10.5	3.1	-
Motor max Output speed	(rpm)	1,143	3,870	12,000





6

TRUCK CRANES

Bonfiglioli offers integrated electric powertrains for the electric control of truck-mounted crane systems, in order to improve their efficiency, reduce CO₂ emissions and noise levels. Environmental sustainability is guaranteed by the fact that the electric system can be operated even when the vehicle's diesel engine is switched off, which makes the application usable both in urban areas and indoors, in compliance with increasingly stringent environmental regulations regarding exhaust gas emissions and noise pollution. The compact, modular electric drive system ensures easier integration and maintenance.



HydroBEV Series

Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

FEATURES

- Scalable power from 70kW to 120kW
- Powertrains options:
 - **e-Dro 70**: predisposition for pump connection for SAE A and SAE B, with SP Line ANSI B92.1 shaft
 - **e-Dro 90/120**: predisposition for pump connection for SAE A, SAE B, SAE C, with shaft SP Line ANSI B92.1
- Permanent magnet synchronous motor technology
- System efficiency reaches 93%
- Telematics Control Board available as a system option
- Adaptable to various applications adding the powertrain control unit
- Available with inverter in slave or master configuration with torque and speed control functions.

TECHNICAL DATA

		e-Dro		
		up to 70kW	90kW	120kW
Torque range	(Nm)	495	780	780
Speed transmission with gear ratio	i:	3.0	3.0	3.0
Motor max output speed	(rpm)	4,000	3,660	3,660

7

GARBAGE TRUCKS

Bonfiglioli offers integrated electric powertrains for the electrification of compaction systems on commercial vehicles, in order to improve efficiency, reduce CO₂ emissions and noise levels. Environmental sustainability is guaranteed by the fact that the electrical system can be operated even when the vehicle's diesel engine is switched off, which makes the application particularly suitable to urban environments, in compliance with increasingly stringent environmental regulations regarding exhaust gas emissions and noise pollution. The electrification of large vehicles is not easy to implement, while the electrification of auxiliary devices is particularly useful and can reduce or eliminate downtime during work cycles. The compact, modular electric drive system ensures easier integration and maintenance.



HydroBEV Series
Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

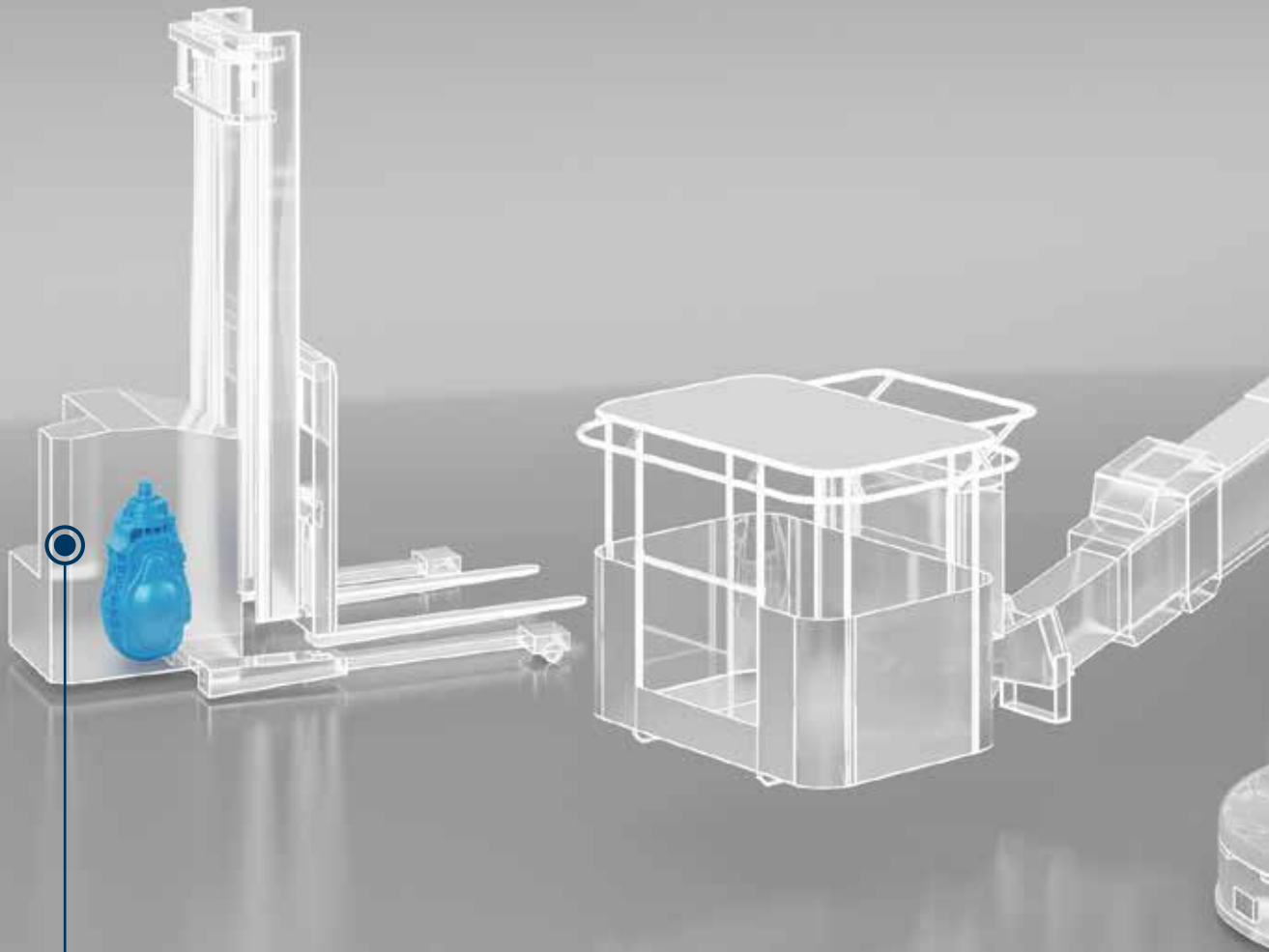
FEATURES

- Scalable power from 70kW to 120kW
- Powertrains options:
 - **e-Dro 70**: predisposition for pump connection for SAE A and SAE B, with SP Line ANSI B92.1 shaft
 - **e-Dro 90/120**: predisposition for pump connection for SAE A, SAE B, SAE C, with shaft SP Line ANSI B92.1
- Permanent magnet synchronous motor technology
- System efficiency reaches 93%
- Telematics Control Board available as a system option
- Adaptable to various applications adding the powertrain control unit
- Available with inverter in slave or master configuration with torque and speed control functions.

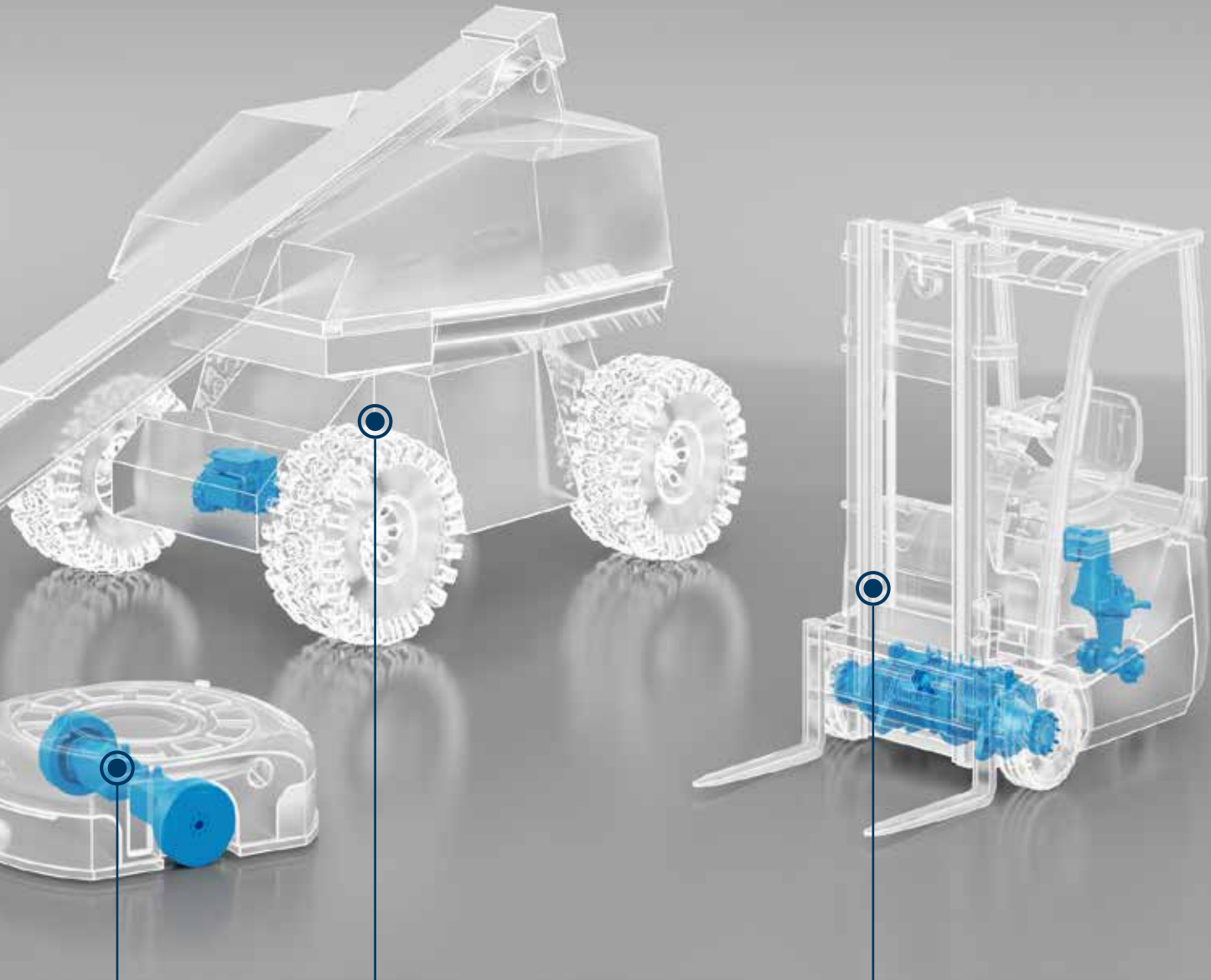
TECHNICAL DATA

		e-Dro		
		up to 70kW	90kW	120kW
Torque range	(Nm)	495	780	780
Speed transmission with gear ratio	i:	3.0	3.0	3.0
Motor max output speed	(rpm)	4,000	3,660	3,660





2 REACH TRUCKS



4 ACCESS PLATFORMS
CENTRALIZED AND DECENTRALIZED
SOLUTIONS AVAILABLE

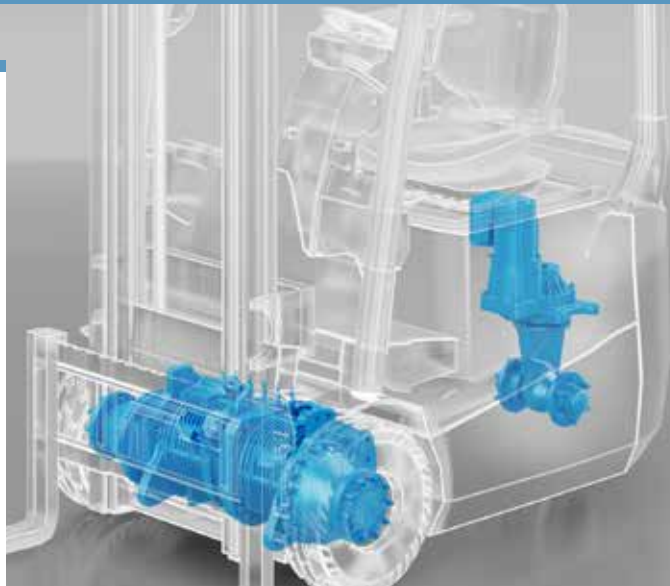
1 FORKLIFTS

3 AUTOMATIC GUIDED VEHICLES

1

FORKLIFTS

Bonfiglioli supplies high-efficiency, low-noise planetary axles and drives with integrated high performance electric motors and low maintenance braking systems for Class 1 material handling vehicles. Typical applications include 3- and 4-wheel counterbalance lift trucks and ground support equipment. Bonfiglioli electric powertrains are fully tested in the factory and guarantee low energy consumption. This, in turn, means longer battery operating times, extended servicing intervals and lower costs of ownership.



600F Series
Traction Systems



600W0C Series
Idle Steering System

BENEFITS

- Maximum efficiency
- Minimum noise
- Complete solution
- Fully tested

FEATURES

- Dual stage gearbox
- Optimized gear design
- Service brake
- Parking brake
- Integrated, customized mast support
- Integrated AC traction motor protection rating up to IP54
- Integrated, high accuracy, silicon-based temperature sensor
- Integrated, high resolution hall effect speed sensor

- 360° steering
- Complete solution
- Fully tested

- Hydraulic steering
- Electric steering for 601W0
- Optimized steering angle design

TECHNICAL DATA

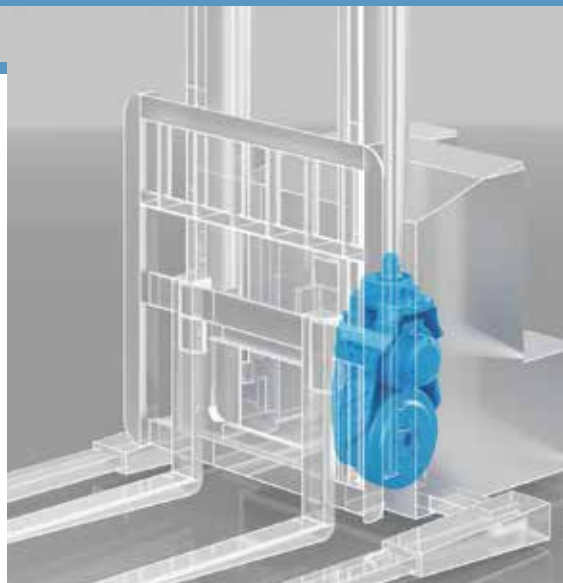
	Axle torque (Nm)	Lift capacity (kg)
601 F	3,000	2,000
602 F	5,500	3,500
603 F	7,000	5,000
605 F	18,000	9,000
610 F	50,000	16,000

	Lift capacity (kg)
601 W0C	2,000
602 W0C	3,000
603 W0C	3,500

2

REACH TRUCKS

Bonfiglioli EL steerable drives are a perfect match for the most demanding warehousing applications (Class 2 and Class 3). Warehousing trucks require high maneuverability in tight spaces, provided by drives like those in the EL series, with the smallest operating radius in vertical arrangements.



EL Series

Steerable Drives

BENEFITS

- Maximum efficiency
- Minimum noise
- Complete solution
- Fully tested

FEATURES

- Two-stage helical & bevel gearboxes
- Manual steering and power steering versions
- Optimized gear design for efficiency and noise
- Integrated low-voltage electric motor
- Integrated parking brake
- Complete system with tires

TECHNICAL DATA

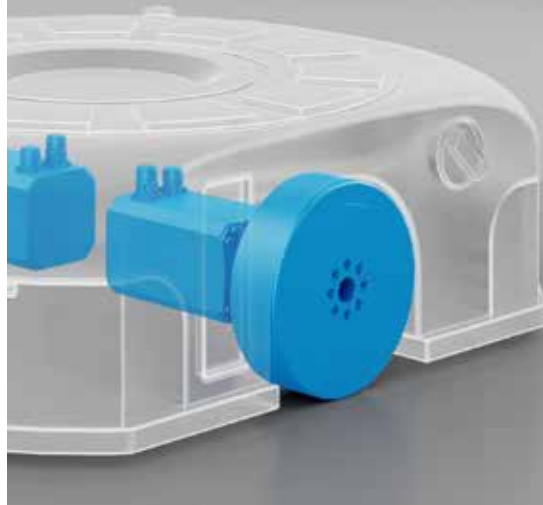
	Torque (Nm)	Max wheel load (kg)
EL100	450	1,200
EL09	500	1,200
EL96	500	1,500
EL10	900	1,500
EL300	1,100	2,200
EL92	1,500	3,000
EL93	1,500	3,000
EL94	1,500	3,000
EL14	1,900	3,400
EL16	2,500	4,000



3

AUTOMATIC GUIDED VEHICLES

Automatic Guided Vehicles (AGVs) and Autonomous Mobile Robots (AMRs) are a range of driverless transportation robots that can autonomously transport materials through designated pickup and delivery routes within a facility. AGVs and AMRs are easy to integrate into existing processes, simplifying intralogistic flows and increasing automation levels. Due to this, a wide range of sectors is adopting these solutions.



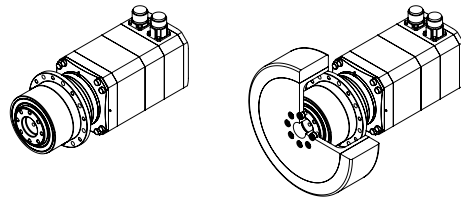
In order to meet the requirements of a wide range of different vehicle concepts and designs, Bonfiglioli offers a **modular approach** for AGV solutions, allowing the selection of the **best configuration** to effectively suit the needs of each specific application.

Based on the design of your vehicle, we can supply **single components** (servomotor or precision planetary gearbox, with and without wheel) **or integrated geared motor solutions**, together with a wide range of **sector-specific components and options**, specially tuned to the requirements of AGV and logistic systems.

Customized levels of integration

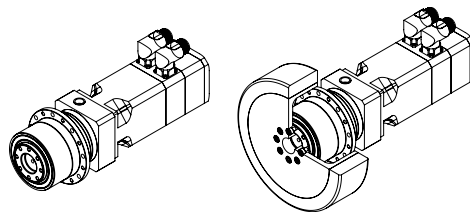
BLUEROLL COMPACT

Extra compact
Servo geared motors



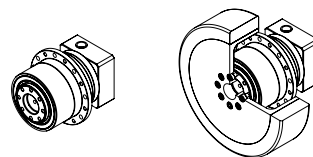
BLUEROLL ADVANCED

Servo geared motors



BLUEROLL BASIC

Precision Planetary Gearboxes



Every BlueRoll version is available both with and without the wheel.



BlueRoll Basic

TQW: the new Wheel-Mounted Gearbox Series

- Easy installation
- Heavy load capability
- Great reliability
- Minimized installation space



BlueRoll Advanced

Powerful and Compact Servo Gearmotors

- High energy efficiency
- Rigid and accurate
- High torque capability
- High flexibility



BlueRoll Compact

Extra Compact Servo Gearmotors

- Simplified AGV design
- Suitable for long operation times
- Top level configuration

BENEFITS

FEATURES

- Three gearmotor sizes, rated for loads up to: 360kg, 720kg and 1020kg
- Speed up to 2 m/s
- New wheel-mounted precision planetary gearbox: TQW
- Permanent magnet synchronous motors with premium efficiency
- Wide range of feedback systems, including safety encoders
- Compact, extensively customizable design

TECHNICAL DATA

	Torque (Nm)
TQW 060	30
TQW 070	65
TQW 090	155

4

ACCESS PLATFORMS

Wheel drives

With a reliable series of products made for access platforms, Bonfiglioli gives machine builders the best possible choice of drive systems. The compact, silent, highly efficient and maintenance-free integrated drive motors are excellent with access platforms for indoor and outdoor use.

Slew drives

Bonfiglioli slew drives are the most effective solution for both hydraulic and electric access platforms.



600WE Series
Wheel Drives



700T Series
Slew Drives

BENEFITS

- Compact dimensions
- Low noise
- High efficiency
- Maintenance free motors

- Rugged construction
- Flange mounted
- High torque capacity

FEATURES

- Two- or three-stage planetary drive with reduction ratios of up to 1:145
- Optimized gear design for maximum efficiency and minimum noise
- Integrated, low voltage, 3-phase induction motor
- Integrated, high accuracy, temperature sensor
- High resolution, hall effect speed sensor
- Motor protection degree up to IP67

- Driven by hydraulic or electric motor
- Output shaft with pinion
- Compact design
- Wide choice of pinions
- Including brake, wet disc or electromagnetic

TECHNICAL DATA

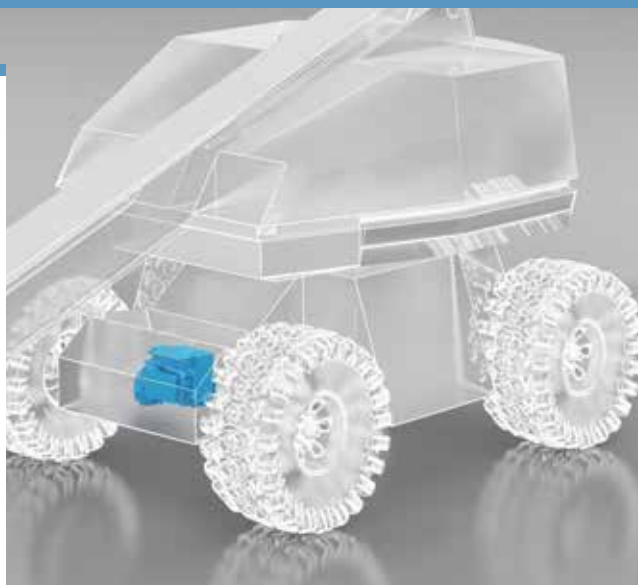
	Torque (Nm)
600 WL	500
600 WE	900
601 RE	3,000
602 RE	3,500
602 WE	4,500
604 WE	7,000
605 WE	10,000

	Torque (Nm)
700 T F	1,200
701 T F	2,400
703 T F	3,500
705 T F	6,500

Electric drive system

Bonfiglioli supplies electric integrated powertrains for battery-powered Access platforms. e-Axle is a modular system that guarantees easy installation, 80% less weight and volume compared to internal combustion engines, high power density and it is easily adaptable to different vehicle architectures with mechanical transmissions.

This compact, modular system ensures easy integration and maintenance.



E-AXLES Series

Electric Drive System

BENEFITS

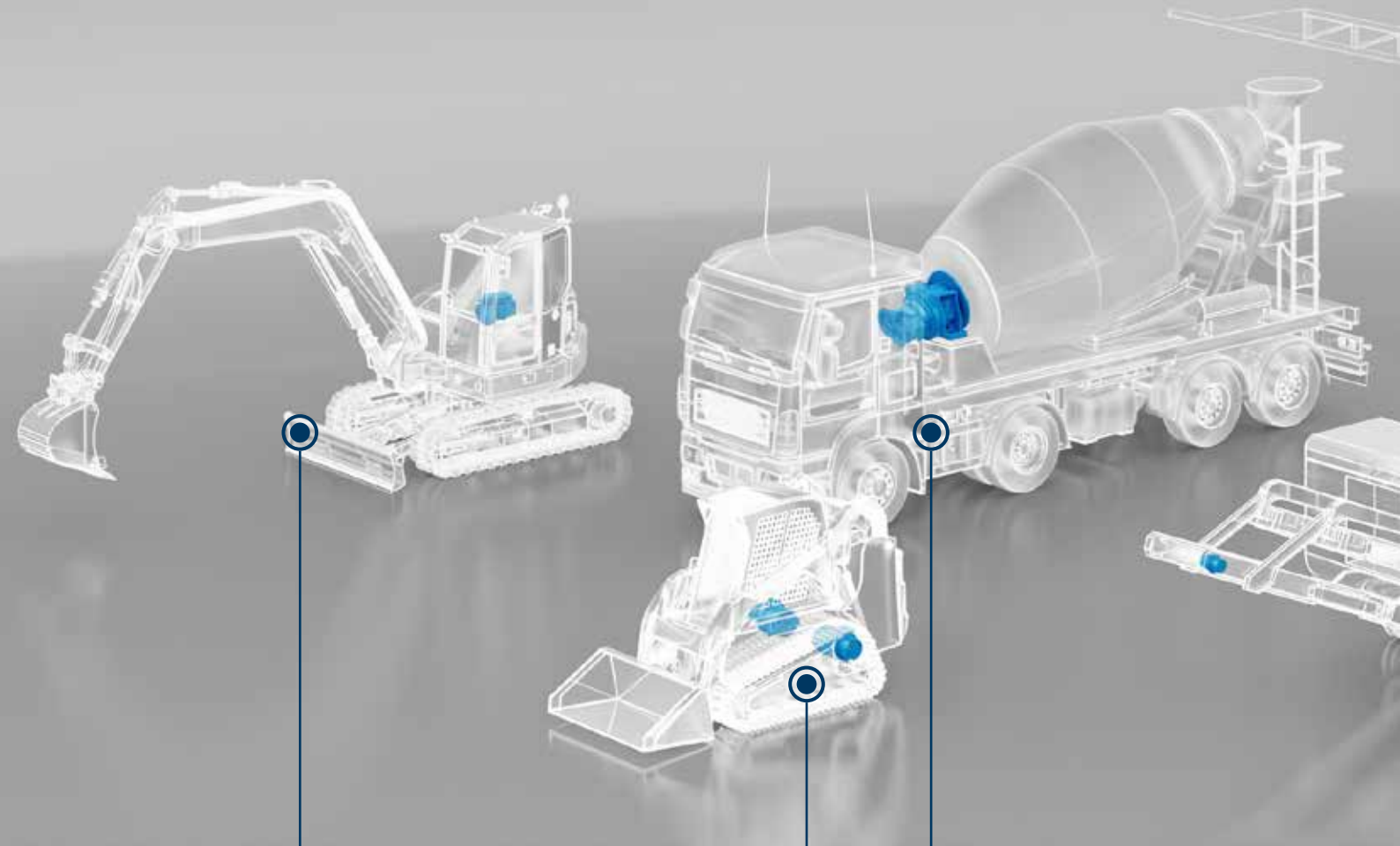
- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

FEATURES

- E-AXLES series can be configured as:
 - TransAxle - with/without gearbox
 - CentrAxle - with/without gearbox
- Telematics control board available as system option
- System efficiency reaches 93%
- Scalable power from 90kW to 120kW peak
- Permanent magnet synchronous motor technology
- Adaptable to various applications adding a powertrain control unit
- Available with inverter in Slave or Master configuration, with torque and speed control functions

TECHNICAL DATA

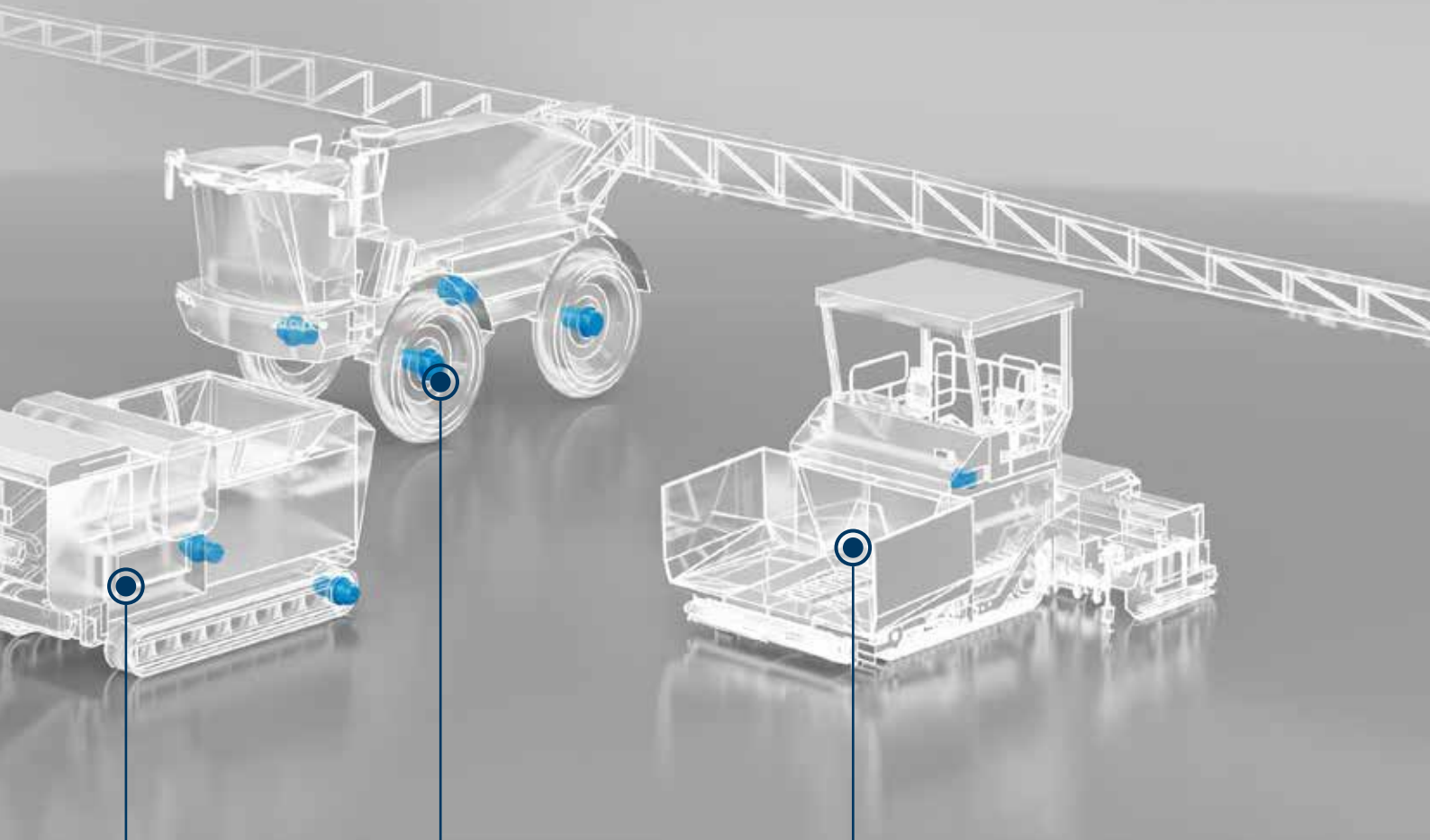
		TransAxle & CentrAxle (with gearbox)		TransAxle & CentrAxle (without gearbox)	
		90kW	120kW	90kW	120kW
Torque range	(Nm)	728	728	260	260
Speed transmission with gear ratio	i:	2.8	2.8	-	-
Motor max Output speed	(rpm)	3,928	3,928	11,000	11,000



1 EXCAVATORS
CENTRALIZED AND DECENTRALIZED
SOLUTIONS AVAILABLE

2 COMPACT TRACKS LOADER

6 TRANSIT MIXER TRUCKS



3 CRUSHERS & SCREENERS

5 SPRAYERS

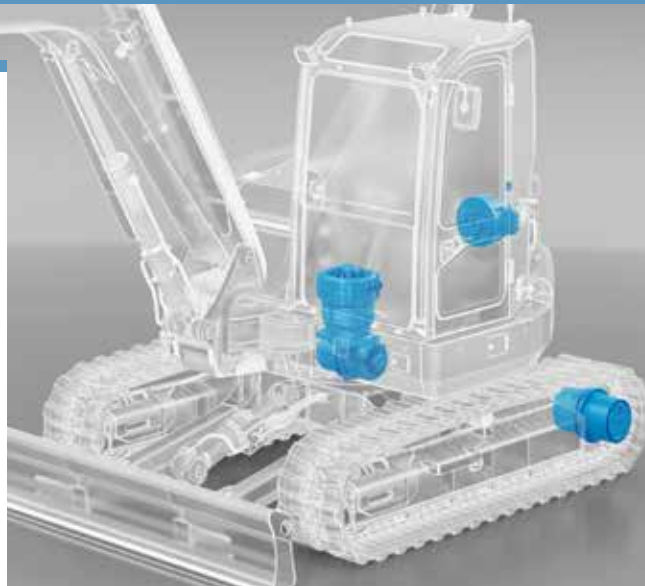
4 PAVERS
CENTRALIZED AND DECENTRALIZED
SOLUTIONS AVAILABLE

1

EXCAVATORS

Track, slew and pump drives

Thanks to a reliable series of products for 1 to 6 ton mini-excavators, Bonfiglioli gives machine builders the best possible choice of drive system. High performance, including high torque in a compact space, is one of our portfolio's key benefits. These solutions allow for smooth machine operation.



700CE Series
Track Drives



700TE Series
Slew Drives



PM MOTOR Series
Pump Drives

BENEFITS

- Compact
- High performance
- High torque in a limited space
- TCO reduction
- Easy maintenance
- Low noise
- No polluting emissions

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- Compact
- High performance
- High torque in a limited space
- TCO reduction
- Easy maintenance
- Low noise
- No polluting emissions

FEATURES

- Reduced axial length thanks to PM e-motor
- Fully integrated design
- Integrated electromagnetic parking brake
- Integrated speed and temperature sensors
- High protection rating

- Fully integrated design
- Integrated electromagnetic brake
- Integrated speed and temperature sensors
- High protection rating

- Permanent magnet motors
- Suitable for 48-96 Vdc batteries
- Air cooled
- Aluminum housing
- Protection rating >IP65
- SAE flanges available

TECHNICAL DATA

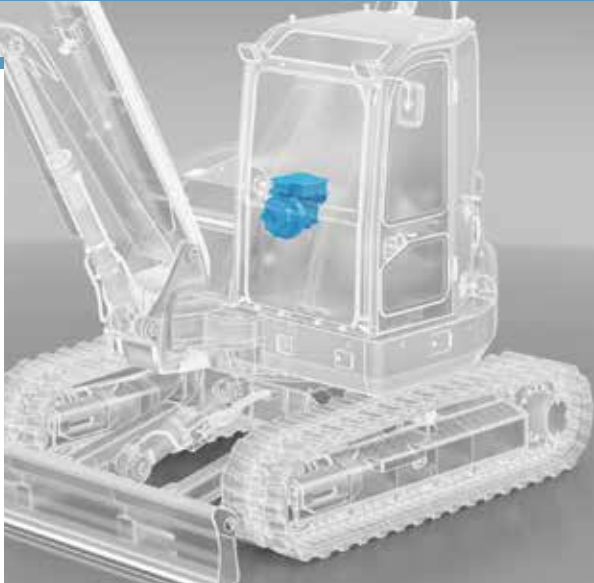
	Torque (Nm)
700 CE	1,200
700-2 CE	1,900
701 CE	2,500
702 CE	3,500
704 CE	5,000
705 CE	9,000

	Torque (Nm)
700 TE	750
701 TE	1,200
703 TE	2,500
705 TE	5,000

	Rated power (kW)
BTM 200-L1	4
BTM 200-L2	7.5
BTM 200-L3	10
BTM 200-L4	15

Electric drive system

Bonfiglioli offers integrated electric powertrains to replace conventional combustion engines through e-Dro, and to electrify small excavators in order to improve their efficiency and reduce CO₂ emissions and noise levels. e-Dro is a modular system that guarantees easy installation, 80% less weight and volume compared to internal combustion engines, high power density and easily adaptable to different vehicle architectures with hydrostatic transmission. The compact, modular system ensures easier integration and maintenance.



HydroBEV Series
Electric Drive System

BENEFITS

- Compact
- High power density & efficiency
- Modular
- Easy installation
- Reduced time-to-market
- Reduced EV knowledge and vehicle modifications
- ~80% less weight and volume compared to conventional internal combustion engines

FEATURES

- Scalable power from 70kW to 120kW
- Powertrains options:
 - e-Dro 70: predisposition for pump connection for SAE A and SAE B, with SP Line ANSI B92.1 shaft
 - e-Dro 90/120: predisposition for pump connection for SAE A, SAE B, SAE C, with shaft SP Line ANSI B92.1
- Permanent magnet synchronous motor technology
- System efficiency reaches 93%
- Telematics Control Board available as a system option
- Adaptable to various applications adding the powertrain control unit
- Available with inverter in slave or master configuration with torque and speed control functions.

TECHNICAL DATA

		e-Dro		
		up to 70kW	90kW	120kW
Torque range	(Nm)	495	780	780
Speed transmission with gear ratio	i:	3.0	3.0	3.0
Motor max output speed	(rpm)	4,000	3,660	3,660



2

COMPACT TRACKS LOADER

Bonfiglioli's electric version of the track drive combines the validated gearbox design with a liquid-cooled permanent magnet motor, offering a compact package that equals and even exceeds the propulsion and thrust performances of conventional machines, because power and torque are immediately available to the electric motor at every operating speed.

Additionally, as the track gearboxes are electrically driven, the machine can work in sensitive areas where emissions and noise are a concern, even on night shifts. Lastly, electric motors are virtually maintenance-free, allowing for longer maintenance intervals.



700CTE Series

Track Drives

BENEFITS

- Ability to work inside sensible areas without emissions
- Machine works without noise and less vibration
- Increased productivity
- Less maintenance
- Maneuverability
- Compact design

FEATURES

- Multistage planetary gearbox
- Rotating housing output
- Validated in the field
- Integrated parking brake
- Specific heavy duty seals
- Permanent magnet motors
- Suitable for 400 - 700Vdc batteries
- Liquid cooled
- Protection rating >IP67
- Rated power up to 30 kW

TECHNICAL DATA

	Torque (Nm)
704 CTE	5,000
705 CTE	12,500

3

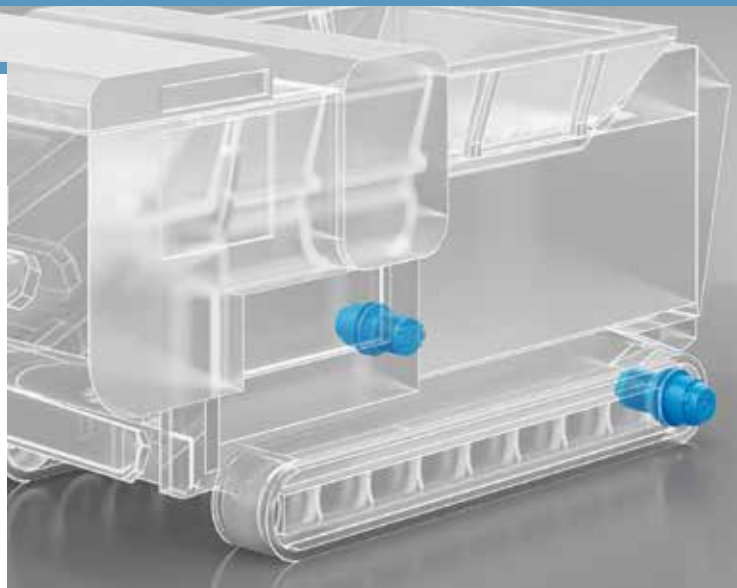
CRUSHERS & SCREENERS

Track drives

With a reliable series of products for crushing equipment, Bonfiglioli gives OEMs the best possible choice of track drive system. High performance, including high torque in a compact space, is one of our portfolio's key benefits. These solutions give the machine smooth operation and long product life.

Conveyor drives

The performance of Bonfiglioli's drives guarantees low level of maintenance, helping our customers increase reliability and cut costs.



700CE Series
Track Drives



800 Series
Conveyor Drives

BENEFITS

Benefits for end-users

- Reduced fuel consumption
- Increased productivity
- Better machine maneuverability
- The electric solution is cleaner: lower risk of oil spills

Benefits for OEMs

- Ability to downsize and downspeed combustion engines
- Easy installation: electric solution dimensions comparable to standard hydrostatics
- Higher system reliability: fewer mechanical parts
- Virtually maintenance-free electric motors
- From sprocket to electric wire with only one supplier

- High torque capacity
- High load capacity

FEATURES

- Gear ratios up to 166
- Input speed up to 6,000 rpm
- Multistage planetary gearbox
- Rotating housing output
- Validated in the field

- Permanent magnet motors
- Suitable for 400 - 700Vdc batteries
- Liquid cooled
- Aluminum or cast iron housing
- Protection rating >IP54

- Rotating housing flange
- Rugged construction
- Optional freewheel for anti-runback device

TECHNICAL DATA

	Torque (Nm)
707 CE	26,000
709 CE	30,000
710 CE	36,000
711 CE	45,000
713 CE	60,000

	Rated power (kW)
BTM 240-L1	20
BTM 240-L2	35
BTM 240-L3	65
BTM 300-L1	100
BTM 300-L2	150

	Torque (Nm)
805 W2	5,000
806 W2	10,000
810 F2	17,500
811 W2	27,000
813 W3	42,000





4

PAVERS

Wheel and track drives

Bonfiglioli produces a series of reliable drives to give paving machine builders a selection of quality drive systems. Our entire portfolio boasts top-level performances, including high torque in a compact space with limited axial dimensions. The electric version has fixed ratio or hydraulic-operated shift.



600W Series

Wheel Drives

BENEFITS

Benefits for OEMs

- Ability to downsize and downspeed combustion engines
- Easy installation: electric solution dimensions comparable to standard hydrostatics
- Higher system reliability: fewer mechanical parts
- Virtually maintenance-free electric motors
- From wheel bolt to electric wire with only one supplier

Benefits for end users

- Reduced fuel consumption
- Increased productivity
- Better machine maneuverability
- The electric solution is cleaner: lower risk of oil spills

FEATURES

- Multistage planetary gearbox
- Rotating housing output
- Validated in the field

- Permanent magnet motors
- Suitable for 400 - 700Vdc batteries
- Liquid cooled
- Aluminum or cast iron housing
- Protection rating >IP54

TECHNICAL DATA

	Torque (Nm)
605 W..V..	10,000
606 W..V	17,000
607 W..V	22,000
609 W..V	30,000
610 W..V	36,000
610 X	40,000
611 W..V	45,000
613 W	60,000

	Rated power (kW)
BTM 240-L1	20
BTM 240-L2	35
BTM 240-L3	65
BTM 300-L1	100
BTM 300-L2	150



700CE Series
Track Drives

BENEFITS

Benefits for OEMs

- Ability to downsize and downspeed combustion engines
- Easy installation: electric solution dimensions comparable to standard hydrostatics
- Higher system reliability: fewer mechanical parts
- Virtually maintenance-free electric motors
- From sprocket to electric wire with only one supplier

Benefits for end-users

- Reduced fuel consumption
- Increased productivity
- Better machine maneuverability
- The electric solution is cleaner: lower risk of oil spills

FEATURES

- Multistage planetary gearbox
- Rotating housing output
- Validated in the field
- Permanent magnet motors

- Suitable for 400 - 700Vdc batteries
- Liquid cooled
- Aluminum or cast iron housing
- Protection rating >IP54

TECHNICAL DATA

	Torque (Nm)
707 CE	26,000
709 CE	30,000
710 CE	36,000
711 CE	45,000
713 CE	60,000

	Rated power (kW)
BTM 240-L1	20
BTM 240-L2	35
BTM 240-L3	65
BTM 300-L1	100
BTM 300-L2	150



5

SPRAYERS

With a series of reliable products for wheeled sprayers, Bonfiglioli offers machine builders a range of excellent drive systems.

Our portfolio guarantees performance, including high torque in a compact space with limited axial dimensions. The electric version includes a maintenance-free compact electric motor, which offers comparable dimensions to the hydraulic one.



600W Series
Wheel Drives

BENEFITS

Benefits for OEMs

- Ability to downsize and downspeed combustion engines
- Easy installation: electric solution dimensions comparable to standard hydrostatics
- Higher system reliability: fewer mechanical parts
- Virtually maintenance-free electric motors
- From wheel bolt to electric wire with only one supplier

Benefits for end users

- Reduced fuel consumption
- Increased productivity
- Better machine maneuverability
- The electric solution is cleaner: lower risk of oil spills

FEATURES

- Multistage planetary gearbox
- Rotating housing output
- Validated in the field

- Permanent magnet motors
- Suitable for 400 - 700Vdc batteries
- Liquid cooled
- Aluminum or cast iron housing
- Protection rating >IP54

TECHNICAL DATA

	Torque (Nm)
605 W..V..	10,000
606 W..V	17,000
607 W..V	22,000
609 W..V	30,000
610 W..V	36,000
610 X	40,000
611 W..V	45,000
613 W..V	60,000

	Rated power (kW)
BTM 240-L1	20
BTM 240-L2	35
BTM 240-L3	65
BTM 300-L1	100
BTM 300-L2	150



6

TRANSIT MIXER TRUCKS

Our solutions for concrete trucks offer precision rpm control, low noise levels and fuel consumption as well as maintenance and reduced fuel costs. Available in both electric and hydraulic versions, Bonfiglioli drum drives are designed around the needs of machine builders. Our electric version not only guarantees greater energy efficiency and reduced fuel consumption, but also cuts cement mixer truck operating costs.



500 Series
Drum Drives

BENEFITS

- Enhanced operational reliability
- Reduced maintenance costs
- Increased energy efficiency and low fuel consumption
- Low operating noise levels
- Accurate rotation speed control
- High functionality in the event of failure, thanks to a second backup DC motor

FEATURES

- **Gear ratios**
Main: 1:220
Emergency: 1:2200
- **Input speed**
Main: 3500 rpm
Emergency: 2000 rpm
- **Motors**
Main: Induction AC
Emergency: PM DC motor

TECHNICAL DATA

	Torque (Nm)
575	50,000
577	60,000
580	75,000



OUR GLOBAL PRESENCE

Thanks to an international network of branches and closely interconnected production plants, we can guarantee the same high standards of Bonfiglioli quality anywhere at any given time. We know that our direct presence in local markets is the key to long-lasting success, so our family includes 23 sales branches (10 on which with assembly lines), 13 production facilities and more than 550 distributors around the world.

Our organization is always close by, offering complete and efficient solutions and supporting our customers with dedicated services, co-engineering and after-sales assistance.



13
PLANTS



13
BRANCHES



10
BRANCHES + ASSEMBLY



80
COUNTRIES



550
DISTRIBUTORS



~4.000
PEOPLE

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 PRODUCTION

 ASSEMBLY

 SALES

 SERVICE





We have a relentless commitment to excellence, innovation & sustainability. Our team creates, distributes and services world-class power transmission & drive solutions to keep the world in motion.

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