

PRODUCT CATALOGUE

EWEA-TECH CO., LTD.

EWEA-TECH CO., LTD.

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INTRODUCTION TO EWEA-TECH CO., LTD.

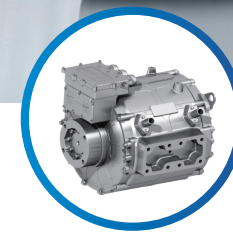
EWEA-TECH is a high-tech enterprise focusing on new energy vehicle traction motors, motor controllers, transmissions and electric drive system integration, and a supplier of electric drive system products and solutions with a full industrial chain layout in the commercial vehicle industry.

CORPORATE CULTURE

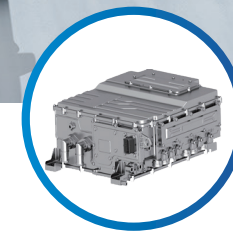
Always adopts morality as the basis of corporate growth, committed to the core values of "morality, coordination and innovation", and the operation and management philosophy of "employee orientation" and "customer orientation".

FULL VEHICLE COVERAGE

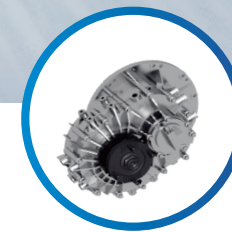
Based on the forward-looking thinking of customer needs and future transportation, 3 technical routes of distributed, direct and integrated types have been planned from a high starting point, and 12 product platforms have been built to fully cover the needs of new energy buses, light trucks, heavy trucks, construction machinery, sanitation vehicles, mining trucks, dump trucks, mixer trucks and other market segments.



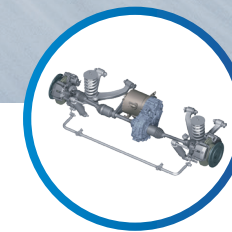
MOTOR CONTROLLER



TRACTION MOTOR



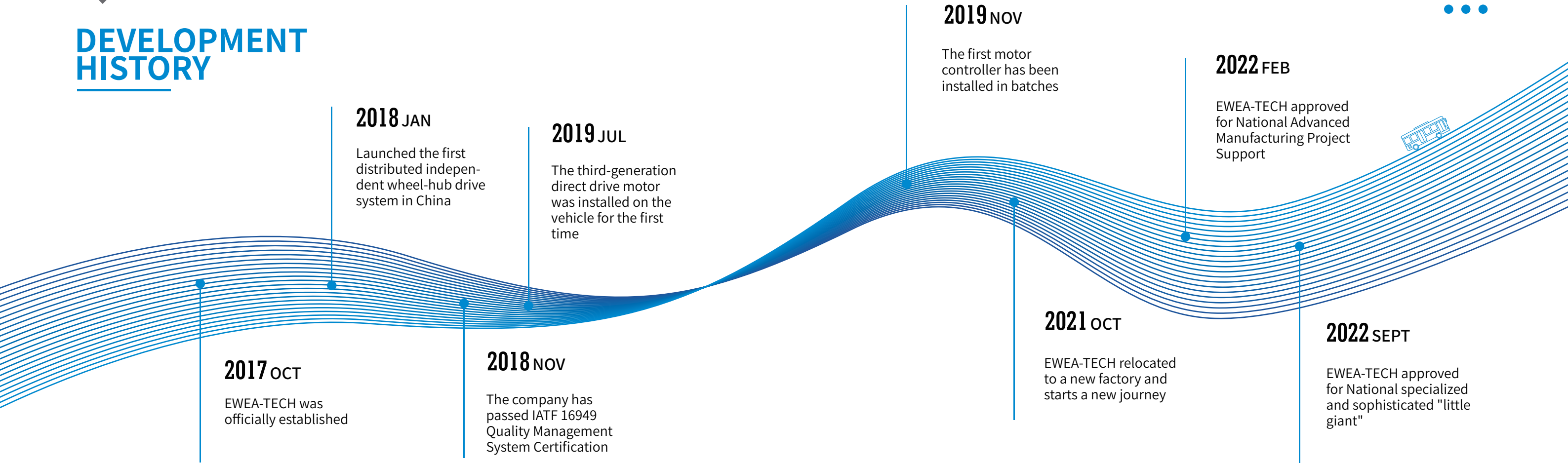
TRANSMISSION



ELECTRIC DRIVE SYSTEM

LAYOUT OF THE WHOLE INDUSTRIAL CHAIN OF COMMERCIAL VEHICLE INDUSTRY

DEVELOPMENT HISTORY



COMPANY HONORS

EWEA-TECH has continuously exceeded expectations and challenged itself. It has continuously won market recognition with "focus" and "professionalism" and won more than 30 national, provincial, municipal and industry honors.

- >> National specialized and sophisticated "little giant"
- >> High-tech enterprise in Henan Province
- >> Henan Commercial Vehicle Electric Drive System Engineering Research Center
- >> Henan Enterprise Technology Center
- >> Zhengzhou New Energy Vehicle Electric Drive System Engineering Research Center
- >> Zhengzhou Commercial Vehicle Electric Drive System Engineering Technology Research Center

CORPORATE HONORS



EWEA STRENGTH

R&D Strength

EWEA-Tech attaches great importance to scientific research investment and ranks high in the industry. It has 98 R&D personnel, with master's and doctor's degrees accounting for more than 33%. Its annual R&D expenses remain above 20% of its annual revenue. It has established R&D platforms such as special test center for electric drive systems and provincial and municipal engineering technology center.

Scientific research cooperation

Adhering to openness, cooperation and innovation, EWEA-Tech has successively established cooperative partnerships with domestic and foreign famous enterprises such as AVL, CRRC and Wolong Holdings, and cooperated with famous universities such as Xiangtan University and Henan University of Science and Technology to carry out a number of industry-university-research cooperation projects such as NVH and lightweight.

R&D Cooperation with Universities

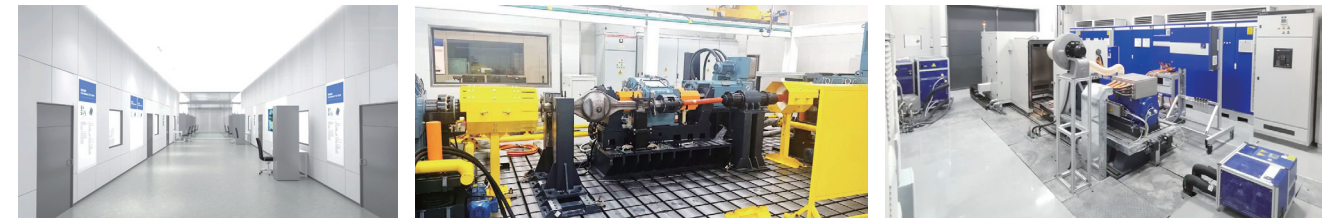


Enterprise Partners



Test verification

The electric drive system test center has been built with the highest standards in the industry, with an area of 3,200 square meters and test equipment of more than RMB 50 million. It can carry out performance, environmental simulation, NVH, durability, vibration, salt spray and other tests. A complete management system for the testing center has been established according to the CNAS standard requirements



Intelligent manufacturing

It has a production area of 247 mu, with 100 mu built in the first phase. It has built the most automated production line of motors, inverters, gearbox assemblies and parts in the industry, supporting MES, AGV intelligent distribution, WMS and other information and intelligent systems, realizing an efficient operation mode oriented to the whole process information management of orders, with an annual production capacity of 25,000 units (sets) and a planned production capacity of 50,000 units (sets) by 2025.

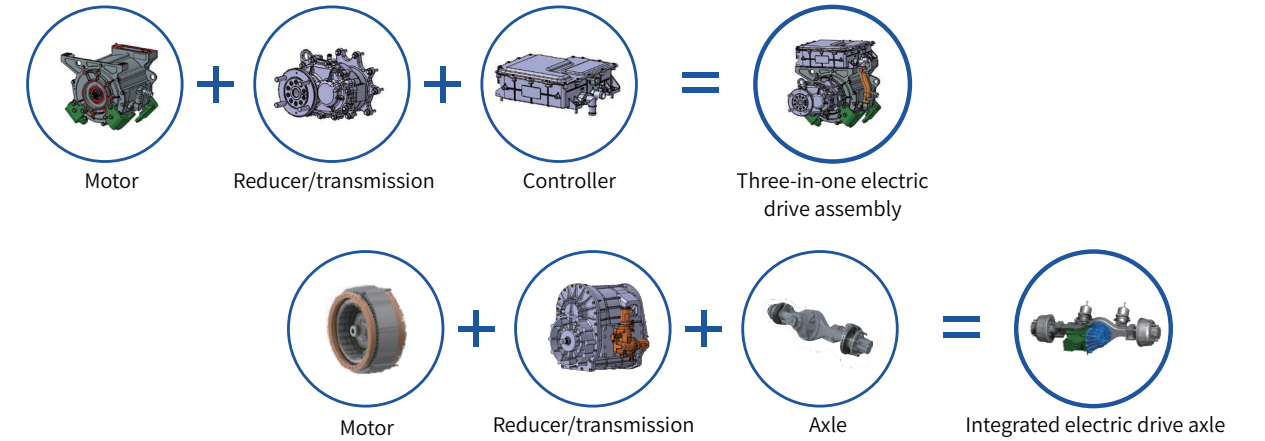


Quality management

EWEA-Tech has passed the IATF16949 certification in the automobile industry, built a QIS quality management platform, adhering to the management concept of "quality assurance + quality prevention", insisting on the principle of "not taking the market as a testing ground", and is committed to realize product life cycle quality management and creating greater value for customers with high-quality products.

MORE INTEGRATED

Make use of the advantages of the whole industry chain to promote the further deep integration of motor, electric control, reducer/transmission with axle and suspension, reduce the consumption of mechanical parts, wiring harnesses, chips, etc., realize the miniaturization and lightweight of the electric drive system, create system-level solutions, and give full play to the performance advantages of the integration.



SERVICE GUARANTEE



Integrated in services

Domestic: 13 4S center stations and more than 2,000 special service outlets.

Overseas: more than 240 authorized service stations or service companies and more than 330 authorized service outlets.



Quick service response

Arrive within 8h in the province and within 24h outside the province.

General faults will be solved within 4 hours, difficult faults will be replied within 8 hours.



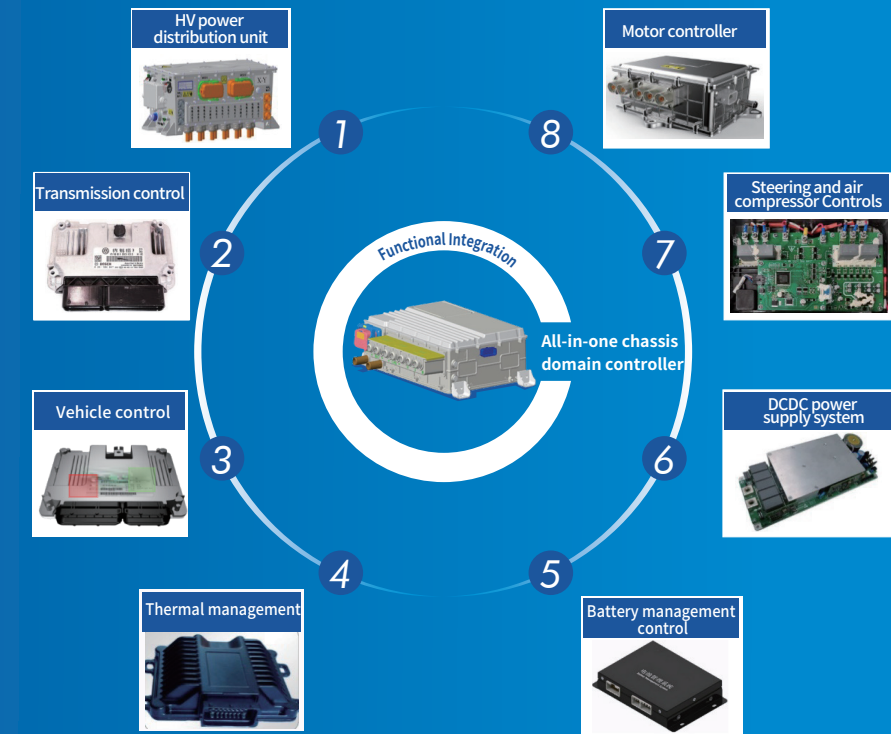
Efficient accessory guarantee

Provide 24-hour accessory service.

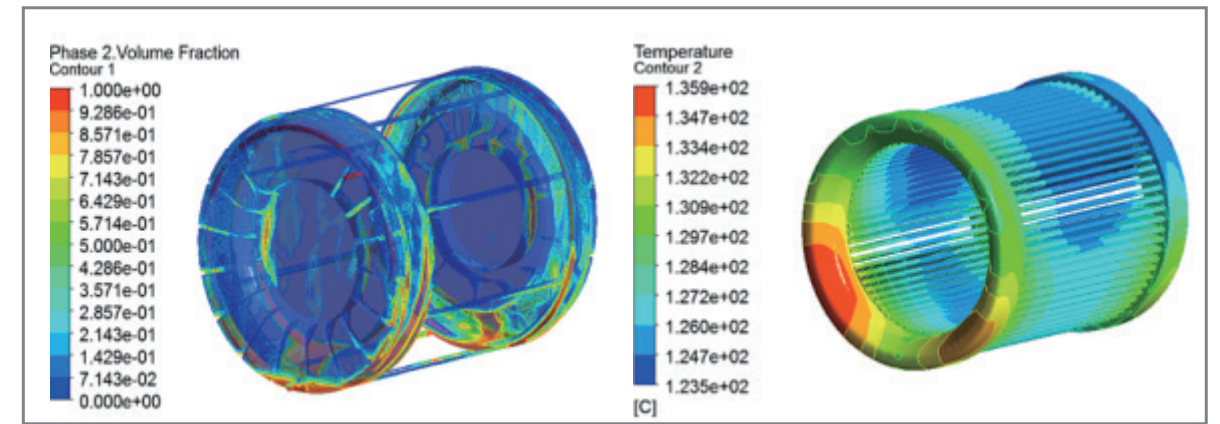
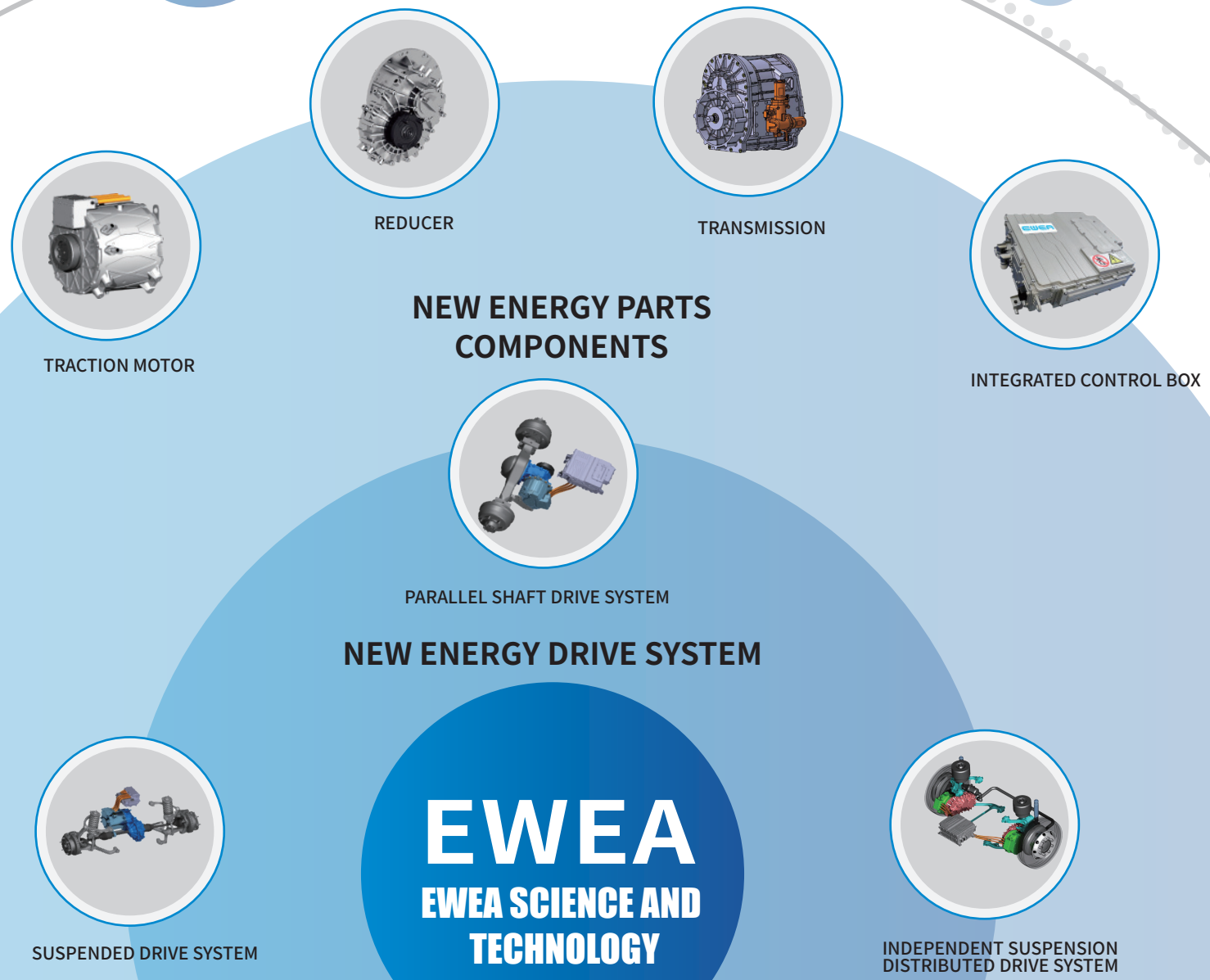
Three-level accessory supply channels: company headquarters, central warehouse and service station.

Hyper-integrated software and hardware
Decoupling platform

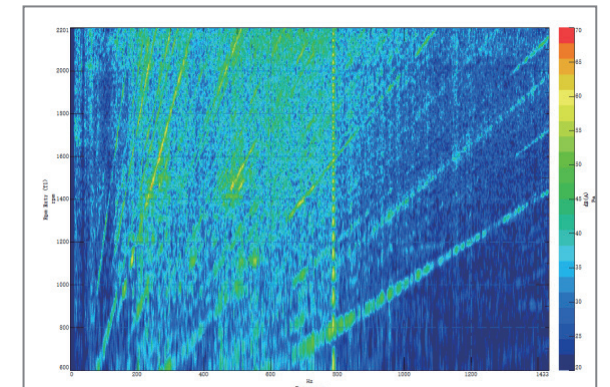
Vehicle operating system for
functional safety



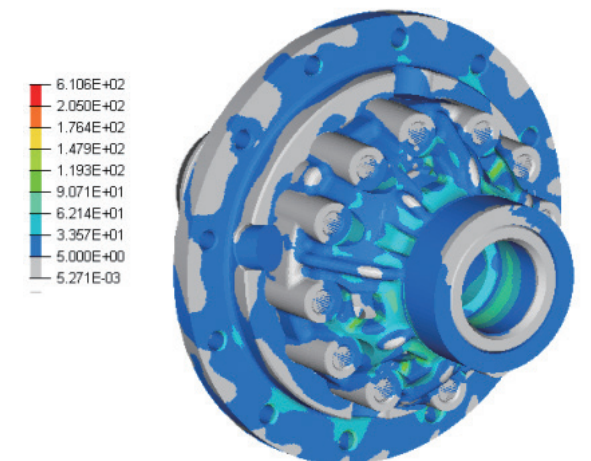
PRODUCT INNOVATION



FLOW SIMULATION ANALYSIS



NVH SIMULATION ANALYSIS

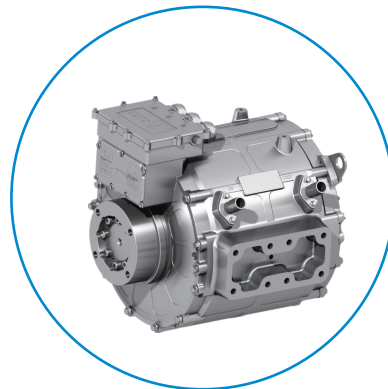


STRUCTURE SIMULATION ANALYSIS

TRACTION MOTOR



It is applicable for buses, dump trucks, tractors, mixers and other models, with mature and complete technology. It has been popularized and applied to 25,000 battery electric commercial vehicles, with good market performance.

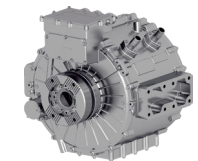


- High efficiency: Maximum efficiency 97% and areas with efficiency $\geq 90\%$ have an overall proportion of $\geq 90\%$.
- High reliability: 2m 72h extreme water-proof, sediment-proof structure, anti-condensation structure, long-life bearing and oil seal.
- Lightweight
- Low noise: Noise at full speed section of motor $\leq 72\text{dB(A)}$, linearity $\leq 2\text{dB(A)}$.

Applicable model / 8-10m bus, 8-10m coach



Rated voltage (VDC)	520
Rated/Peak Power (kW)	120/240
Rated/Peak Torque (Nm)	1200/2400
Maximum speed (rpm)	3000
Maximum efficiency of motor	$\geq 97\%$
Dimension (mm)	$\Phi 430 \times 426$

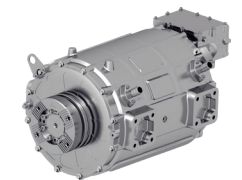


EM370-240F

Applicable model / 11-18m bus



Rated voltage (VDC)	600VDC
Rated/Peak Power (kW)	220/350
Rated/Peak Torque (Nm)	1200/3200-20s
Maximum speed (rpm)	3000
Maximum efficiency of motor	$\geq 97\%$
Dimension (mm)	$\Phi 372 \times 723$



EM330-350-1

Applicable model / 9-12m coach



Rated voltage (VDC)	600
Rated/Peak Power (kW)	215/350
Rated/Peak Torque (Nm)	1260/2800 (3100-20s)
Maximum speed (rpm)	3500
Maximum efficiency of motor	$\geq 97\%$
Dimension (mm)	$\Phi 436 \times 542$

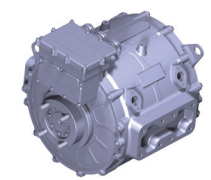


EM380-350

Applicable model / 8-9m bus, 6-7m coach



Rated voltage (VDC)	520
Rated/Peak Power (kW)	80/160
Rated/Peak Torque (Nm)	800/1600
Maximum speed (rpm)	3000
Maximum efficiency of motor	$\geq 97\%$
Dimension (mm)	$\Phi 372 \times 453$

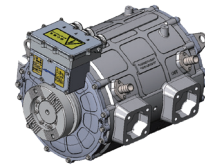


EM330-160

● **Applicable model / 10-12m bus and 8-10m coach**



Rated voltage (VDC)	520
Rated/Peak Power (kW)	120/240
Rated/Peak Torque (Nm)	1200/2400
Maximum speed (rpm)	3000
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ372*572

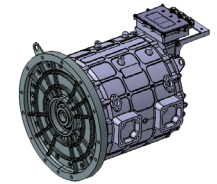


EM330-240-1

● **Applicable model / Tractor, mixer, dump truck**



Rated voltage (VDC)	650
Rated/Peak Power (kW)	280/430
Rated/Peak Torque (Nm)	1300/2800
Maximum speed (rpm)	3500
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ436*748



EM380-430

● **Applicable model / 10-12m bus and 8-10m coach**



Rated voltage (VDC)	520
Rated/Peak Power (kW)	120/240
Rated/Peak Torque (Nm)	1400/2800
Maximum speed (rpm)	2500
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ436*524

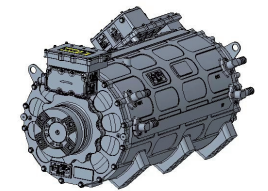


EM380-240

● **Applicable model / 18t sanitation vehicle, 15m and above bus**



Rated voltage (VDC)	520
Rated/Peak Power (kW)	250/500
Rated/Peak Torque (Nm)	2400/4800
Maximum speed (rpm)	3000
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ436*1009

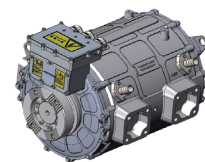


EM380-500

● **Applicable model / 10-12m bus and 8-10m coach**



Rated voltage (VDC)	520
Rated/Peak Power (kW)	120/240
Rated/Peak Torque (Nm)	1200/2800
Maximum speed (rpm)	2500
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ372*572

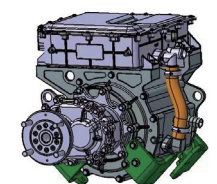


EM330-240-2

● **Applicable model / sanitation vehicles, mixing vehicles (upper)**



Motor	Rated voltage (VDC)	520
	Rated/Peak Power (kW)	65/80
	Rated/Peak Torque (Nm)	150/275
Reducer	Speed Ratio	2.407
System	Maximum output torque (Nm)	660
	Weight (kg)	83



EQ700

● **Applicable model / 12-13m bus**



Rated voltage (VDC)	600
Rated/Peak Power (kW)	220/350
Rated/Peak Torque (Nm)	1450/2800 (3200-20s)
Maximum speed (rpm)	3000
Maximum efficiency of motor	≥97%
Dimension (mm)	Φ372*726



EM330-350-2

HIGH VOLTAGE INTEGRATED CONTROLLER



Platform products, suitable for buses, trucks, sanitation and other models, with high integration and complete functions, have been large-scale promoted and applied to electric commercial vehicles, and the market performance is stable and reliable.



- MAXIMUM EFFICIENCY>99%
- FUNCTIONAL SAFETY LEVEL ASIL C
- HIGH RELIABILITY: 2M 72H EXTREME WATERPROOF
- EMC REACHES CLASS 5 UNDER NO-LOAD
- INTEGRATED DESIGN, SMALL SIZE, LIGHT WEIGHT AND STRONG EXPANSIBILITY.

Applicable model /10-12m bus



Range of operating voltage (VDC)	200~750
Rated/Peak capacity (kVA)	180/360
Peak output current (Arms)	560
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	28
Dimension (mm)	495×437.5×208



EI51-540X560 (560E)

Integration type
Motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution

Applicable model /6-9m bus and coach



Range of operating voltage (VDC)	200~750
Rated/Peak capacity (kVA)	140/280
Peak output current (Arms)	420
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	28
Dimension (mm)	495×437.5×208



EI51-540X420 (420E)

Integration type
Motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution

Applicable model / Coaches above 9m, heavy trucks and mining trucks



Range of operating voltage (VDC)	200~750
Rated/Peak capacity (kVA)	354/640
Peak output current (Arms)	850
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	46
Dimension (mm)	678.2*493.6*260



EI51-614X850 (850E)

Integration type
Motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution

Applicable model / mining trucks



Range of operating voltage (VDC)	200~750
Rated/Peak capacity (kVA)	285/526
Peak output current (Arms)	700
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	46
Dimension (mm)	678.2*493.6*260



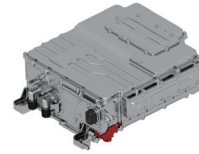
EI51-614X700 (850E reduced power)

Integration type
Motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution

● **Applicable model / 18t sanitation (double motors)**



Range of operating voltage (VDC)	200~750
Rated/Peak capacity (kVA)	/
Peak output current (Arms)	560*2
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	46
Dimension (mm)	678.2*493.6*260



Dual motor controller (560D)

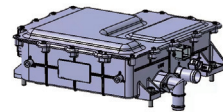
Integration type

Dual motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution

● **Applicable model /Sanitation truck, mixer truck (upper)**



Range of operating voltage (VDC)	300-750
Rated/Peak capacity (kVA)	65/80kW
Peak output current (Arms)	280
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	9
Dimension (mm)	370.5*335*167.5



Upperstructure controller

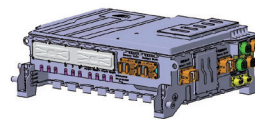
Integration type

Single motor controller (can be matched with reducer + motor for upperstructure)

● **Applicable model / Coaches above 9m, heavy trucks and mining trucks**



Range of operating voltage (VDC)	200-750
Rated/Peak capacity (kVA)	354/640
Peak output current (Arms)	850
Maximum efficiency	≥99%
Protection Grade	IP68
Weight (kg)	≤69
Dimension (mm)	828*570*285

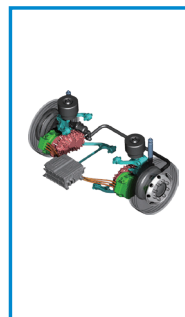


EI71-850 (Domain controller)

Integration type

Motor controller + steering controller + air compressor controller + DC/DC + high voltage power distribution + DC charging + insulation detection

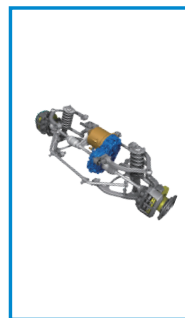
DRIVE SYSTEM



Independent suspension distributed electric drive system

It is suitable for low-floor buses. It is the first independent suspension wheel-end dual-motor drive scheme in China, with independent intellectual property rights and compact structure. It realizes the interior design of full flat low-floor and wide aisle, and improves the riding space and passenger capacity of buses.

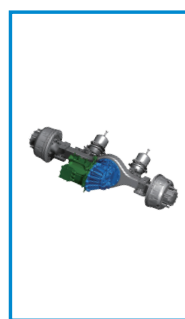
- 20% lighter than direct drive system
- Transmission efficiency increased by 15%
- Low-floor, extra-wide aisle



Suspended electric drive axle

It is suitable for pickup trucks, micro-circulation autonomous driving and 5-6m buses. It has been equipped on Yutong autonomous intelligent buses for demonstration operation in Zhengzhou Wisdom Island and Yutong Industrial Park, which has attracted high social attention and opened a new future of mobility.

- Integration of high-speed motor and high-speed ratio reducer
- New axle suspension design, compact structure, small space occupation
- Verified by 20,000 km comprehensive road test



Suspended electric drive axle

It is suitable for buses, light trucks and sanitation vehicles. It adopts a three-in-one integrated design of high-speed motor, high-speed ratio reducer and axle, replacing the traditional direct drive system (motor + drive shaft + axle), solving the problems of low transmission efficiency and tight space of chassis layout.

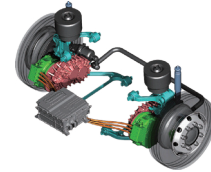
- Integrated design, more than 15% lighter than direct drive
- System efficiency reaches 93%
- Three-stage reduction mechanism, with a total transmission ratio of 16.28

Applicable model / 8-8.5 m bus



Motor	Rated voltage (VDC)	540
	Rated/Peak Power (kW)	2*60/105
	Rated/Peak Torque (Nm)	2*170/300
System	Maximum output torque (Nm)	8860 <small>maximum input torque of reducer: 320Nm</small>
	Rated Load (kg)	7000
	Weight (kg)	745

Distributed electric drive axle (independent suspension)



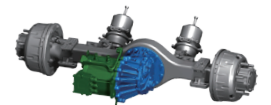
EW70

Applicable model / 6t light truck and special vehicle



Motor	Rated voltage (VDC)	406/540
	Rated/Peak Power (kW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	Maximum output torque (Nm)	5780
	Rated Load (kg)	4000
	Weight (kg)	305

Parallel-shaft electric drive axle



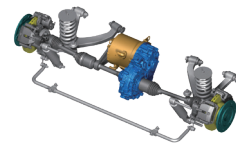
EA40

Applicable model / 5m micro-circulation (rear drive)



Motor	Rated voltage (VDC)	405
	Rated/Peak Power (kW)	47/120
	Rated/Peak Torque (Nm)	130/270
System	Maximum output torque (Nm)	4323
	Rated Load (kg)	2300
	Weight (kg)	289(including suspension)

Suspended electric drive axle



EA23(rear drive)

Applicable model / 8t light truck



Motor	Rated voltage (VDC)	406/540
	Rated/Peak Power (kW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	Maximum output torque (Nm)	5775
	Rated Load (kg)	5000
	Weight (kg)	255

Parallel-shaft electric drive axle



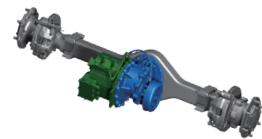
EA50

Applicable model / 4t sanitation, 6m bus



Motor	Rated voltage (VDC)	540
	Rated/Peak Power (kW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	Maximum output torque (Nm)	4870 <small>maximum input torque of reducer: 320Nm</small>
	Rated Load (kg)	3000
	Weight (kg)	270

Parallel-shaft electric drive axle



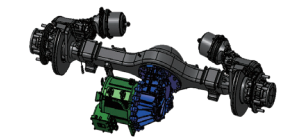
EA30

Applicable model / 6-7m bus



Motor	Rated voltage (VDC)	540
	Rated/Peak Power (kW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	Maximum output torque (Nm)	5780
	Rated Load (kg)	6000
	Weight (kg)	329

Parallel-shaft electric drive axle



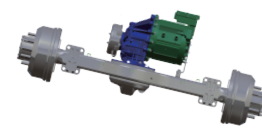
EA60

Applicable model / 5T light truck (hydraulic brake)



Motor	Rated voltage (VDC)	406/540
	Rated/Peak Power (kW)	65/120
	Rated/Peak Torque (Nm)	170/355
System	Maximum output torque (Nm)	5780
	Rated Load (kg)	3500
	Weight (kg)	260

Parallel-shaft electric drive axle



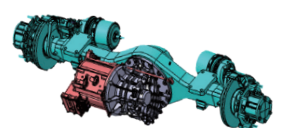
EA35

Applicable model / 8.5m bus



Motor	Rated voltage (VDC)	540
	Rated/Peak Power (kW)	80/160
	Rated/Peak Torque (Nm)	200/450
System	Maximum output torque (Nm)	9213
	Rated Load (kg)	6000
	Weight (kg)	415

Parallel-shaft electric drive axle



EA85