

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains definitions of certain terms used in this Document in connection with our Company and our business. These terms and their definitions may not correspond to standard industry definitions, and may not be directly comparable to similarly titled terms adopted by other companies operating in the same industries as our Company.

“ABS”	anti-lock braking system, a safety feature that prevents wheels from locking up during hard braking by rapidly modulating brake pressure
“accessory”	a secondary item or attachment for a motor vehicle that enhances its appearance, comfort, utility, or performance
“ball screw(s)”	a mechanical device that converts rotational motion into linear motion with very low friction
“bearing(s)”	a machine element that constrains relative motion between moving parts to only the desired motion
“CNAS”	China National Accreditation Service for Conformity Assessment
“CNC”	Computer Numerical Control
“cockpit(s)”	an interface between the vehicle and the drive & passengers
“controller(s)”	electronic hardware that regulates a chip or expansion card that interfaces with a peripheral device, the performance of the motor and electric power steering system
“corner module”	a compact module located near the wheel integrates the traditionally separate systems for drive, steering, braking, and suspension, and serves as the core unit of a steer-by-wire integrated chassis
“electric cylinder”	an actuator that uses a motor instead of hydraulics or pneumatics to generate linear reciprocating motion. It can be understood as a combination of a motor + screw + guiding mechanism. Its function is similar to that of a hydraulic cylinder or pneumatic cylinder, but its power source is electricity
“EHB”	electro-hydraulic braking, a system with a brake-by-wire technology that uses electric signals from the brake pedal to a control unit, which then directs hydraulic pumps to generate and control pressure, providing power and braking force to the wheels
“EMB”	electro-mechanical brake, a system that uses an electric motor and mechanical components, like a screw-nut mechanism and gears, to apply braking force

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“EV”	electric vehicles
“ESG”	environmental, social and governance
“e-axle (s)”	refers to electric axle, a compact, integrated system for electric vehicles (EV) that combines an electric motor, power electronics (inverter), and a transmission into a single unit within an axle housing
“gearbox”	an assembly of parts including the speeding-changing gears and the propeller shaft by which the power is transmitted from an engine to an axle
“grinding machine”	a type of machine tool that uses abrasive tools (such as grinding wheels, abrasive belts, or oilstones) to perform precision cutting and finishing on the surface of a workpiece
“HDM”	horizontal drive mechanism, a system that converts rotary motion into horizontal reciprocating motion, enabling the horizontal adjustment of automobile seats
“heat treatment”	a group of industrial and metalworking processes used to alter the physical, and sometimes chemical, properties of a material that involve the use of heating or chilling to extreme temperatures to achieve the hardening or softening of a material
“hub bearing(s)”	a crucial pre-assembled unit in a vehicle that attaches the wheel to the car, allowing it to rotate freely while supporting the vehicle’s weight
“humanoid robot”	a robot designed with a human-like form and perform tasks alongside humans
“humanoid robot joint module”	a compact, integrated actuation unit designed to function as a robot’s joint, similar to a human shoulder, elbow, knee or ankle. It combines motor, transmission, sensors and control electronics in one module, allowing humanoid robots to achieve smooth, precise and human-like motion
“ISO10012”	an International Organization for Standardization (ISO) standard specifying requirements for measurement management systems, which covers the management of measurement processes and the metrological confirmation of measuring equipment to ensure accuracy and compliance
“ISO14001”	an international standard for environmental management system (EMS) that provides a framework for organizations to manage their environmental responsibilities, reduce their environmental footprint, comply with legal obligations and improve overall environmental performance

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“ISO27001”	an international standard for establishing, implementing, maintaining, and improving an Information Security Management System (ISMS) and provides a framework for organizations of all types and sizes to manage risks to sensitive information by defining requirements for security controls, processes and continuous improvement, helping to protect data, meet compliance
“ISO45001”	an internationally recognized standard for occupational and safety (OH&S) management systems, providing a framework for organizations to identify hazards, assess and control risks, and continuously improve their OH&S performance
“JIS”	the standards used for industrial activities in Japan
“LRC”	light, rapid and comfortable
“NEV”	new energy vehicle
“OEM”	original equipment manufacturer, a term generally used in the automotive industry
“planetary roller screw”	a precision actuator that uses multiple rolling elements between a central screw and a nut to convert rotational motion into highly accurate linear motion
“PEEK”	polyether ether ketone, a high-performance thermoplastic with excellent resistance to high temperatures, wear and corrosion, as well as high strength and good dimensional stability
“PP”	polypropylene, a versatile and cost-effective plastic used for numerous automotive parts like bumpers, instrument panels and door trims
“roller screw(s)”	a mechanical linear actuator that converts rotary motion into linear motion by using rolling members (rollers) instead of balls
“R&D”	research and development
“screw nut(s)”	a nut with internal, or female, threads that are designed to match and receive the external, or male, threads of a screw or bolt, acting as a fastening component to hold parts together
“screw grinding”	also known as thread grinding, refers to a highly precise machining process that uses a shaped grinding wheel to cut the specific thread pattern on a screw, bolt, or other threaded workpiece

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“sensor(s)”	a converter that measures a physical quantity and converts it into a signal which can be read by an observer or by an electronic instrument
“three-electric system”	the three-electric system in a new energy (electric) vehicle consists of the power battery, electric motor and electronic control system
“T29490”	the Chinese national standard GB/T 29490-2023, which provides requirements for establishing, operating, continually improves an Intellectual Property (IP) management system and helps organizations to manage their IP and ensure IP compliance
“TS16949”	an International Organization for Standardization technical specification prepared by the International Automotive Task Force that aims to develop a quality management system that provides for continual improvement, emphasizing defect prevention and the reduction of variation and waste in the supply chain of the automotive industry
“vehicle model(s)”	a particular brand of vehicle sold under a marque by a manufacturer, usually with a range of models which are of different sizes or capabilities
“vehicle-mounted drone system”	an integrated platform that combines a drone (or drones) with a vehicle and a control system, designed for applications like real-time aerial surveillance, security, mapping or counter-drone operations form a mobile platform
“wheel hub”	the central component of a wheel that connects it to the vehicle’s suspension and axle, enabling the wheel to rotate freely while supporting the vehicle’s weight
“worm gear”	a mechanical arrangement consisting of toothed wheel worked by a short revolving cylinder bearing a screw thread