
GLOSSARY OF TECHNICAL TERMS

This glossary contains an explanation of certain technical terms used in this document as they relate to our Company and as they are used in this document in connection with our business or us. Such terminology and meanings may not correspond to standard industry meanings or usages of those terms.

“ABS ”	Anti-skid Braking System, a safety system which operates by preventing the wheels from locking up during braking, thereby maintaining tractive contact with the road surface and allowing the driver to maintain more control over the vehicle.
“AC motor”	a type of motor that converts electrical energy into mechanical motion, featuring a stator, and rotor, and has versatile applications due to its simplicity, reliability, and efficiency.
“automotive”	branch of vehicle engineering that focuses on the application, design and manufacturing of various types of automobiles.
“CNC”	Computer Numerical Control, the automated control of machine tools by a computer.
“controller”	component responsible for controlling the motor and its electronic circuits to achieve functions such as starting, braking, speed regulation and protection of the motor. It is usually composed of power semiconductor devices.
“CRM”	Customer Relationship Management, an integrated software platform designed to manage a company’s interactions with its current and potential customers.
“CSA ”	Standards developed by the Canadian Standards Association relating to the safety, energy efficiency and performance requirements for electrical equipment used in North America.
“dies”	specialised machine tool used in manufacturing industries to cut and/or form material to a desired shape or profile.
“die-casting”	process in which objects of a particular shape are produced by forcing a molten material into a mould under pressure.
“driver(s)”	an electronic device used to drive and regulate the operation of a motor by amplifying input signals and supplying power to the motor.
“electric drive solution”	the combination of motor, driver, controller, software and related services.
“Electrical discharge machining”	a metal fabrication process in which a desired shape is produced by using electrical spark discharges to remove material from a workpiece. It is widely used to machine hard materials such as carbide.

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“electrification”	the transition toward the use of electricity as the primary power source for industrial equipment, machinery and other applications traditionally powered by non-electric energy sources.
“ERP”	Enterprise Resource Planning, an integrated software platform used to manage and automate core business processes across an organisation. ERP systems consolidate data from various departments, such as finance and supply chain to enhance efficiency and provide a unified view of business operations.
“explosion-proof motor”	a type of motor engineered to contain an internal explosion without allowing flame or hot gases to escape and ignite the surrounding atmosphere. It is widely used in explosive atmospheres.
“forklift(s)”	vehicle(s) with two metal bars fixed on the front, used for lifting and carrying piles of goods.
“GFA”	gross floor area.
“grinding”	abrasive machining process that uses a grinding wheel or grinder as the cutting tool. Grinding is a subset of cutting, as grinding is a true metal-cutting process.
“grinding machines”	power tool (or machine tool) used for grinding. It is a type of machining using an abrasive wheel as the cutting tool.
“HVAC”	Heating, Ventilation and Air Conditioning (HVAC) system, integrated components used to regulate indoor environment. They are designed to provide thermal comfort and acceptable indoor air quality by controlling temperature, humidity and air flow.
“HVAC motors”	the motors used to power the moving parts within HVAC systems, such as fan blades, compressor rotors, and pump impellers
“industrial motors”	motor to convert electricity into mechanical energy.
“Industry 4.0”	the fourth industrial revolution, which is an on-going evolution of the value chain of a product and driven by continuous sensor, computing and memory capacity improvement, digitalisation of analogue technologies, real-time data analysis and inter-connectivity throughout the entire product cycle; according to the Hong Kong Productivity Council, certification to Industry 4.0 is divided into five levels from Level 0 to Level 4.

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“IoT”	Internet of Things, the network of physical objects embedded with sensors, software and other technologies to connect and exchange data with other devices and systems over the internet. These objects range from everyday household items to sophisticated industrial tools. The primary aim of IoT is to enable seamless communication and interaction between devices, enhancing efficiency, automation and data-driven decision-making.
“intelligent manufacturing”	manufacturing approach integrating advanced digital and automation technologies to enable real-time optimisation and automation of production processes across the value chain.
“lamination”	process of manufacturing a material in multiple layers, achieving improved strength, stability, sound insulation, appearance or other properties.
“loose lamination”	lamination not firmly held or fastened.
“machine tool(s)”	a machine for handling or machining metal or other rigid materials, usually by cutting, boring, grinding, shearing, or other forms of deformations.
“machining”	process used to remove material, typically metal, to create parts for machines, tools, transportation, and more.
“motor”	the core unit of the electric drive solution. It uses the principle of electromagnetic induction to generate rotational torque through the interaction between the stator and the rotor.
“mould”	hollow container with a particular shape into which soft or liquid substances are poured, producing a component with a desired shape after solidification or curing.
“moulding”	process of manufacturing by shaping liquid or pliable raw material using a rigid frame called a mould or matrix.
“NEMA”	standards developed by the National Electrical Manufacturers Association for various grades of electrical enclosures typically used in industrial applications.
“OEM”	Original Equipment Manufacturer, which refers to a company that produces components, parts, or complete products based on the specific designs, specifications, or brand requirements of another company.
“PMSM(s)” or “permanent magnet synchronous motor(s)”	permanent magnet synchronous motor(s), a type of motor that uses permanent magnets in the rotor to create a steady magnetic field, together with servo drives and encoders. It is widely used in applications such as electric vehicles and industrial machinery.

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“press”	machine tool that changes the shape of a work-piece by the application of pressure.
“rotating equipment”	mechanical equipment that uses rotational motion to perform industrial functions, including energy conversion and the movement of fluids and gases, typically comprising pumps, compressors, turbines, generators, etc.
“rotor”	the rotating part inside the stator that converts electrical energy into mechanical energy.
“stator”	the stationary part of a motor that generates a rotating magnetic field when electric current is applied.
“Three-phase asynchronous motors” or “3-PH IM”	a motor powered by a three-phase AC supply, in which the rotor rotates by electromagnetic induction at a speed lower than the synchronous speed of the rotating magnetic field.
“VFDs” or “variable frequency drives”	a type of motor drive used in electromechanical drive systems to adjust AC motor speed and torque by varying motor input frequency. It is used in many different manufacturing and industrial settings, but particularly valuable for controlling pumps.
“V/F control”	volts-per-hertz control, a motor control method that regulates motor speed by maintaining a constant voltage-to-frequency ratio, thereby enabling speed adjustment and stable operation of AC induction motors.