**Industrial Machinery Manufacturing Glossary**

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| Term: | Definition: |
| Air gap | The space between rotating and stationary parts in an electric motor. |
| Assembly | The process of putting two or more pieces of machinery together to create a product |
| Automation | Using machines, AI, or robots, the process of manufacturing without human assistance. |
| Calibration | A method of testing measuring instruments and devices against a tool to ensure accuracy and stability within the measuring tools. |
| Cogging | Shaft rotation occurring in jerks or increments rather than smooth continuous motion. The jerky rotation results from the rotating arm’s tendency to certain angular positions. Cogging is very apparent at low speeds and determines a motor’s speed range. |
| Concurrent Engineering | Running product development stages parallel to each other rather than one stage followed by another. This reduces lead times and costs. |
| Load | The work required from a motor to drive equipment. Load is usually defined in terms of horsepower. |
| Flexible machining | Machining equipment that can easily be reprogrammed to fluxuate with the project at hand, such as dynamically programmable robotics with  |
| Heat-affected zone | A section of a part whose structure and mechanical properties were altered due to heat. This can occur in laser cutting |
| Inspection | The process of checking a part to ensure that it meets specific dimensions and quality standards.  |
| ISO Certification | A certification for quality standards |
| Precision machining | Machining and measuring to exact specifications, including dimensions, limits, tolerance, and allowances |
| Product Lifecycle Management (PLM) | Managing the entire lifecycle of a product from inception, through engineering design and manufacturing the final product, to servicing those manufactured products. |
| Product Modularization | Using modules or manufacturing sub-systems to create, upgrade and develop products mostly along multiple production lines, or a single product line offered in various configurations. This brings significant cost reductions, reduces time to market significantly, while offering the customers required personalization. This means that companies can slash their product development and material costs, and facilitate optimization of the total product cost by:* Increasing potential for product variety
* Enabling faster product development and upgrade
* Improving time-to-market, as well as aftermarket and service support
* Allowing continuous product and market improvement
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| Repeatability | The capability of a machine to meet a certain accuracy time and time again. |
| Value-added service | The processes or additional measures taken to add more value to a part or project, such as welding, drilling, etc. |