



machines



Special Issue Reprint

Lean Manufacturing and Industry 4.0

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Existing competitiveness between companies in the global market requires a high degree of proactivity, with an aim of reducing costs, increasing quality, and providing the market with innovative products that are in line with the natural evolution of customer demands. The concepts of the Toyota Production System, which have led to the adoption of lean manufacturing, have helped industrial managers to implement tools and practices that eliminate or substantially reduce wastes that normally exist in conventional production lines. However, the need for successive increase in flexibility necessitates a more favorable evolution with technological advancements in the programming of equipment and devices, along with the use of robotics and the integration of information throughout the product manufacturing cycle using the IoT or powerful networks. This concept, usually referred to as Industry 4.0, is in line with the principles of lean manufacturing, although it can only be supported by a true technological revolution involving remote programming of machines, integration of manufacturing processes, and real-time control of the work performed through an entire production cycle. This Special Issue showcases important contributions in the area of lean manufacturing and Industry 4.0, with innovative concepts that will certainly enthuse and strengthen readers' knowledge.



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