

New manufacturing challenges facing sustainability

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Abstract

We sought to identify opportunities for Industry 4.0 technologies in Sustainable Manufacturing using a two-stage methodology. In the first stage, we investigated Industry 4.0, sustainability, and Smart Factories and identified eleven technological trends linked to Sustainable Manufacturing. In the second stage, we graphically integrated the technological trends with Sustainable Manufacturing and a Smart Factory scheme in the context of Industry 4.0. We formally discussed the interconnection between these concepts and the relevant literature from which we derived these opportunities. © 2021 Society of Manufacturing Engineers (SME)

Author keywords

Industry 4.0; Sustainable Manufacturing and Smart Factory