

Revolution of Compact Line –To Strengthen Japanese Manufacturing Industry

The Strong Factory Analysis Team
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Abstract:

The Strong Factory Project: a project Nikkei Monozukuri is proceeding with to assist Japanese factories.

In the past, we have featured factory managers in the January 2013 issue and cutting-edge factories with unique buildings and facilities in the May 2013 issue. In this third feature, we will focus on production lines, which are the core of a facility.

Through interviews we found that domestic manufacturers are trying to make their production lines compact using approaches such as reduction and shortening of processes.

Their target reduction rates are much higher than before. Some manufacturers have generated innovative ideas that aim to reduce their investment costs to one thousandth of what they were before.

We report on the latest trends of compact lines aiming at revolutionary evolution.

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Nikkei Monozukuri is a monthly magazine published by Nikkei Business Publications (Nikkei BP) in Japan providing frontline engineers and project development leaders in the manufacturing industry with the practical information indispensable for problem solving and technology innovation. To its key readers engaged in the manufacture of automobiles, industrial machinery and precision/office machinery, Nikkei Monozukuri offers helpful hints on how to spur innovation, streamline operational processes, strengthen the competitiveness of engineers, and enhance alliances with manufacturing partners in the world. "Nikkei BP Japan Technology Report" is a fee-based publication offering English-language translations of key technical articles selected from the full array of Japanese-language Nikkei BP publications. (<http://techon.nikkeibp.co.jp/english/>)

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Introduction: Growing expectations for compact lines

Yorii Plant of Honda Motor Co., Ltd.

In July 2013, there occurred two events that would be turning points for the Japanese manufacturing industry.

Firstly, a new plant, the most leading-edge plant in the world, started operation in Japan. The plant is the Yorii Plant of Saitama Factory, Honda Motor Co., Ltd.,

where finished cars are produced. At the Yorii Plant, the company plans to start production of the Freed minivan, and then the new Fit compact car scheduled to be released in September 2013.



The plant has innovative production lines that make the plant ‘leading-edge’. Honda comprehensively promoted its “Process Shortening Method” including reduction, integration, and shortening of