

World-class plastics manufacturer slashes downtime by 60% & rejection by 50%

Background

Mitsu Chem Plast Limited (Mitsuchem) is a 32 year old manufacturer of world class blow and injection molded plastic products. Using patented technology, Mitsuchem has established itself as a leader in automotive components, health care and hospital furniture, infrastructure/stadium furniture and industrial packaging solutions. They have multiple plants in India serving Indian and global customers. Mitsuchem has a culture of continuous innovation fueled by investments in best-in-class processes and technologies.

Challenges

Mitsuchem's leadership aspired to achieve improved productivity and efficiency that would **sustain the tremendous growth and expansion of their business** despite the rapid pace of change and complexity in the global business environment. They identified Industry 4.0 adoption as a key strategic enabler for their development.

Existing manual and semi-manual measures result in blind spots that limit the degree to which process productivity and efficiency can be improved. Manual data collection is also occasionally inaccurate leading to inefficient decision making.

Therefore, they were looking at Industry 4.0 products to help them retain their business and competitive edge by enabling a culture of data-driven decision making and improvements.

Solution

axisPLAST 4.0, a premier and industry leading Industry 4.0 product for plastics manufacturers, digitally enabled 22 blow molding machines across their 3 plants in the first batch to provide a single, integrated, multi-plant view of their operations across the organization. **The timeliness, accuracy and depth of analytics** uncovered opportunities for improvements that Mitsuchem team was hitherto unaware of due to limitation of manual, paper-and-spreadsheet based data collection and analysis.

For example, insights from axisPLAST 4.0 immediately and accurately flagged inefficiency in ideal cycle time through continuous, near-real time monitoring of actual cycle time and trends over time.

axisPLAST 4.0 downtime analytics which include **total downtime loss, Mean Time Between Failure (MTBF) and Mean Time To Repair (MTTR)** across machine, section and plant level enabled a deeper understanding of root causes for downtime. Mitsuchem team leveraged these analytics to proactively put corrective action plans in place to significantly reduce downtime.

Benefits

The results within two years of adoption have been tremendous



**60% reduction
in downtime**



**50% reduction
in rejection**



**10% improvement
in production**

- Improved operator and supervisor productivity due to reduced paperwork
- Increased customer confidence and satisfaction due to transparency and trust on data

axisPLAST 4.0 adoption has validated Mitsuchem management's vision and belief in benefits of adopting Industry 4.0 technologies and helped them achieve the benefits they expected from the investment.

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“axisPlast 4.0 has met every expectation we had, and we continue to push the envelope to drive greater value for our business. In addition to delivering an excellent product, EcoAxis has been a true partner with their customer first approach which is essential to the success of any organization’s Industry 4.0 journey. In the next phase, we plan to integrate axisPLAST 4.0 with our ERP to improve our on-time, in full (OTIF) for enhanced customer satisfaction”

– Jagdish Dedhia, Chairman, Mitsu Chem Plast Limited

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