

# SEOYON E - HWA Automotive Pvt. Ltd., Version 1.0

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#### Client - SEOYON E - HWA Automotive Pvt. Limited

**SEOYON E - HWA Automotive India Pvt., Limited**, Oragadam, Tamil Nadu, was formerly known as Hanil Automotive Pvt. Limited. The organization is a leading supplier of Plastic molded components to Hyundai Motors Company, Korea. They specialize in manufacturing of Automotive Plastic and Painting parts including car Interiors and Exteriors, Bumper, Door Trim, Luggage Side Trim and Crash pad.

### The Objective

SEOYON E - HWA Automotive Pvt. Ltd., required a software application to streamline and integrate their different manufacturing functionalities and address their **Key pain areas** –



#### **Material**

- ✓ The occurrence of Dead stock was a major challenge, often led to loss mounting to few crores.
- ✓ Facilitating FIFO based material issue for production was practically infeasible. Raw materials with time bound validity often went obsolete due to this.



#### **Streamline Production**

- ✓ WIP stock which has to be released for the subsequent production stage often laid in the shop floor with no proper tracking and used to overrun their validity period. This lead to huge financial losses.
- ✓ Achieving JIT production system with maximum efficiency and optimal raw material was a big



#### **Quality Control**

- ✓ Quality control measures like supplier rating w.r.t material, production line inspection and finished goods inspection were difficult to be reinforced.
- ✓ Quality audit reports were maintained manually; at time of audit extracting the audit trails and generating BI reports & metrics for business performance evaluation was not feasible.



#### **Maintenance**

- ✓ Inefficient Technical maintenance often led to breakdowns and downtime resulting in huge loss.
- ✓ Keeping track of the preventive maintenance activities and executing them on time was very tedious, also the cost associated with the activities could not be tracked.

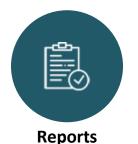


## **Technology & Platform**

AgES Manufacturing ERP has been offered as a Web Application using the specified Technology:









ASP.NET C# (.NET Framework 4.0)

Telerik

Crystal & Telerik

SQL Server 2008

Agaram offered **key business objects to** handle the pain areas:



An effective platform for communication between the organization and its vendors:

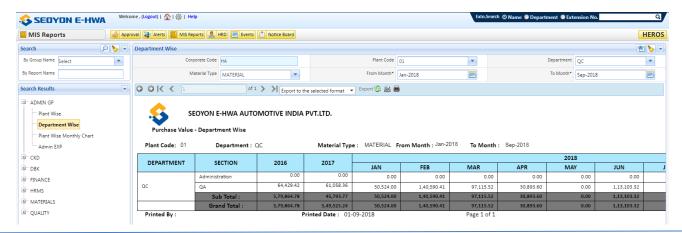
- ✓ Creation of purchase schedule against open PO.
- ✓ Advance Shipmen Notice (ASN) upload by the vendor in the portal ensures quick & easy generation of GRN.
- ✓ The Quality Rejections (QR) reason uploaded by the vendor. History of rejections ensures supplier blocking based on the number of rejections.



Quality Management of the materials integrated in the procurement process through supplier blocking based on number of quality rejection.

- ✓ The module guarantees the on-time FIFO based supply of materials for production
- ✓ Plant wise stock, Part number wise current stock, category wise purchase summary could be easily obtained to ensure effective material management.

Department Wise Purchase details can be obtained, this makes stock management easy.







Efficient planning of end part production

- ✓ Effectively prepares a daily Production Planning Control (PPC) plan based on the data from the client and also a tentative monthly PPC plan
- ✓ Procurement of Raw materials, monthly purchase plan and resource allocation is efficiently devised based on the PPC. This eliminates to a great level the over stocking of raw materials leading to dead stock.



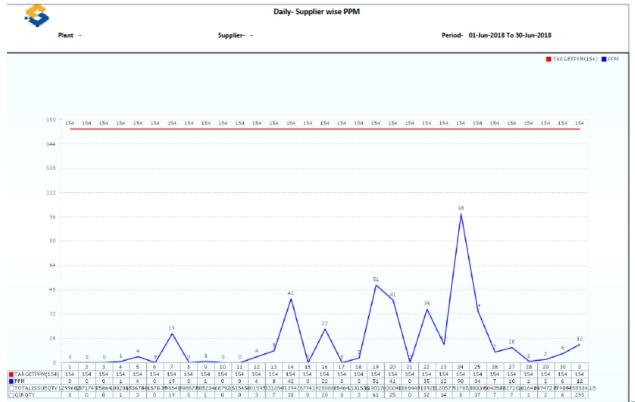
Automates the preventive maintenance activities for Module, Equipment and Fabrication

- ✓ Maintains a check list for preventive maintenance activities and issues alerts ahead. This ensures timely completion of maintenance activities and prevents breakdowns.
- ✓ Material required & Service cost for Maintenance both effectively tracked.



The module offers numerous reports for quality process tracking

- ✓ Daily Part problem report, Process / Product Audit report, Supplier Audit report, supplier PPM report, etc.
- ✓ Performance of the Supplier assessed to establish a minimum standard for the supplied quality





### Challenges through the way

The implementation of Manufacturing ERP at SEOYON E - HWA was a huge challenge considering the scope of requirements and the numerous cross department functionalities it handled. Due to this huge size of the project and the fact that the requirements were constantly changing Agaram faced numerous challenges in the execution of the project.

- Constitution of the cross functional team (CFT) A major challenge came up in the form of the constitution of the cross functional team (CFT). The members of the team were not retained through the different phases of the project. Due to this a clear understanding of the functional requirements could not be easily arrived.
- Constantly changing requirements When the prototype developed on basis of the requirements
  by the CFT was tested by the heads of different departments and the management, many changes
  were specified. The issue arouse since the requirements were not validated by the department heads
  and their superiors. This caused multiple iterations of the development leading to considerable loss of
  time.
- **Inter departmental Functionalities** In scenarios which involved inter departmental functionalities arriving at consensus was a major challenge. Example: Supplier blocking in the Materials module was based on the number of rejections the supplier has faced for the specific material. However this being a quality issue was forbidden to be handled in the material screen by the Materials department.
- **Agreement on the specification of details** Another disputable area was regarding the responsibility of data entry. For example, data entered in Material master offers in-depth specification of the different parameters of the material. Some of this like the material quality related details had to be provided by the quality department, cost related details were required from the costing department, and so on. The decision as to who would be the designated one with whom the responsibility to enter material data would rest with could not be easily arrived.
- **Resistance to the new system** Very often the comfort level with the existing system forbids the users from trying a newer system; the same issue was encountered here.



### Factors that contributed to the successful project completion



- **Reconstitution of CFT(Cross Functional Team)** Based on the feedback from Agaram, the CFT was reconstituted to include department heads and management personnel, this ensured that both Agaram and the client were on terms w.r.t the functionality of the application and the requirements addressed.
- Consensus on inter department functionalities Agaram overcame this hurdle through a series of meetings with the CFT, department heads and providing them with clear idea of the various functionalities of the different screens. Every functionality in a screen that impacted or which was influenced by another department was carefully scrutinized and scope defined before it was taken up for development.
- **Impact Analysis of CRs (Change Requests)** The non-freezing of requirements expanded the development period and resulted in multiple iterations of the product. However after this initial glitch Agaram performed a detailed impact analysis for every change request received and clearly defined its scope.
- **Extensive UAT (User Acceptance Test)** To accelerate the switch over to the new system the management enforced the disengagement of the existing system and ensured the usage of the new system. The users overcame the initial resistance within a short span of time and the exhaustive usage of the system for their day to day processes ensured a comprehensive UAT.



### **Conclusion**

The application has addressed all the major concerns of SEOYON E - HWA Automotive Pvt. Ltd. –

- Issue of Stock was mapped to its respective request; Stock movement was completely monitored and maintained in the system. Materials & WIP traceability made possible individually at each plant, every department and stage of production, this ensured that there was no Dead Stock.
- Complete control over the quality assurance process has been accomplished through vendor supplier rating, vendor blocking based on the number of rejections for a material, incoming inspection, inline inspection, in house inspections and pre delivery inspections.
- System maintains the quality documents efficiently, quality audit trail, and eliminates the cumbersome process of manual record maintenance.
- Vendor portal establishes a live platform for information exchange between organization and vendor, ensures capture of quality rejection reason, maintains rejection history and enables vendor blocking for material based on number of permissible rejections.
- Payment status for Goods Receipt (GR) maintained by the system and available at Vendor portal ensures proper communication of payments made and pending payments.
- Advance Shipment Notice (ASN) uploaded by the vendor in the portal ensures easy generation of GRN
  and comprehensive details of the material captured in its barcode avoids the tedious process of
  keying material details.
- Production Planning Control (PPC) efficiently automates the planning of end part and is based on the
  actual plans provided by their client, HMI. This helps generate very relevant daily and monthly
  production plans for SEOYON E HWA.

