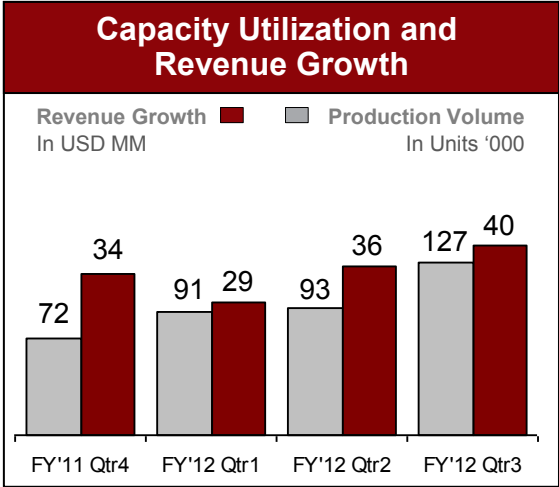


ATTAINING MANUFACTURING OPERATIONS EXCELLENCE FOR LONG TERM TOP LINE IMPACT

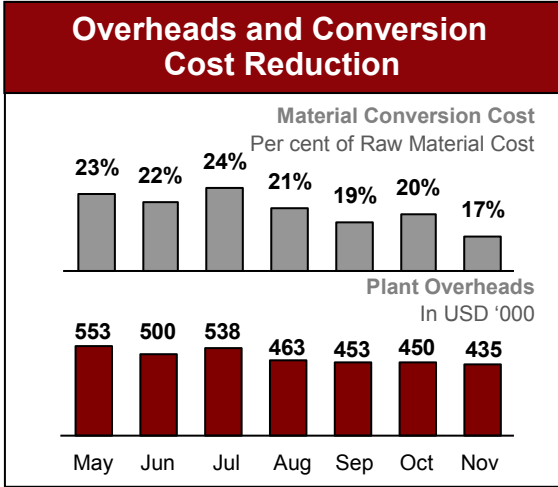
SITUATION	SECTOR
<p>A USD 140 M manufacturing client wanted to improve the capacity utilization of its core manufacturing facility that lacked operational efficiency and strategic approach despite a world-class infrastructure</p>	<p>Storage Battery Manufacturing</p>
<p>KEY ISSUES</p>	<ul style="list-style-type: none"> ▪ Commercial viability low due to poor capacity utilization against fixed overheads ▪ Operation and sales planning performed in an unstructured manner and plant unable to provide the right product mix to marketing on time ▪ Lack of focus on quality & rejection resulting in increased market complaints
<p>APPROACH</p>	<ul style="list-style-type: none"> ▪ A three pronged approach towards triggering and connecting operations effectiveness, people engagement & management infrastructure ▪ Focus on improving production by applying multiple levers simultaneously e.g. materials, maintenance systems, quality systems, coordination and planning ▪ Sustain improvements through organizational capability building and training
<p>RESULT</p>	<ul style="list-style-type: none"> ▪ Reduction in cost of conversion by 52%, an annual saving of USD 4 MM ▪ Increased the production by 70% creating an additional top line of USD 25 MM ▪ A 64% reduction in internal rejection & 50% reduction in external rejection

LEAN TRANSFORMATION OF MANUFACTURING OPERATIONS

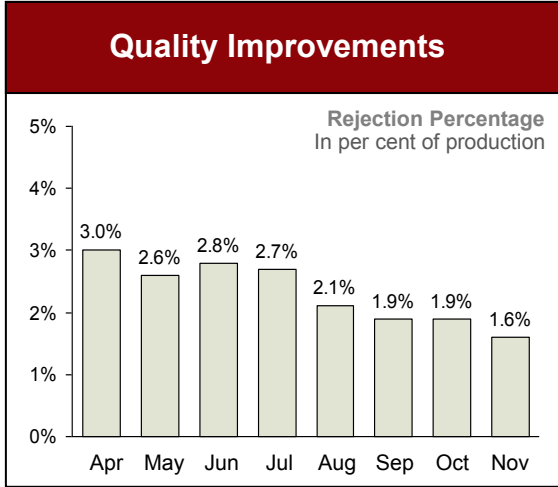
KEY PERFORMANCE INDICATORS



- Step change in plant production by 70% by debottlenecking of critical processes in the value stream
- Capacity Utilization of the manufacturing unit improved from 25% to 45%



- Direct & Indirect cost reduction of USD 1.5 MM p.a. by power & energy optimization, scrap reduction, manpower utilization
- Working Capital reduction by inventory optimization, floor space utilization, lead time reduction



- Reduction in plant rejection from 2.5% to 1.0% for finished goods
- Fall in external rejection by 50% resulting in improved market feedback and brand strengthening

APPROACH TOWARDS LEAN TRANSFORMATION

Work streams

Description

Results

1 Operating Systems

- Identifying opportunity areas across the manufacturing value chain, using lean tools to identify losses
- Applying multiple levers including maintenance systems, quality systems, supply chain optimization
- Timely implementation tracking of pending issues and debottlenecking

- Transparency on losses, Bottlenecks, other key levers
- Fast track resolution of maintenance, Material issues
- Root cause problem solving meeting and implementation tracking

2 Management Infrastructure

- Establishing KPIs, setting targets and accountability
- Create shop floor visual management
- Timely performance tracking of business and individual performance against baseline and targets
- Standardize dashboards and tracking

- Performance management system (PMS) in place
- Operator awareness and motivation
- Performance dialogue and feedback mechanism
- Institutionalizing the PMS

3 People Engagement

- Boot camps, workshops, training on lean manufacturing and problem diagnostic tools
- Focus on Frontline motivation and involvement through building ownership through shop floor meetings
- Run Idea generation session (IGS) with the client team
- Prioritize initiative areas & building implementation teams

- Mentoring client to build capability for a sustained improvement
- Employee Motivation and active involvement in problem solving
- Continual improvement of mindset & institutionalization of lean