

## Case Study – Kirloskar Brothers Limited

### The Industry

Kirloskar Brothers Limited (KBL) is one of India's premier engineering groups with over 116 years of experience. With a turnover of rupees 33 billion the company is into manufacturing of industrial pumps, projects & engineered pumps, Agriculture & Domestic pumps, Valves, Hydro turbines and Anti corrosion products.

### The Client's Need

KBL was looking out for a Production Scheduling software for scheduling jobs on the shop floor for its Engineered Pumps Division (EPD) at Kirloskarwadi in Sangli District.

Following were the requirements of KBL:

- Pressure for meeting schedules
- Backward scheduling at a planning level.
- Daily Resource Load chart for better control
- Equipment wise, Customer wise completion status.

### The Solution

After a thorough evaluation of competing products, KBL chose Walchand Infotech's ExSched. ExSched is a software package designed specially for Production Resource Scheduling on the Shop Floor. It simulates the shop floor environment and provides the most effective and efficient scheduling for the jobs.

The scheduling program uses the technique of Discrete Event Simulation. The scheduling rule uses combination of parameters such as 'Due Date', 'Priority', 'SPT', 'Minimum WIP' and 'Backward Scheduling'. Schedules are arrived at after considering practical constraints such as resource availability, holidays, resource breakdowns, outside operations etc.

### Key requirements addressed

- Facility to mark partial completion of jobs both quantities based as well as time based.
- Facility to overlap operations automatically at shop order level for better utilization of resources.
- Delayed jobs reports and analysis.
- Report showing quantity wise equipment completion.
- Facility to manually override the schedule by modifying resources, timings, priorities, due dates etc as per practical loading

### Business Benefits

- The time spent by planning persons is considerably reduced from days to couple of hours for preparing the schedule.
- The Planning department can predict the delivery time of jobs well in advance considering the current load in the shop floor.
- Effective utilization of resources with minimum idleness of machine resources.
- Subcontracting schedule is available in advance.
- Gantt charts and reports give an overall view of the shop floor in a single screen