How Bently Nevada’s Anomalert solution is generating savings in repair and maintenance costs in a pharmaceutical plant.

CHALLENGE
Before the installation of Anomalert the customer was experiencing frequent unplanned down times despite regular maintenance practices. This was generating discontinuity in production and reduction of fabrication output quantity and quality. Maintenance practices were also not optimal in that the client was incurring high costs due to daily/weekly maintenance activities required; inefficient resources allocation; bearings and belts replacements done without a fault root cause identified; as well as frequent and unnecessary alignments after component substitution. Prior to the installation of Anomalert, the customer’s routine practices included:

• HVAC (Heating, Ventilation and Air Conditioning systems): Replacement of bearings and belts, adjustment of pulley and belts, cleaning of HVAC unit (internal and external), replacement of filters, calibrations for temperature and humidity sensors.

• Dust Extraction System: Cleaning of dust collectors, inlet and outlet pipe, vacuum cleaners pipe.

• MV and MDP yearly maintenance.

• Steam boilers and system yearly maintenance.

SOLUTION
• 120 Anomalert products were installed in the motors’ control cabinet.

• Anomalert alarms were taken into consideration while planning the works order list.

• Monthly reports on data taken from Anomalert were used for root cause analysis and to identify fault parameters to drive maintenance activities on failing components.
**BENEFITS**

- Reduced HVAC yearly maintenance cost, replacing only necessary part at the right time.
- Reduced weekly maintenance time concentrated on fewer items.
- Reduced unplanned downtime and emergency maintenance.
- Ability to check the effectiveness of maintenance practices.

**IN NUMBERS**

<table>
<thead>
<tr>
<th>Reduced unplanned downtime to</th>
<th>Reduction in R&amp;M costs – spare parts and manpower</th>
<th>Elimination of HVAC parts cost for preventive maintenance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“0” HOURS</td>
<td>~$64,000 USD/YEAR</td>
<td>~$37,904 USD (80% OF YEARLY MAINTENANCE COST)</td>
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**Reduced labor cost:**

~504 hours x $13.13 USD/hour = $6,618 USD  
(INTERNAL LABOR DURING YEARLY HVAC MAINTENANCE)

**Reduced HVAC weekly maintenance labor cost:**

58 units x 0.5 hour x 52 kws x $13.13 USD/hr x 0.8 = $15,840 USD

**Reduced daily check labor cost:**

0.75 hour x 365 days x $13.13 USD/hour = $3,594 USD
(DAILY CHECK TIME OF 1.5 HOURS REDUCED TO 45 MINS.)

**TOTAL COSTS REDUCTION...**

$125,000 USD/Year