

CASE STUDY

Assessment For Pharmaceuticals Company Calculates Over \$270,000 In Net Savings In The First Year

This global pharmaceuticals company operates across four continents and turned to MaxGrip for assistance improving their asset management strategy.

MaxGrip was brought on board to optimize their maintenance approach through our Asset Improvement Program (AIP) assessment. By mapping their current situation and generating a clear-cut action plan, MaxGrip was able to project over \$270,000 in net savings for the first year.

APPROACH: ASSET IMPROVEMENT MAPPING

With an Asset Improvement Mapping (AIM) we will assess your asset improvement potential. One of the first steps is to gather important data and information and interview key stakeholders. These were key representatives of production, materials management, and maintenance.

Twenty individuals were interviewed, including personnel from maintenance, upper management, reliability engineering, procurement, warehousing and production. Additionally, asset hierarchy, Critically Analysis, RCM studies, RCA's, WO history, spare parts inventory and other documents were collected in conjunction with various facility walkdowns.

SUMMARY

Challenge: reduce costs and standardize global operations

Approach: Asset Improvement Mapping

Work Process Control: roles were clearly defined

Asset Criticality: criticality validation

Reliability: Updated RCA/FMEA evaluation

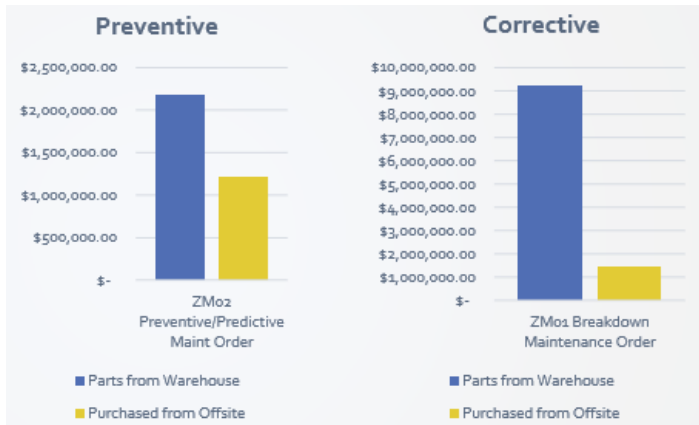
PM Optimization: validated risk-based strategies

Results: business case with bespoke action plan

- \$270,000 in net savings within the first year
- 50% reduction in low criticality PMs
- 3,000 man-hours saved
- Potential for global standardization identified

MATERIALS MANAGEMENT

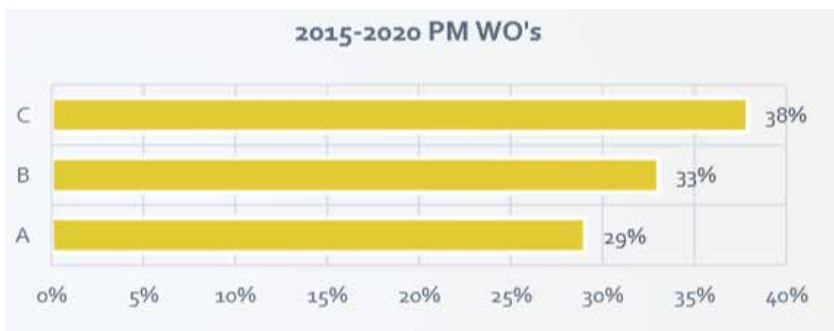
The two charts below shows the usage of materials per work order type for level “A” criticality asset from 2018-2020. While most of the breakdown maintenance (corrective) parts are taken from the warehouse, over 50% of the parts used during PMs are not on-hand in the warehouse. This shows that the warehouse is not adequately stocked for the current PM strategy due to poor materials management and job planning.



Almost \$12,500 was spent in 2019 on “Hot Shot” parts for control loops. By identifying these parts and ensuring the warehouse is properly stocked, spare parts will be reduced with more efficient operational planning.

PM OPTIMIZATION

The PMs performed since 2015 with respect to criticality shows 71% of all closed PM work orders were performed on medium to low criticality equipment. This indicates a significant amount of low value maintenance within the PM program. Further analysis of the PM program indicated 20% of all PMs performed since 2015 were inspect or calibrate PMs on “B” and “C” level assets.



PMs on lower criticality assets accounted for roughly 16% of the total work orders performed during the 2017-2019 time period and 5% of the maintenance budget. MaxGrip recommended these low criticality assets be moved from time-based calibrations to a condition-based strategy approach. Moving to a condition-based calibration strategy would reduce the amount of low criticality PMs by 50% and save up to 3,000 man-hours per year.

RECOMMENDED ACTION PLAN

MaxGrip's Asset Improvement Mapping is always concluded with a validated business case including an action plan and justified potential results. For this company, we proposed a four point action plan to optimize the maintenance approach and reduce overall costs. The action plan included: work process control, asset criticality, reliability, and PM optimization.

Work Process Control

Roles needed to be clearly defined and responsibilities for all support functions defined within the new plan (Operations, Reliability, Engineering, Training, HR, Procurement, Materials Management, & Maintenance). The maintenance execution workflow process and procedures also needed to be defined to close gaps in execution efficiency.

Asset Criticality

The current asset criticality distribution requires validating utilizing multidisciplinary inputs across all support functions defined in the new plan (Operations, Procurement, Reliability, and Maintenance).

Reliability

Formal RCA (Root Cause Analysis) /FMEA (Failure Modes and Effects Analysis) processes need development to establish defensible maintenance strategies for critical equipment.

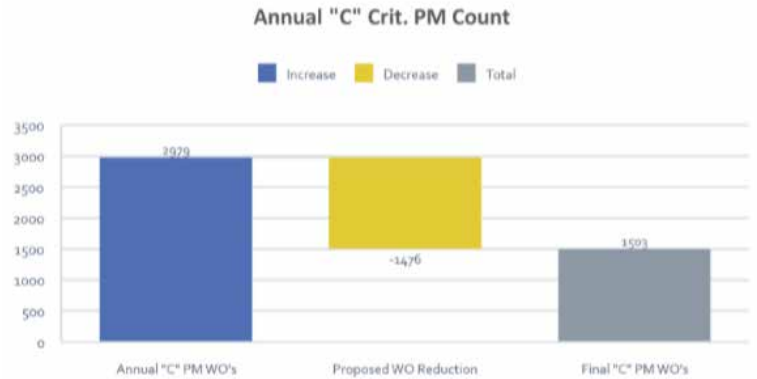
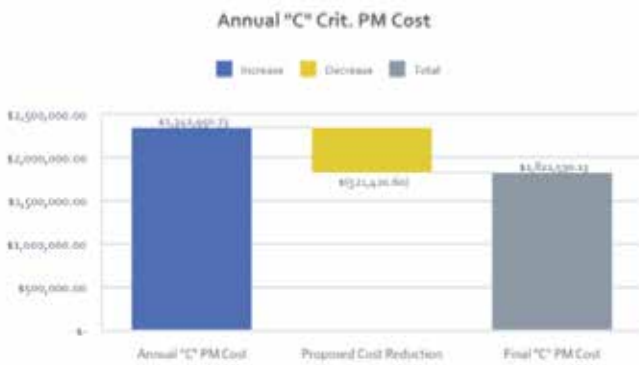
PM Optimization

Finally, utilize newly validated asset criticality to drive risk-based maintenance strategies on critical equipment.



RESULTS: \$270,000 IN NET SAVINGS AND REDUCTION IN LOW CRITICALITY PMS

MaxGrip's Asset Improvement Mapping projected over \$270,000 in net savings through asset management optimization within the first year. By moving low criticality PMs from time-based calibrations to a condition-based calibration strategy, low criticality PMs could be reduced by 50% and save up to 3,000 man-hours per year. An additional \$12,500 will be saved by increasing the on-hand spare parts in the warehouse for PM work orders. In addition, the business case scoped and showed the potential for global standardization of the maintenance approach.



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net savings in first year

50%
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3,000
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ABOUT MAXGRIP

MaxGrip consultants enable organizations in asset-intensive industries to achieve continuous improvements on their asset performance, also using the power of Digital Transformation. MaxGrip embraces APM 4.0 with a maintenance track record of over twenty years in industries like Oil & Gas, Food & Beverages and Utilities & Infrastructure. We operate on all continents and have a global presence with our main offices in the Netherlands (HQ), USA, Malaysia, and, Australia.

WOULD YOU LIKE TO KNOW MORE?



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