

Drug Manufacturer increased manufacturing yield by predicting batch failure

Challenge

Our client business objective was to improve the yield quantity of the Drug product manufacturing
Three months of historical data were available

Outcome

Client has better visibility on which parameters are driving the yield of the product
This enabled them to target for their 'Golden' batch to achieve output of 117 kg against 114 kg per year previously

Key Results

2.6% Increase in achieving output

Approach

Gramener used Exploratory Data Analysis to understand various patterns
But since the key question was which operational and material parameters are important, we applied classification and regression models for rules and variable importance

Solution

- > Pharma process laid out from left to right. The raw material once blended pass-through multiple equipment for processing
- > The process parameters are passed through digital twin algorithm to understand the optimum operation range
- > Anomaly once detected raises alert in real time making supervisor aware to take pre-emptive actions

\$6M Annual savings

About Straive

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