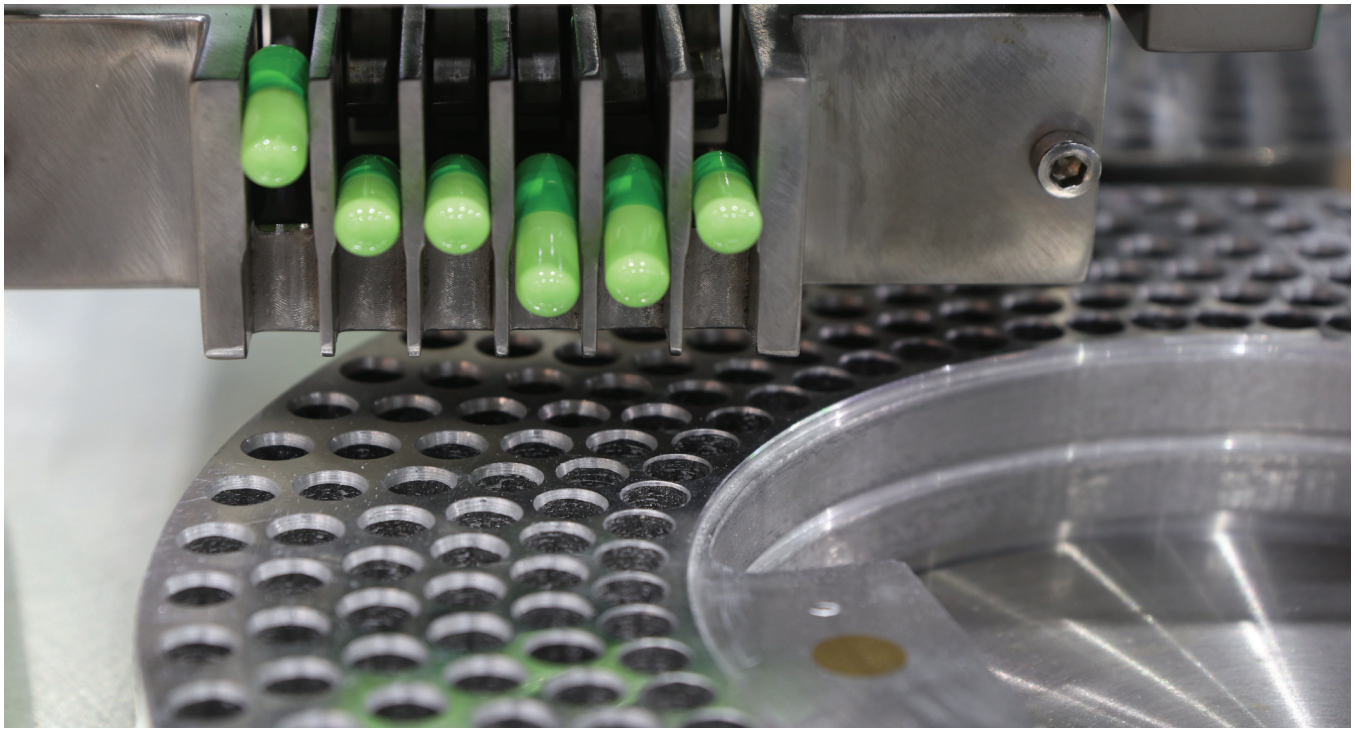
ACG
CAPSULES



Your go-to partner for increasing yield and profitability through strategic changes in machine design

CHALLENGE

A leading pharmaceutical company based in the USA faced the challenge of achieving desired yield percentage with four capsule-filling machines:

- <97%: Average yield on four capsule-filling machines
- 36 kg/batch: Average product loss* (batch size of 3 million capsules)

INVESTIGATION

The complete investigation involved study of the following:

- **Machine:** Each individual capsule-filling machine
- **Formulation:** Bulk density of powder of different batches
- **Wastage:** Batch-wise powder loss
- **Rejections:** Capsule rejection on machines

*Out of the total (36 kg) product lost, on average, 88% of powder was lost in the ADU (anti-dust collecting unit), 8.5% on the table, and 3.5% due to defects in the capsules.

SOLUTION

Strategic Machine Design Modifications to Ensure:

- Yield improvement
- Reduction in machine downtime

KEY STEPS

a. Bypassed anti-dust collecting unit and collected powder in stainless steel trays to improve yield (loss of powder in ADU—25 kg)

b. Modified the tamping plate assembly and eliminated bearing jamming for prevention of machine downtime

Proactive Operational Improvements

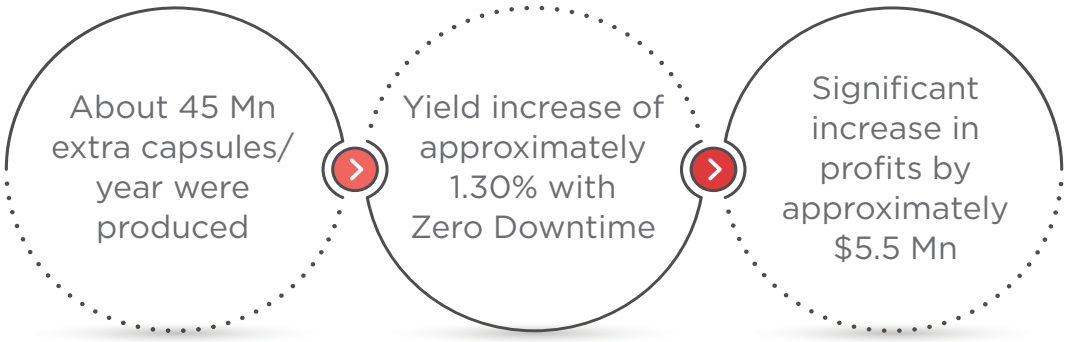
a. Powder collected in the modified tray to be mixed with the main batch at periodic intervals

b. Training to be provided to all operators and immediate supervisors on handling ACG-PAM machines

RESULTS

SUMMARY

ACG's smart machine design solutions resulted in yield increase + zero downtime.



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The industry's preferred end-to-end provider of integrated manufacturing solutions. With our extensive experience and know-how across the value chain, we help our customers stay ahead of the curve.