

HIGHLIGHTS

Optimising Glove Dipping with Intelligent Systems

Duramitt Sdn Bhd



Semi-Automatic Dipping Machine

Duramitt Sdn Bhd, a manufacturer of various specialised protection gloves, has successfully transformed its dipping process by implementing a closed-loop inverter control system to enhance efficiency, reduce manpower, and improve product quality.

By converting the dipping process from a hydraulic system to a closed-loop inverter control system, the company has achieved automatic control of the dipping level and material supply at each station. This advanced automation enables multiple speed controls for immersion and withdrawal, reducing overall cycle time.

The implementation of the semi-automatic dipping machine has yielded impressive results for Duramitt Sdn Bhd. The company has reduced its manpower requirements by two workers per shift and greatly increased throughput by 35%.

The consistent process conditions achieved through automation, including precise control of process timing and parameters, have led to a 1.2% reduction in the reject rate. Overall, the company's estimated annual cost savings amount to RM122,000, demonstrating the significant financial benefits of adopting advanced automation technologies.

Duramitt Sdn Bhd**Workforce****200** workers**Export Markets****United Kingdom****USA****France****Germany****Norway****Italy****Japan****Australia****Canada****Brazil****India****South Africa****Specialty****Chemical Protection Gloves****Cut Protection Gloves****Mechanical Protection Gloves****Specialised Protection Gloves****Thermal Protection Gloves****Project Objective**

Convert the dipping process from hydraulic system to closed loop inverter control system and automatically control the dipping level and material supply at each station to reduce overall cycle time.

**Machine Purchased****Semi-Automatic Dipping Machine****Value of FAGT Funding****RM281,000****Project Achievements****Reduction** in two manpower per shift**67%**

increase in throughput

1.2%

reduction in reject rate

RM 122,000

estimated annual cost savings from manpower reduction and throughput increase

