Case Study 0455

ADITYA BIRLA GROUP

Webster Griffin
packed with know how

CARBON BLACK

High Speed FIBC Bag Filling





THE CLIENT

Columbian Chemicals, are a subsidiary of Birla Carbon, the world's leading sustainable manufacturer and supplier of carbon black additives, provides high quality, specialty plating chemistries to the surface finishing industry. Birla's products span ASTM grades and specialty blacks their downstream customers produce materials like rubber, plastics, coatings and inks.

Webster Griffin were commissioned to supply a Big Bag filling solution to process their carbon black product. They are globally renowned for their patented "semi-suspension" filling system - ideal solution for this project.

THE CHALLENGE

Columbian chemicals required two bulk bag filling stations for pelleted carbon black. The system was needed to be flexible to adjust for varying bag sizes and weights from 500kg to 1500kg whilst maintaining a highly productive throughput.

- Recording of the accurate weight of every filled bag delivering more control over production.
- Automated pallet placement and conveying to maximise output and reduce the number of personnel on site.
- Ensure the system produces tall stable bags suitable for transportation to Birla's clients.

THE SOLUTION

Webster Griffin's team assessed Birla's requirements and advised a twin IBC-PF4 Big Bag Filling system capable of a throughput of up to 20 bags/hour, complete with automatic pallet magazine with a capacity of up to 400kg and an integrated fully automatic conveying system.

- Two operator platforms for ease of operation.
- Automatic adjustment for varying bag weights from 500kg to 1500kg
- Siemens S7 1200 with a 5.7" colour Proface HMI.
- Automatic sliding filling spout with manual locking ring and inflatable collar
- to secure and seal the bags keeping wastage to a minimum.
- Dust retention system for hygienic bag filling conditions.
- Electronic weighing control to deliver weighing accuracy of +/-0.5%
- Bag inflation device to ensure the bags are fully filled.
- Swinging bag loop hooks for ease of bag placing.
- Adhesive label and ticket printing system.

THE RESULT

Birla were able to benefit from the follwoing improvements.

- The big bag filling system has the low labour input of a single operator and a fork lift driver maximising labour efficiency
- Bag weight filling accuracy is delivered within +/-0.5% on desired bag weight giving Columbian Chemicals greater control over their product
- The big bag filling system delivers a high throughput of up to 20 bags/hour improving production capabilities.
- Hygienic bag filling.
- Flexibility in production through an automatic self-adjusting system.

Linkedin.com/Webster Griffin Ltd
Youtube.com/Webster Griffin Ltd
www.webstergriffin.com

Webster Griffin Ltd. Brooklands Park,
Farningham Road, Crowborough
TN6 2JD England (UK)

+44 (0) 1892 664250
+44 (0) 1892 664340
Info@webstergriffin.com

QUALITY MACHINERY SINCE 1975

Case Study 0455

ADITYA BIRLA GROUP

Webster Griffin
packed with know how

CARBON BLACK

High Speed FIBC Bag Filling

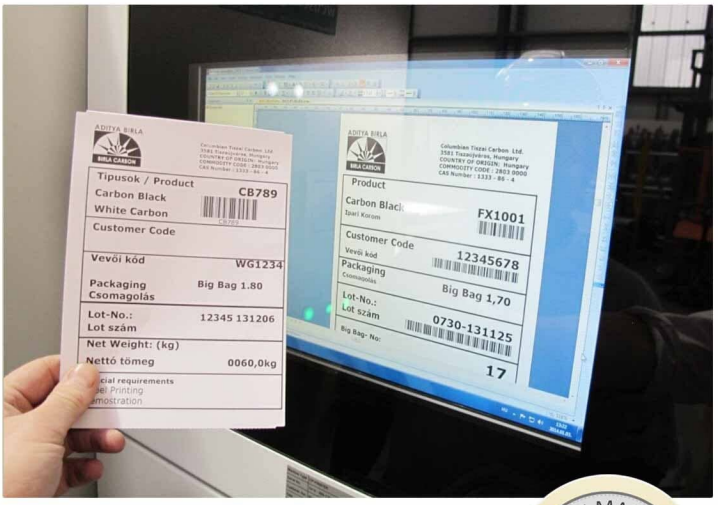












Linkedin.com/Webster Griffin Ltd
Youtube.com/Webster Griffin Ltd
www.webstergriffin.com

Webster Griffin Ltd. Brooklands Park,
Farningham Road, Crowborough
TN6 2JD England (UK)

+44 (0) 1892 664250
+44 (0) 1892 664340
Info@webstergriffin.com

QUALITY MACHINERY SINCE 1975

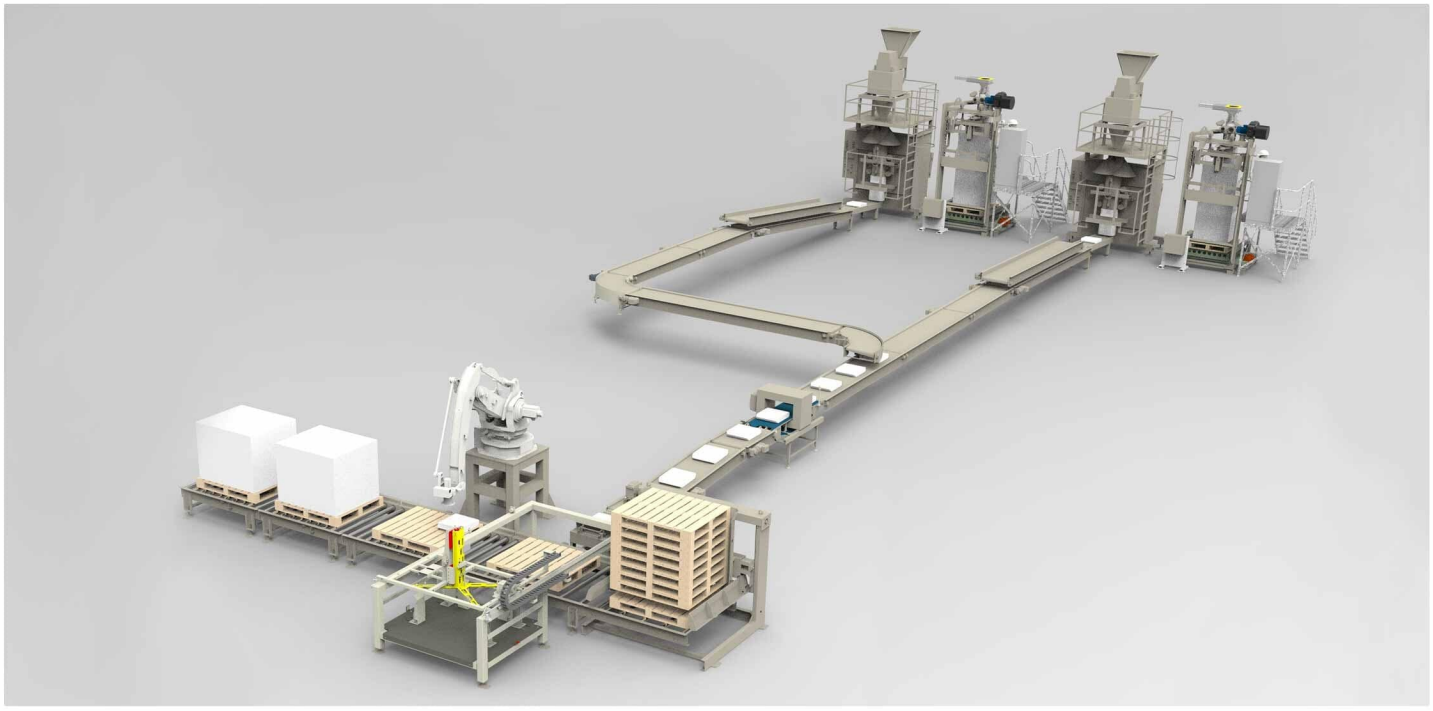
Case Study 0455

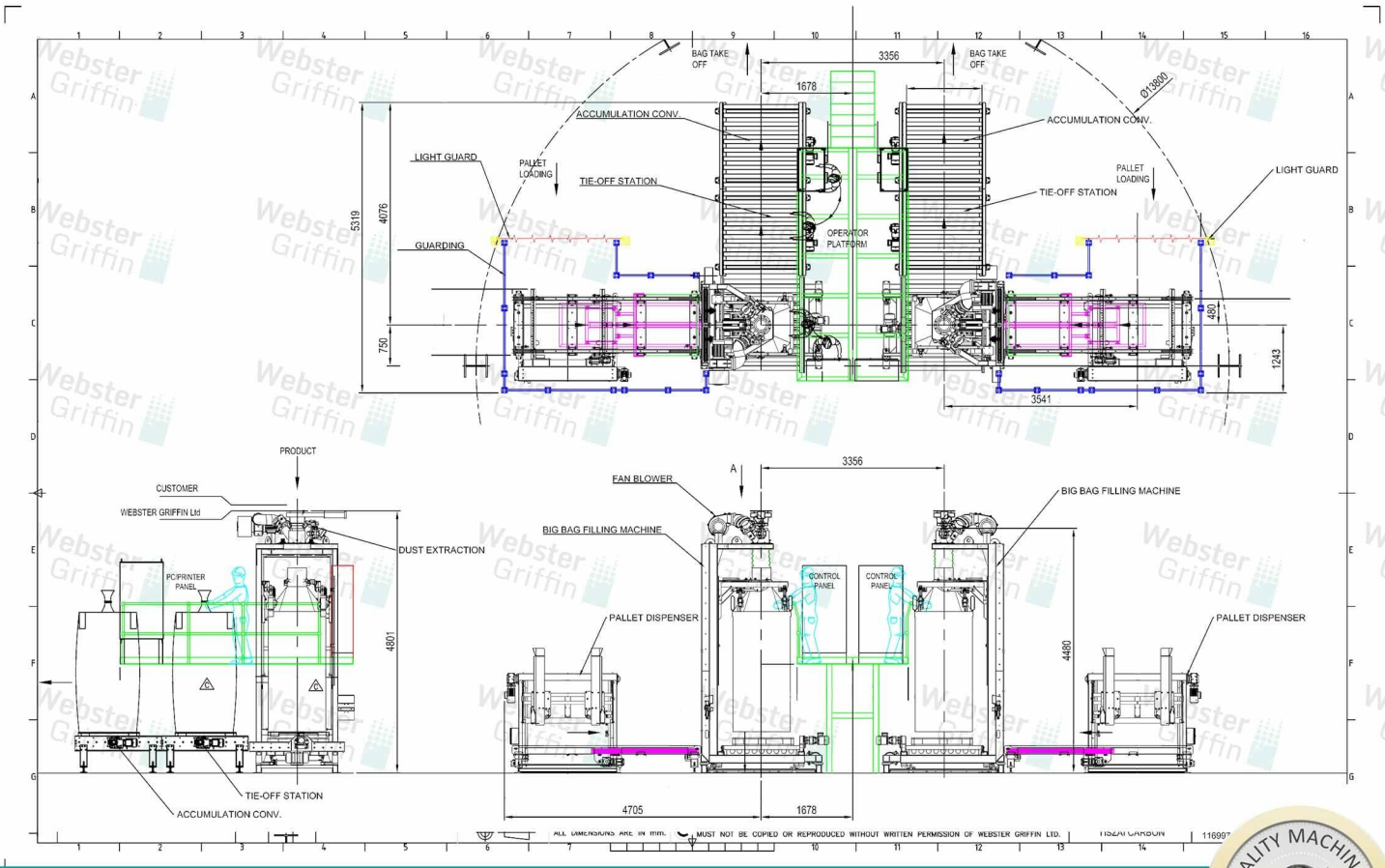
ADITYA BIRLA GROUP

Webster Griffin
packed with know how

CARBON BLACK

High Speed FIBC Bag Filling





ALL DIMENSIONS ARE IN mm. MUST NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION OF WEBSTER GRIFFIN LTD.

Linkedin.com/Webster Griffin Ltd
Youtube.com/Webster Griffin Ltd
www.webstergriffin.com

Webster Griffin Ltd. Brooklands Park,
Farningham Road, Crowborough
TN6 2JD England (UK)

+44 (0) 1892 664250
+44 (0) 1892 664340
Info@webstergriffin.com

QUALITY MACHINERY SINCE 1975