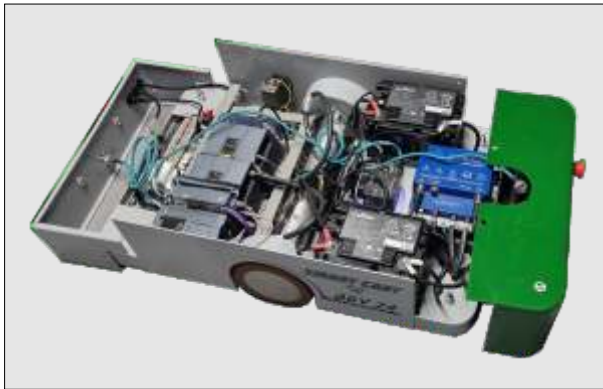


The Smart Cart Gets Smarter

C J Waterhouse Co. Ltd. Were tasked with delivering a Minor Ingredients batching system to provide high accuracy weighing and bagging of multi-ingredients at high throughputs for a UK based food manufacturer. The developed system was based around our Smart Cart system which utilised mobile weigh carriages running upon a mono rail track to collect ingredients from numerous dosing stations and has been in operation for a number of years within the rubber and plastics industry. The customer was keen to implement this system due to its production flexibility, accuracy and individual ingredient traceability, however due to their rigorous cleaning regime the track system was not the correct solution. C J Waterhouse therefore looked to develop an automated guided vehicle (AGV) system which would not require a track assembly.

After research into third party AGV's C J Waterhouse Company decided to develop their own AGV's due to the specific bespoke requirement of the Smart Cart System. The AGV's utilise Siemens micro drives with two central drive wheels and 4 corner swivel wheels allowing complete directional control of the carriage.



Each AGV is fitted with a high accuracy Mettler Toledo digital scale and an integrated bag clamp assembly. Bags are manufactured by C J Waterhouse's in-line bag manufacture machine before being swung into position upon the Smart Cart clamp assembly. The clamp assembly is then opened and the carriage sets off, passing under an array of material dosing stations to collect individual ingredients in accordance with the specific recipe.

Upon completion of the batch the bag is printed, sealed and discharged onto the accumulation system.



Batch logging records each individual ingredient weight together with the total batch weight. This information is stored and presented as batch logs which can be viewed, printed and exported. These logs can be viewed at any time under search criteria such as date, batch number, recipe number etc.

The First AGV Smart Cart System is now nearing completion of commissioning and incorporates a total of 44 material dosing station with 28 AGV Smart Carts.

For more information on our Smart Cart System or our range of materials handling solutions please visit our website at www.cjwaterhouse.co.uk, call us on 0044 (0)1636 610792 or email us at sales@cjwaterhouse.co.uk.