

# High Speed Bagging at Italtip Preforme Pallanza PET Chips Filled Fast with Patented System



Webster Griffin installed a big bag filling system at Italtip Preforme Pallanza on the shores of Lake Maggiore in Northern Italy for bagging PET chips (Polyethylene Terephthalate) into 800, 1000 and 1200kg four loop big bags

Italtip' Preforme's sister company, Cobarr Plastics Rome, were the second company, after Crystal Polymers UK, to select a Webster machine for the bagging of PET chips, now over 40 such systems are operating world wide - the most advanced being at Italtip Preforme .

Because PET chips are used for making carbonated soft drinks bottles and clear rigid food packaging strict quality assurance procedures are in place at Italtip Preforme and traceability of all product throughout manufacturing, bagging and despatch is of paramount importance.

Operated by one man, who places an empty bag onto the machine every 90 seconds, the Webster system runs for 8-16 hours/day but in times of high demand will run for 24 hours/day, 7 days/week.

As this is the only bagging line at Italtip Preforme reliability and versatility are essential -bag size and/or weight changeovers often have to be done several times per shift, therefore, such features as self adjustment for different bag sizes, integrated check weighing of filled bag weights, and automatic printing of an identification label for each bag are considered to be essential.

The bagging machine is fed with product from two stainless steel silos above the bagging hall, after filling and tagging bags are conveyed into the adjacent warehouse where they are unloaded by two fork lift trucks working in sequence.

The new Webster Griffin line comprises of:-

1. Empty pallet magazine, capacity 15-20 pallets
2. Big bag weigh-fill station model IBC-PF3
3. Automatic check weighing and bag neck closing station
4. Filled bag labelling station
5. Bag accumulating conveyors



Owing to the high value of PET resin at up to US\$2,000 per tonne, Italtip Preforme needed to reduce product give away and stipulated an accuracy of +/- 500g - 1000g/bag dependable accuracy is ensured by Webster's 'self optimising' digital weighing controller, via a 'Querty' keypad the weighing system can be loaded with 100 different sets of instructions for different bag weights and product bulk densities, these pre-set instructions are re-called by entering an alpha numeric code.



An RS232 output links the weighing system to a barcode and label printer, a printed label is placed in a pocket on each bag and displays a unique bag identification number, as well as the final customers name, product grade, batch number, date, time and the actual net weight of product in the bag

The weigh system is also connected to Italtip Preforme's DCS, Plant Computer, which records and monitors the performance of the bagging station. A database of production data, which can be interrogated according to customer name, product grade, batch and time will provide a central pool of easily accessed information on the history of every bag which has been filled by the system.

When filling big bags at high speed it is very important that the loose inner PE bag does not rupture as it is filled, to avoid this problem the empty bag is raised up and completely inflated by a motor driven fan before the two stage product feed valve above the IBC-PF3 is opened and chips are allowed to pour into the bag hanging below.

For Italtip Preforme it is crucial that filled bags are stable and sit squarely on the pallet. Whatever the bag height a stable square pack is assured by the Webster machine which suspends the bag during filling and lowers it down onto the pallet at the end of the auto weigh fill cycle.

To further reduce operating costs Italtip Preforme sought to reduce expenditure on packing materials by using bags which are as small as possible - unfilled space in a bag is a waste of money and avoided by Webster's unique method of clamping the bag neck and holding it in tension throughout the whole filling cycle.