

# CMC Texpan is expanding and is becoming more integrated into the Siempelkamp Group



Oscillating screen

In plant engineering, being able to receive complete plants from one source has always been better than receiving plant components from many different providers. The more components a manufacturer can offer for a plant, the less interfaces have to be dealt with when it comes to complex projects in the wood-based materials industry. This results in considerable advantages for the customer. In this respect, as a supplier, Siempelkamp is becoming more complete. A recent example: For more than 25 years Siempelkamp Maschinen- und Anlagenbau GmbH & Co. KG and CMC Texpan S.r.l. in Colzate (Italy) have been shareholding companies. In November 2009 this relationship was modified to the effect that Siempelkamp now holds 70% of the majority stake. Advantage number one: The Italian company now is even more integrated into the technology, production, and innovation pool of the Siempelkamp Group. Advantage number two: CMC Texpan is expanding its product range. For the customer this opens up new products in the area of wood processing such as the storage, dosing, cleaning, screening, and the glue application of chips, flakes, and fibers.

By Ralf Griesche

Since 1980 CMC has been a competent and reliable partner to Siempelkamp. The shared activities are characterized by expert knowledge and extensive experience with many different machines and equipment which include almost all areas of the wood-based products industry.

“This make-up is an extremely important advantage. All Siempelkamp Group companies work closely with their partners. CMC is no exception in this regard. CMC provides extensive knowledge of the entire production process which optimally fits into our Group,” says Dr.-Ing. Hans W. Fechner, Managing Director Siempelkamp Maschinen- und Anlagenbau GmbH. Dr. Dario Zoppetti, Managing Director CMC Texpan, adds: “Furthermore, as part of the Siempelkamp Group, our operating radius makes it possible to accurately assess the needs of our markets. Consequently, we concentrate on the production of new machines in order to meet the constantly changing market demands. Close dialogue with our Group partners is again an important pace maker in this respect.”

CMC Texpan has recently added several innovations to its range of products. Furthermore, the company, based in Colzate, has upgraded the production of well-proven machinery which was formerly marketed by Texpan. Until 1997 CMC Texpan operated as an independent company. Important innovations can be found in the areas of storage, dosing, cleaning, screening as well as glue blending.

#### Storage: the right solution for every material

CMC Texpan offers a large selection of bins and silos for the storage and dosing of both dry and wet materials (e.g., chips and particles). These silos can be installed in all production areas. According to the type of material processed, an appropriate discharge and dosing system is installed.

CMC Texpan equips concrete silos for the storage of chips with hydraulic moving



Silo



Dosing bin



Chip Cleaner

floor extracting systems. Cylindrical steel silos are suited for both dry and wet

materials: Extraction takes place by means of hydraulic sliding scrapers, rotary systems, and extracting dosing worm screws. Usually, only the extraction system for the silo is supplied, while the concrete or steel construction of the silo is carried out on site according to CMC design data.

#### Dosing

CMC dosing bins and scales are designed to deliver a constant and precisely metered flow of mainly dry but also wet materials to the machines installed after them (generally blending systems). They are equipped with a leveling system which, by means of rotary combs, creates a mat with uniform height inside the bin. The electronic weighing devices are highly precise. These scales control material dosing and make sure the preset material throughput is maintained, which will minimize glue consumption. In this respect, this technology scores high in the area of resource efficiency.

#### Cleaning

CMC has resumed the production of chip cleaners which were marketed by Texpan in the 1990s. The last generation of these machines has been updated with technical and technological solutions.

These machines are designed to remove any possible pollutants or materials (e.g., stones and minerals, sand, metals, glass, rubber, plastics, high density wood chips and so on) unsuitable for production from the material stream (especially from relatively dry recycled material). These cleaning machines play a significant role within the technological process for the production of particles, flakes or fibers from wood chips.

Their principle of operation is based on densimetric separation. This separation takes place in an oscillating tank and is



Gravimetric separator

supported by a strong pulsating air flow which provides for further cleaning.

“High efficiency removal of contaminants is fundamental not only to prevent wear and damages to downstream machinery, but also to ensure a long-life cycle for the entire production line,” says Dr. Dario Zopetti.

### Screening and grading

The latest screening and grading technology by CMC is also state of the art. The correct separation of chips and particles will have a positive influence on material yield and resin consumption. It represents a key factor for good board quality. In this respect, classification of the chips and particles is a matter of great importance within the production process. CMC now offers machines for this field of application.

Gravimetric separators carry out a classification of wet and dry particles according to their weight, size, and thickness. Heavy pollutants are reliably removed. The separa-

tors’ principle of operation is based on a wind chamber with an air flow. The particles are separated in the air flow according to their weight. The degree of separation can be easily adjusted to achieve the desired selection.

Depending on the quantity of screening decks located inside the screening box, oscillating screening machines are designed to screen material in up to four fractions. The use of screens with different mesh sizes with a reliably high material throughput enables the precise definition of the particle size to be classified.

Roller screens are particularly suitable to process wet material. CMC has already been implementing roller screening systems in mat forming lines for many years.

The high technology required by such applications has resulted in the construction of high performance roller screens. These screens efficiently screen wet chips, sawdust and shavings without contaminating them.

### Gluing systems: a CMC core competency

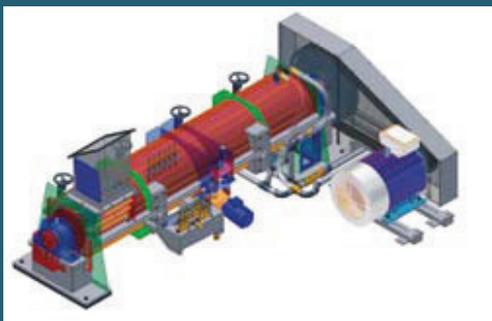
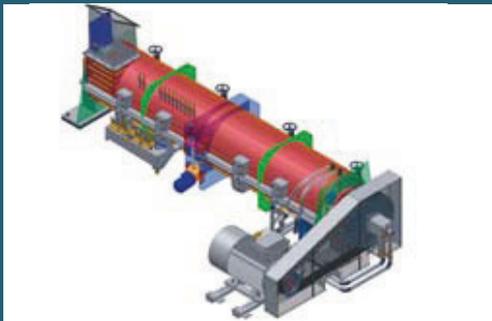
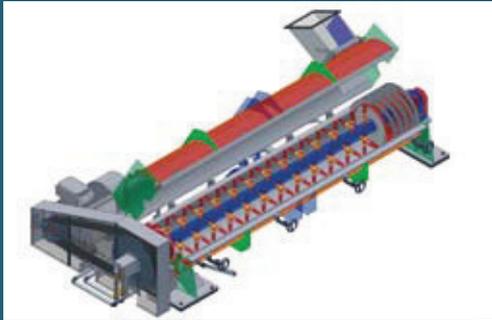
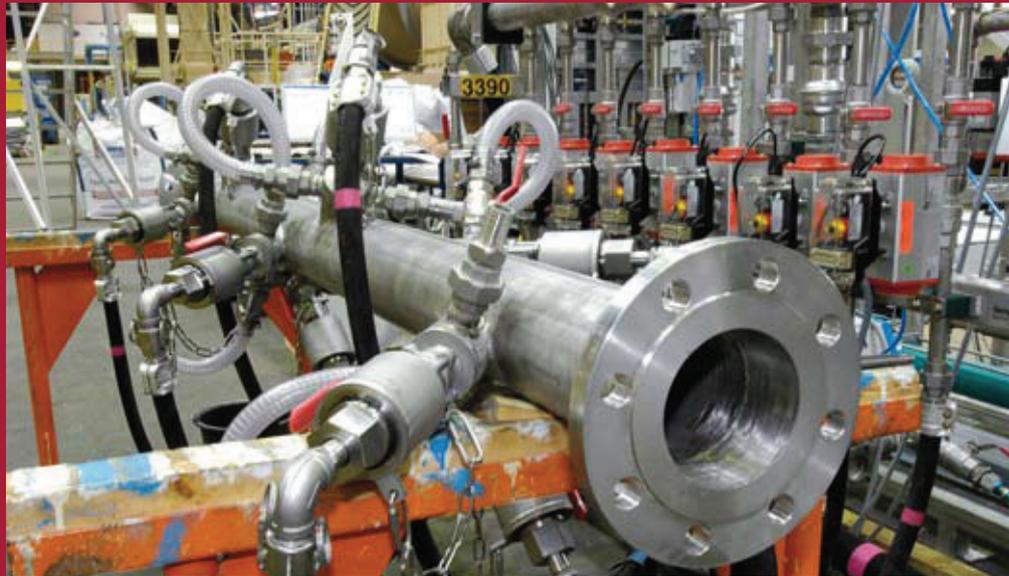
Glue blending is undoubtedly an extremely important part of the production process of wood-based boards. “The correct, constant, and accurate dosing and mixing of particles, glue, and additives is the precondition in achieving a board with good mechanical properties,” says Dr. Dario Zopetti. A state-of-the-art glue blending system can provide customers with considerable savings.

Siempelkamp is responsible for the development of the glue systems and works closely together with CMC Texpan. These glue kitchens are equipped with the latest flow meters and have been tested in Siempelkamp’s laboratory. The centerpiece of the system is new software that provides a number of ways to save glue.

Combined with the CMC dosing bins with scales (for a precise dispensing of particles to be mixed with glue), the use of the glue system leads to high board quality.

CMC also offers glue blenders designed to obtain a uniform, homogeneous flow of glued particles to be fed into the forming station.

“Our customers need an integrated concept starting with the wood-yard and ending with the packing of the finished boards. With CMC Texpan, Siempelkamp has added a manufacturer of state-of-the-art machines covering a broad range in wood processing,” concludes Dr. Hans Fechner, chairman of the Executive Board of the Siempelkamp Group.



Different types of glue blenders

Testing of a complete gluing system for an MDF line