

Specialist in forming celebrates forty years

Top right: Stationary forming machine with four plus two heads

Bottom left: Inside CMC Texpan's Colzate factory

Bottom right: Aerial view of Colzate and the main factory

The origins of CMC Texpan go back 40 years to April 1962 and the formation of CMC by Mario Zoppetti, father of Dario Zoppetti, the current president of CMC Texpan.

In the 1970s, Ferdinando Campo Antico and Dario Zoppetti formed Texpan SpA, a pure engineering company and, together with his interest in another Italian woodworking machinery company, Elmag SpA, this led to



the involvement of CMC in the woodworking machinery field.

Texpan's expertise has always been in the area of forming machines for the composite panel manufacturing industry and the company is credited with the invention of the textile forming belt to replace the then commonly-used steel belts, hence

the name Texpan, combining 'textile' with 'panels'.

In the mid-1980s, German complete plant supplier Siempelkamp took over the Texpan company.

Specialising in the design and engineering of complete forming systems for particleboard lines, Texpan initially employed the services of CMC to carry out the manufacture of its systems. However, in 1997 Texpan's know-how was taken over by CMC and CMC Texpan is of course still part of the Siempelkamp family, providing forming technology for virtually all Siempelkamp's new lines and upgrades.

In addition to contracts received through Siempelkamp, which account for about 40-50% of turnover, CMC Texpan also sells its systems direct to panel mills.

Two years ago, CMC Texpan carried out some major investment at its headquarters in Colzate, north east of Bergamo, extending both the factory and the offices.

It has a second factory in Colzate, a short distance from the main base, where heavier engineering work is carried out, and a third unit near Bergamo; the factories have a combined area of 25,000m², of which 18,000m² is under cover.

While particleboard forming is the main market for CMC Texpan, it also supplies – through Siempelkamp – forming machines for the production of MDF and OSB.

The company does not just supply forming heads, but complete forming lines, mat dividing equipment, electronic weighing systems, hammer mills, dosing and storage bins, disc separators, pressing and equalising systems and panel saws as well.

When Texpan began designing forming heads, it was for single and multi-daylight lines and tray systems.

Things have changed, of course, and

Nestling at the bottom of the lower Alps is the ancient town of Bergamo and close by is the small town of Colzate, home of CMC Texpan, which celebrates 40 years in business this year. Today the company supplies forming machines and other equipment for many of the world's panel mills



Above:
Forming line
at Plitprom's
particleboard
line in
Moscow

Right:
Replacement
forming unit
at Frati,
Pomponesco,
Italy

continued from p28

the company soon became expert in forming equipment for the continuous press lines which surged onto the market from around the mid-80s.

A new concept, launched this year by CMC Texpan, is its mechanical high-capacity three-head forming system.

Until now, higher capacity particleboard lines had to rely on a four-head forming line – two for the core and two for the surface layers; the highest capacity which could be achieved with a conventional three-head system was around 920m³/22.8 hours with 19mm thick panels. That has now changed.

CMC Texpan has designed a new 'over-size' mechanical head for the core layer, which it claims can reach a capacity of 1,150m³/22.8 hours – a 25% increase in productivity.

"Such a solution increases return on investment as well as saving overall installation space," said Mr Zoppetti.

Upgrades

Today, there are still calls for machinery to suit the 'older technologies' in the form of upgrades to increase the output of older lines and improve board quality. In fact, this has taken an increasing share of CMC Texpan's order book in the last couple of years as new plant investments have decreased and interest in upgrading existing plants has seen a corresponding increase.

Two recent examples of upgrades are at the Pomponesco factory of Italian panel group Frati and at Moscow-based Plitprom.

Frati wanted two new mat formers for its particleboard line, which has a 16-daylight press with trays of 2.92m x 4.31m. The original core layer formers, which CMC Texpan replaced, were Bison units.

The replacement former features a feeding system comprising two traversing belts which distribute the furnish more uniformly inside the bin, leading to an improvement in transverse distribution of the mat, claims CMC Texpan.

There are also two four-comb dosing bins, one of which has an integral scale to measure the density of the surface layer material, and two larger pneumatic forming chambers complete with horizontal

screen for the extraction of glue lumps.

These screens are designed to separate any such lumps or oversize material from the particle mat, thus protecting the press from possible damage and increasing homogeneity, processing characteristics and quality of the finished panel, said

the company employs 100 staff to do this.

In the despatch area awaiting delivery was a mechanical MDF forming machine for a Siempelkamp main contract for Intasa of Spain, while for the Falco particleboard factory in Italy, there were four forming machines – two mechanical for the core and two wind formers for the surface layers – wrapped and ready to go.

Pin rolls for forming heads are assembled in the factory, with each copper-plated pin being welded in place on its cylinder, while in

another area, a mat weigh-scale was being crated for despatch.

A CNC milling machine with 64 tools was in the process of machining a saw head for a Siempelkamp Handling Systems (SHS) contract – one of many for this

sister company in the Siempelkamp family.

Another, enclosed, CNC milling machine, this time with 11 heads, is also available to machine smaller components.

In the despatch area, there is a workshop for making packing cases tailor-made from OSB to fit each item manufactured and ensure its safe delivery to the panel mill.

To monitor production progress, each member of CMC Texpan's staff has a magnetic card and swipes their card and enters a job code as they commence work. This information is passed to a central computer so that the progress of each job can be tracked at any point and raw materials can be organised at the right time, or transport arranged for delivery of a finished job on time.

In the passage of 40 years, composite panel production lines have seen major changes in the way in which the panels are manufactured. Perhaps the most fundamental change came with the introduction of the continuous press and the resultant dramatic increase in the capacities of the lines.

To meet this challenge, the mat had to be formed faster and better to feed these monster presses and produce a good quality panel at the other end of the line.

CMC Texpan has continuously developed its forming systems to keep up with that changing pressing technology, but has also designed replacement forming equipment for older lines to improve their efficiency.

That flexibility has been the key to the company's success in recent times, when major new investments have been few and far between. ■



Mr Zoppetti.

The project met the objectives of Frati in allowing the production of panels which could be directly laminated with any overlay paper.

The old Bison machines were limiting the capacity of the line to the extent that it could not achieve the target of 950-1,000m³/23 hours. After the Texpan installation, the line achieved a peak production of 1,150m³/23 hours, with the added benefit of improved quality panels, said the CMC Texpan president.

At Plitprom's particleboard line in Moscow, CMC Texpan supplied two wind formers for the surface layers and one mechanical forming head for the core, replacing existing Würtex mechanical formers in a tray conveyor, multi-daylight press line.

Modifications to the feeding conveyors for the forming heads, which were supplied by the customer, formed part of the engineering on this project. Fellow Siempelkamp group member ATR was responsible for the electrical side of the works and the whole contract was overseen by Siempelkamp.

In this case, increased production capacity was not the main target, but the quality of the finished panel surfaces was previously very poor and needed to be improved.

However, after two months' operation of the upgraded plant, Plitprom not only reported a big improvement in quality, but also increased output from the line.

The main factory of CMC Texpan is equipped with all the necessary milling and machining equipment to carry out the majority of the production in-house and