CMF XLT: Customised technologies for large size tiles

CMF XLT：大规格瓷砖的定制技术

Mirco Corbelli, CMF Technology (Pavullo, Italy)

CMF Technology has been designing and building plant and automation for the ceramic industry for over 40 years.
In the field of automation, it supplies ceramic tile conveying and handling lines, storage systems with laser guided vehicles and satin finishing machines that serve to functionalise the surfaces of sintered products. The range of equipment available for porcelain tile production includes raw materials storage, batching and mixing plants, behind-the-press technological towers for management and mixing of coloured bodies, dry colouring units, and single and double loading and "through-vein" press feeding systems.

The growing demand for customised solutions for large-size tile and panel production together with CMF's efforts to meet the needs of the market has led to the launch of CMF.XLT, the brand name used for the company's many plant and process solutions specially designed and engineered for production, handling and finishing of large-size ceramic tiles and panels. CMF Technology has already completed a large number of orders for XLT brand equipment. Alongside the well-established **TBOX and TFLAT lines of storage units for fired and unfired products** and the **Pegaso laser-guided vehicles**, other automation segment solutions that have attracted considerable interest include the **Rotox transfer table** and the **Magic Table**

40多年来，CMF科技公司一直在为陶瓷行业设计和建立工厂与自动化系统。
在自动化领域，该公司提供陶瓷输送带和装卸作业线，配备激光制导轨车的存储系统，以及用于加工功能性产品的缎面加工设备。可用于瓷质砖生产的设备包括原材料存储、配料及搅拌设备、压机之前管理和混料的技术塔、干法着色设备，以及一次布料、二次布料、形成通体纹理的布料系统。

市场对大规格瓷砖和板材生产定制解决方案的需求日益增长，CMF为满足市场这一需求推出了CMF.XLT品牌。该品牌产品是CMF公司专为大规格瓷砖和板材的生产、装卸和精加工而设计的众多设备和工艺解决方案。CMF科技公司已经为XLT品牌设备拿下了大量订单。除了用于烧成产品和未烧成产品的**TBOX和TFLAT存储设备**以及**Pegaso激光制导轨车**之外，其他自动化领域的解决方案也吸引了相当多的关注，包括**Rotox转换台和魔术桌大板旋转装置**。
Rotox用于转换和90°旋转陶瓷板材及其倍数规格产品，而Magic Table满足了陶瓷板材及其倍数规格产品安全旋转的需求，并确保产品在生产周期结束时的完整性。
对于无釉瓷质大板的生产，CMF科技公司的**Tech Tower**配备了两

panel rotation device. Rotox is used for the transfer and 90° rotation of ceramic panels and their submultiples, while Magic Table fulfils the need for safe rotation of ceramic panels and their submultiples and guarantees complete integrity of products at the end of the production cycle. For the production of unglazed porcelain panels, CMF Technology equips its **Tech Tower** range with two different types of press feeding system: the **Spiller Evolution 3D** decoration unit, a device that is suitable for the production of panels using the single- and double-loading process; and **Spiller 2.0**, a patented technology specially designed to create "through-vein" full body effects during the panel shaping stage using latest-generation pressing technologies. The Spiller 2.0 module was developed through the hard work of staff at the R&D laboratory, an integral part of CMF's organisation. It has pilot plants for studying new processes and system solutions and offers training courses and customised research services. The XLT technologies for the ceramic tile finishing segment also include the **Silktile dry satin finishing machines** for the satin finishing of large size tiles and panels in sizes up to 1600x3200 mm. Silktile is produced in a wide range of models to meet many different requirements (matt or gloss finish for glazed porcelain tiles, satin finish for unglazed porcelain, etc.) and is attracting growing market interest. ✕

种不同类型的布料系统：**Spiller Evolution 3D**装饰设备，该设备适用于通过一次布料和二次布料生产大板；**Spiller 2.0**，则是一项专利技术，在大板成型阶段使用最新一代压制技术，专门打造"通透"的通体效果。

Spiller 2.0模块经过研发实验室工作人员的不懈努力开发而成，该实验室是CMF组织的一个组成部分。实验室拥有用于研究新工艺和系统解决方案的试点设备，并提供培训课程和定制研究服务。

瓷砖精加工领域的XLT技术还包括**Silktile干法缎光精加工机**，用于大规格瓷砖和规格达1600×3200（mm）的大板的缎面精加工。Silktile配备一系列模具，可以满足许多不同的需求（瓷质釉面砖的哑光或亮光表面效果、无釉瓷砖的缎面效果等），吸引着越来越多的市场关注。 ✕