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LATEST TECHNOLOGIES

DIAMORPH HOB CERTEC

In recent years, Diamorph Hob CerTec has demonstrated an exceptional ability to meet even the most demanding requirements of ceramic tile manufacturers by developing and continuing to improve the range of super-technical Hyperroll NG, X and Dense rollers, solutions that are suitable for any kind of production. Following the rapid growth in large ceramic slab production in recent years, specific operating conditions must be maintained to ensure maximum tile flatness, especially during firing. This results in the need for extremely precise dimensional tolerances and high MOE (modulus of elasticity) values to avoid or minimise potential bending of the rollers and consequently improve first choice production, especially in the case of large slabs up to 180x320 cm in size produced on continuous lines. In this case, flatness is the

most important quality parameter, especially for surfaces that will subsequently undergo polishing and where any deformations will be highly visible. Another important technical parameter of the roller is its chemical resistance, to avoid the presence of deposits on the roller (caused by contact with the tile body) which would damage the lower face of the tile. The demand for increasingly efficient and low-cost production processes has led to longer and wider firing kilns and consequently the need for super-technical rollers with perfect size tolerances, an adequate diameter and a correct distance between the rollers. In the case of high-thickness slabs, the MOE of the rollers must be as high as possible to allow for the transport of particularly heavy materials (up to 50 kg/sqm in the case of 30 mm thicknesses). Hob CerTec's R&D staff, together

with the technical and sales team, regularly visit its customers' ceramic factories to fine-tune research according to their specific needs and to further improve the technical characteristics of rollers by developing optimised, tailor-made solutions for the production of slabs with thicknesses from 4 mm to 30 mm.

近年来, Diamorph Hob CerTec通过开发和继续提高超技术的超级辊棒NG, X和密实辊棒的应用范畴(适用于全部生产类型的解决方案),证实了它拥有一种出色的能力,即能够满足陶瓷生产商甚至最为苛刻的要求。随着近年来大规模陶瓷板生产的快速增长,必须保持特定的操作条件,以确保瓷砖的最大平整度,尤其是在烧成过程中。这就需要非

常精确的尺寸公差和较高的MOE(弹性模量)值,以避免或尽量减少辊棒弯曲的潜在可能,从而提高优等品的产量,尤其是在连续生产线上生产规格高达180x320 cm的大板的情况下。

在这种情况下,平整度是最重要的质量参数,特别是对于随后将要进行抛光的表面,任何变形都将非常明显。辊棒的另一个重要技术参数是其耐化学性,能够避免辊棒上出现沉积物(与瓷砖坯体接触而导致),从而损坏瓷砖的下表面。

对日益高效和低成本生产工艺的需求使窑炉变得更宽、更长,因此需要具有完美尺寸公差、足够直径和正确辊棒间距的超级技术辊棒。对于厚度较高的大板,辊棒的弹性模量必须尽可能高,以便运输特别重的材料(对于厚度为30 mm,重量高达50 kg/sqm的大板)。

Hob CerTec的研发人员以及技术和销售团队定期拜访客户的陶瓷工厂,根据客户的具体需求对研究进行微调,并通过开发优化的、量身定制的解决方案来进一步改善辊棒的技术特性,以便更好地生产厚度为4 mm至30 mm的大板。



SURFACES GROUP

In recent years, the ceramic production process has been revolutionised by technological advances in the field of automation. The new era began with the introduction of digital decoration, after which the development of shaping plants capable of producing extra-large slabs in a continuous process has increasingly driven

the ceramic sector towards the adoption of Industry 4.0 principles. In this very dynamic context, the finishing process (rectification, semi-polishing, honing, satin finishing, polishing and surface treatment) is playing an increasingly important role as it allows for the production of materials with increasingly sophisticated aesthetic qualities. These opera-

tions have contributed to the development of digitally-decorated tiles, as without these processes large slabs would have remained fairly unappealing semi-finished products incapable of satisfying the needs of an increasingly discerning market.

To keep pace with the development of the market, Surfaces Group has brought together

several outstanding players in the field of grinding wheels, abrasives and surface protection products (Surfaces Technological Abrasives, Adi, AS Tools, International Chips and No Coat) under a single brand name. It plays a crucial role in promoting the diffusion of processes and know-how in the field of ceramic finishes and is capable of providing ex-