



SYNCHROTILE
PATENTED TECHNOLOGY

PRINT-IN-REGISTER & 3D DIGITAL STRUCTURE

The SynchroTile patent package consists of two **complementary technologies for texture and design for ceramic tiles**: Print-In-Register with design alignment and 3D Digital Structure.

SynchroTile Print-In-Register creates a consistent look and feel by synchronizing the graphic pattern and the texture. Digital Structure enables a whole new world of 3D design and texturing possibilities.

These technologies can be used separately or combined to create the **most realistic natural effects for wood and stone designs**.

PRINT-IN-REGISTER

Print-In-Register matches digital printing with the structure of the ceramic body. The use of a **detection system allows 3D textures** on the base body to be recognized. These textures are then **synchronized** with multiple graphic patterns by identifying the texture.

The 3D texture integrates with the digital design of the material, achieving an extraordinary realistic and natural effect.

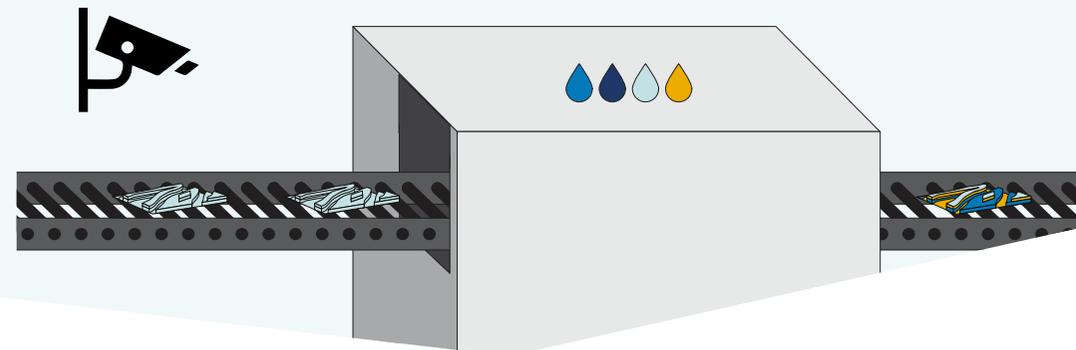
The technology is especially suited for wood and stone decor designs.



HOW DOES IT WORK?

The SynchroTile Print-In-Register technology ensures an **excellent synchronization** between the relief structure of the ceramic tile and the digital decor in three steps:

1. The mould creates a relief structure on the tile
2. The detection system identifies the structure of the tile
3. Align the graphic design with the identified material structure via digital printing





3D DIGITAL STRUCTURING

The 3D Digital Structuring production technology **combines digital printing of graphic patterns with digital 3D material** structure.

The negative or positive digital embossing can be achieved by **applying a glue and a grit, a repellent or sinking agent, or a digital glaze.**

The textures are **easily synchronized** with multiple graphic patterns and colored designs, achieving an extraordinary realistic and natural effect.

3 DIFFERENT METHODS FOR DIGITAL TEXTURING POSSIBLE

1. Glaze

Digital printing of a glaze forms structure in the ceramic tile, while synchronizing the graphic design. This combines two production processes to create a real touch and feel.

2. Sinking agent or repellent

Either by digitally printing a sinking agent as a substance to interact with the glaze during firing to create a structure, or by jetting a carver that repels the glaze before the firing process, generating a structured ceramic tile.

3. Glue and powder

By digitally printing a glue on specific spots of the ceramic tile, subsequently dry powdering the tile with a grit and removing the loose powder, leaving a life-like 3D structure.

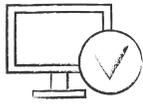
WHY CHOOSE SYNCHROTILE



REAL TOUCH & FEEL



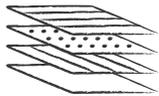
GREAT TECHNICAL PERFORMANCE



COMPLETELY INTEGRATED
DIGITAL SOLUTION



PATENTED SOLUTION



ENDLESS DESIGN FLEXIBILITY



AFFORDABLE DIGITAL
PRINTING SOLUTION



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