**Inlaid‑Linoleum Thesis — English Translation (Part 2)**

**2.2 Emergence of Inlaid‑Linoleum**

Also called Mosaic Linoleum, Inlaid‑Linoleum was less common due to the difficulty of production and resulting higher cost. However, technical advances helped mitigate this disadvantage. Its specific production method allowed unlimited colours and patterns — geometric, floral or ornamental — to be created, repeatable across full roll widths and lengths. Unlike mosaic versions assembled from cut pieces directly onto the fabric, Inlaid‑Linoleum applied patterns to an intermediate layer covering the base fabric.

**2.2.1 Production**

Linoleum is produced in three main stages: (1) fabrication of Linoleum cement (the binder), (2) mixing raw materials into the linoleum mass, and (3) pressing this mass onto jute fabric. The name ‘Inlaid’ refers to the ‘laying in’ of differently coloured linoleum masses. This could be achieved by cutting and recombining sheets, embossing, cutting techniques, or scatter methods.

**2.2.1.1 Production using pressed wear layers**

Embossing method: two differently coloured sheets were passed through engraved rollers to create high‑ and low‑relief patterns. These were then fitted together, heated, and hydraulically pressed into flat linoleum boards, later split horizontally to produce matching patterned sheets. Other variants involved filling recessed areas with coarse or coloured masses and pressing them together.

Cutting method: coloured shapes were cut precisely using special blocks and reassembled to form mosaics. Pieces were transferred into frames and pressed onto jute fabric under tension, expanding to fit seamlessly once frames were removed.

**2.2.1.2 Production using scatter method — typical Inlaid‑Linoleum**

This stencil method used metal templates (zinc, copper, brass) to scatter coloured granules in planned patterns onto the base fabric. Each colour required a separate stencil. After deposition, the granules were compressed and fused into a seamless surface. Edges could blur slightly (ca. 3 mm), but dividing strips reduced mixing between colours.

**2.2.1.3 Production at Linoleum AG Giubiasco**

The only Swiss linoleum factory, Linoleum AG Giubiasco, employed ca. 350 workers and produced about one million m² annually. Processes included grinding cork into fine meal; oxidising linseed oil into Linoxyn; mixing with resins (colophony, kauri); maturing the cement; and blending with cork meal and pigments. The mass was rolled, calendered onto jute, and dried in tall chambers. For Inlaid, stencils were meticulously crafted from zinc, with each colour applied separately before hydraulic presses (1500 tonnes) bonded the design to the jute. Finished rolls (2 m wide, 25–30 m long) were dried for weeks, cut, and stored.

**2.2.2 Uses**

Linoleum’s properties made it suitable for many building types: dwellings, schools, gyms, hotels, offices, even ship decks and rail cars. Its antibacterial qualities made it especially popular in hospitals and sanatoria.

**2.2.2.1 Hospitals and sanatoria**

Beyond medical care, patient recovery depended on light, fresh air, quiet and cleanliness. Linoleum contributed by damping sound and providing a seamless, washable surface with bactericidal qualities (from Linoxyn). Hospitals avoided sharp corners, using coved skirtings instead. A related wall/furniture material, Lincrusta, was also widely adopted for its hygienic qualities.

**3 Restoration and Reconstruction of Inlaid‑Linoleum**

Today Inlaid‑Linoleum is no longer manufactured. Labour‑intensive methods, feasible only with cheap early‑20th‑century labour, cannot compete with modern vinyl. By the late 1950s, plastics replaced Inlaid, knowledge and tools largely vanished. Modern linoleum production (e.g., Forbo) is highly automated. Historical presses and stencils may still exist but are inaccessible.

‘Inlaid’ covered diverse methods, not one uniform product. Around 1900 rapid innovation spawned many processes and patents. Defining a sample requires identifying date and manufacturer precisely.