



-Hybrid Couture – 3D Printed Fashion-

3D-BUILT. COUTURE. CONSCIOUS

Futurewear designed by a North African mind. Printed. Assembled. Felt.

PART 1

The Origin

3D Fashion Designer — Hybrid Couture

About The Designer

A **North African fashion designer** using **3D printing** to create innovative garments and accessories.

The work combines digital design with **real materials**, building pieces layer by layer — directly from computer models to physical form. Traditional craftsmanship and technology meet in each creation.

Each design is developed with attention to **structure, function, and emotion**, aiming for a balance between modern innovation and cultural heritage.

This capsule is part of a larger journey: redefining fashion as **modular, intentional, and deeply rooted**.





The Concept— Hybrid Fashion Design

About The Brand

1. DNA

The Brand is a fashion tech label born in North Africa- It merges **3D printing**, **traditional know-how**, and **textile experimentation** to create sculptural, hybrid pieces that are both wearable and collectable.

2. VALUES

- Eco-Conscious Creation: Corn-based PLA, algae-infused TPU, biodegradable, recyclable materials.
- Zero-Waste Philosophy: Optimised designs, on-demand printing, no overproduction.
- Artisan-Driven Finishes: Handmade post-processing, pigments, assembly, textile bonding, embroideries for the future couture line fashion-wear.
- Unique over Mass: Every item is limited, non-replicable, shaped for meaning.
- Rooted & Futurist: North African soul, futuristic silhouette, feminine strength.

3. SIGNATURES / DESIGN CODES

- Seamless modularity
- Parametric geometry
- Printed couture
- Textiles fused with 3D printing technology

The Visual DNA — Fashion & Geometry

About The Inspirations

The brand's design language draws on a blend of **Maghrebi** and **contemporary influences**, combining **geometry**, **craft**, and **digital construction**.

It draws from **Berber symbols**, **Islamic architectural patterns**, and **organic structures** found in **nature**, all reinterpreted through **3D modelling** and **parametric design**.

Forms follow **structural logic** rather than decoration, creating **wearable architectures** that balance symmetry and controlled asymmetry.

Each line and **volume** reflects the dialogue between **heritage** and **innovation**, **transparency** and **opacity**, **matte** and **gloss**, as well as **smooth** and **textured surfaces**.

This duality defines the brand's identity: **rooted in ancestral codes**, **shaped by technology**, and **projected toward the future**.

Inspiration Board



PART 2

The Fusion

3D Printing The Technology

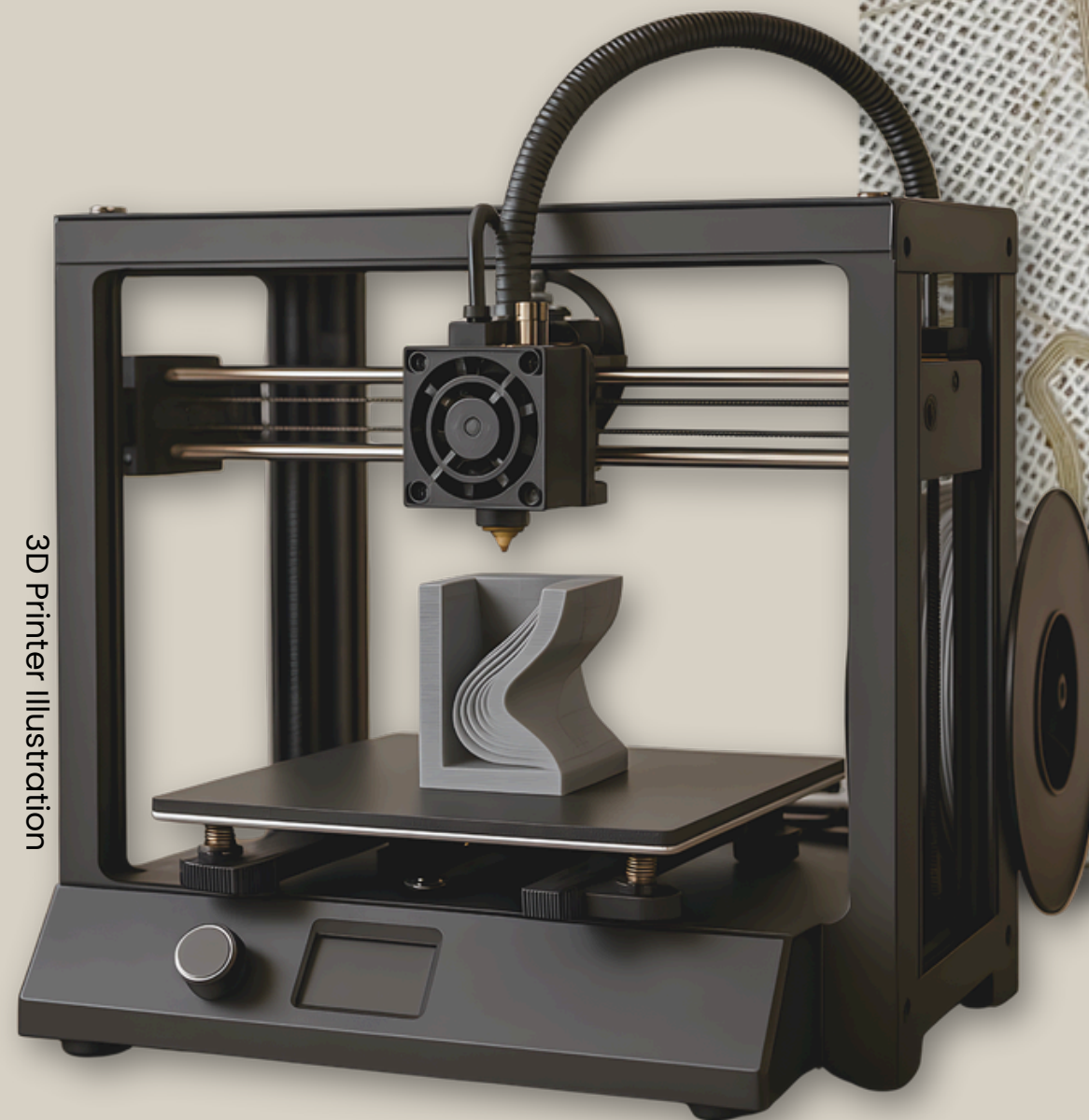
Fused Deposition Modelling (FDM) is an additive manufacturing method that builds objects **layer by layer** using **melted thermoplastic filament** — a **clean, conscious, and scalable technique** increasingly used in fashion tech.

Unlike **resin-based** methods, **FDM** relies on **non-toxic, flexible materials** ideal for **wearable designs, textile integration, and zero-waste production**.

Key benefits of FDM in fashion:

- Precise modular construction
- Seamless integration with fabrics
- Durable, wearable, and lightweight forms
- Optimised for on-demand fashion production

3D Printer Illustration



3D printing process —
the material is built layer by layer, directly over the fabric.

The 3D Materials

PLA — Corn-Based Filament

- Made from **renewable plants** (like corn starch or sugarcane)
- Rigid and ideal for sculptural forms: bags, details, frames
- **100% biodegradable** under industrial composting conditions

Used in: Bags and accessories —

Appears in: Luxury & Pure Lines

TPU — Flexible Eco Filament

- Elastomer-based filament, derived from **recycled** plastic sources
- Highly flexible and resistant, perfect for modular wearables
- Soft touch, washable, and wearable directly on the skin

Used in: Fashion —

Appears in: Luxury & Pure Line

TPU Composites — Biobased Luxury Filament

- **Advanced composite filament, developed from marine algae or mycelium**
- Supplied by a startup specialising in **bio-sourced materials**
- High durability, semi-rigid texture with a luxurious finish

Used in some modulares in the Bloom Skirt

To be used entirely in: Couture Luxury Line — exclusive capsule with hybrid 3D-textile compositions- End 2026



3D filaments

The Natural Materials

For the first capsule, the brand pays tribute to the **Maghreb** through the use of the hayek, a **traditional handwoven** garment historically worn by women across generations.

Made from **fine cotton or wool**, the **hayek** is known for its fluid drape and deep symbolic connection to modesty, identity, and artisanal pride.

By hybridising this cultural textile with 3D-printed components, the collection bridges past and future — crafting a wearable story of origin and continuity.

While this capsule highlights Maghrebi heritage, future collections will explore natural fabrics from other regions of **the Middle East and North Africa**, blending them with 3D-printed structures to create new narratives and material dialogues.



The Hayek - Symbol of Modesty and Strength

The 3D Jasmin Modulares

This **first mini-collection** marks the beginning of the brand's **hybrid couture** line, where **natural textiles and advanced 3D-printed materials** coexist within a single modular system.

Each petal forms part of an interlocking structure that creates a **continuous, flexible fabric** — a new type of wearable architecture inspired by jasmine geometry.

- **Composite, biodegradable** flexible material derived from natural **marine biomass**, used for the beige petals.
- **Recyclable flexible** polymer from a European source, used for the translucent and neutral components.
- **Hybrid printing on textile**: 3D printing directly onto the Hayek fabric, merging digital precision with the heritage of handwoven craft.
- **Recycled material with hand-painted finish**: selected petals manually coated with acrylic gold pigments to enhance depth and light contrast.

This first fashion collection lays the foundation for a broader design system — **modular, sustainable, and culturally rooted**, paving the way for future evolutions within the brand's fashion-tech language.



The Software & Tools

From 3D design to fabrication, the workflow relies on the following digital tools and materials.

1. Software:

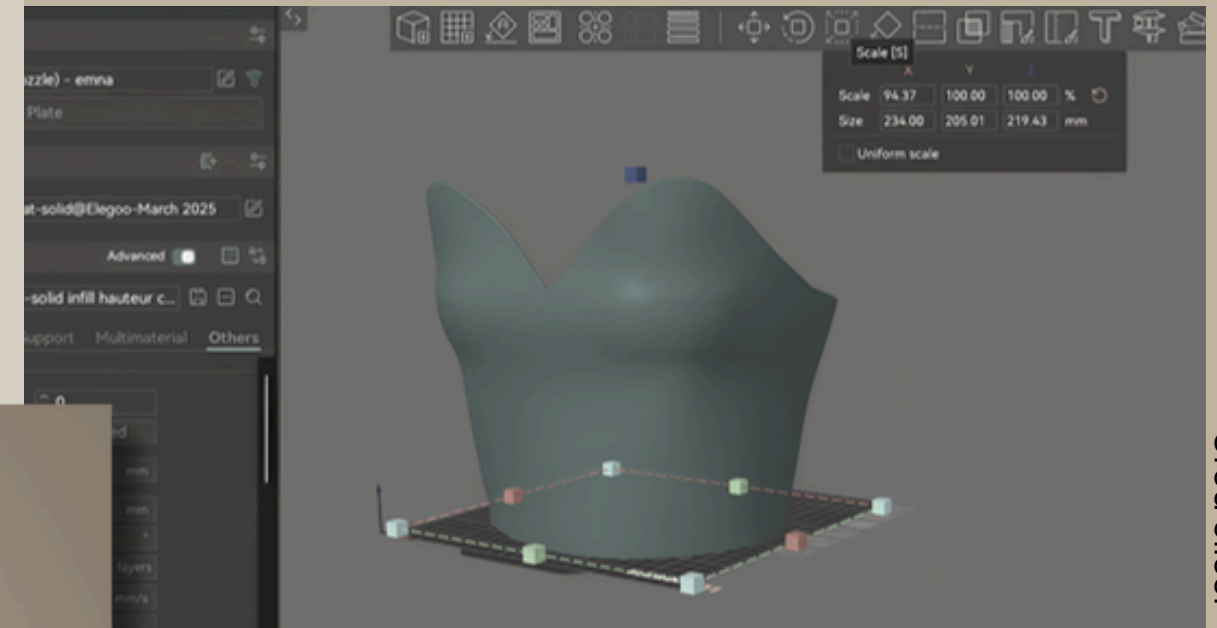
- **Clo3D** – 3D fashion design and garment simulation
- **Rhinoceros 3D** – precise volume modelling and clean geometry
- **Adobe Illustrator** – vector design and modular pattern creation
- **OrcaSlicer** – 3D printing workflow and slicing setup

2. Tools:

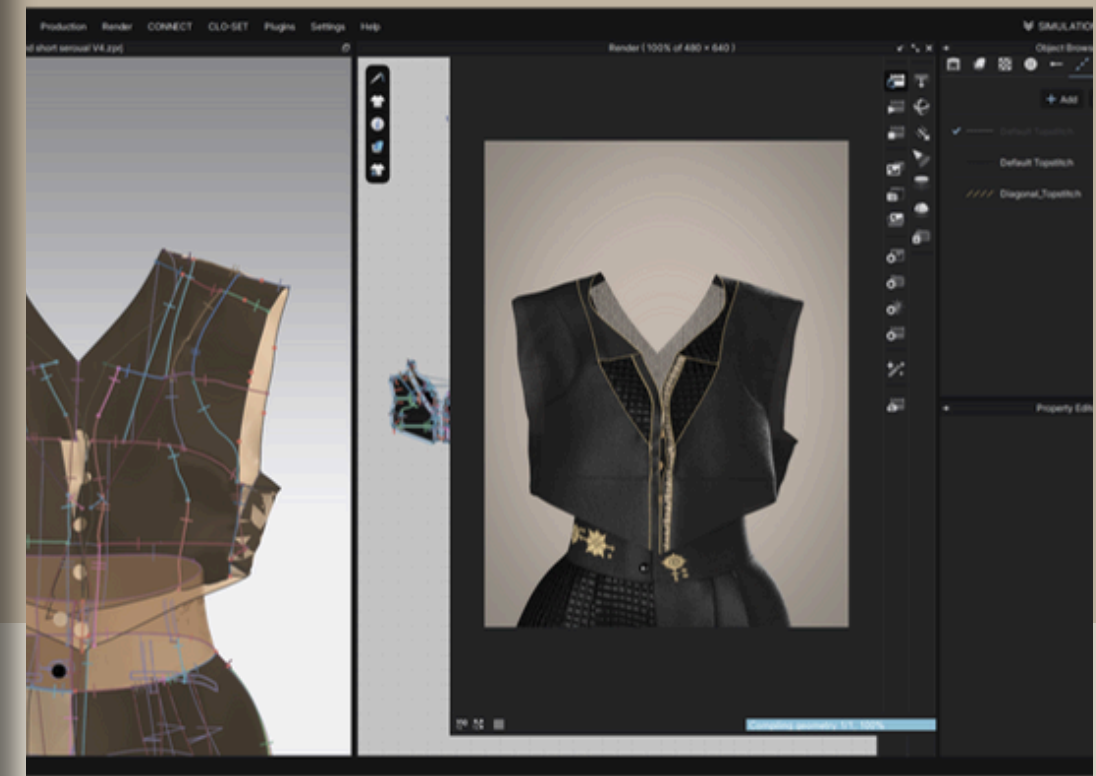
- FDM 3D printers
- Eco-certified pigments for artistic finishing
- Protective coatings – anti-UV, anti-humidity, and anti-dust finishes using eco-certified sprays



Clo3D



Orca Slicer



PART 3

The Fashion Collection ACT 1 - SS25

ACT 1

About The Collection

This **debut capsule** redefines fashion as a **modular, seamless, and customizable system** — merging craftsmanship and technology within a conscious design language.

The collection features sculptural statement pieces that combine **3D-printed elements with traditional textiles from the Maghreb region**.

Key looks include the **Bloom Modular Crop** (crafted with hayek and 3D jasmine petals), the **Almost Seamless Corset**, and the **Stem Skirt** (crafted with hayek, composite, and recyclable materials).

Developed with a **zero-waste approach** and produced using **biosourced, eco-friendly** filaments, every piece is made to order — uniting **technological innovation with cultural heritage and influence**.

This is fashion built for impact: designed to assemble, adapt, and evolve with purpose.

Croquis ACT 1



SECTION 1

Manifest 1 - Corset

The Almost Seamless Corset

Printed in transparent and white recyclable flexible TPU, this sculptural corset embodies the fusion of digital precision and couture craftsmanship.

Composed of **three sculpted sections**, it creates a continuous organic silhouette adorned with modular jasmine petals.

Engineered for both **aesthetic and function**, the corset embraces the body like a second skin — **light, bold, and wearable**.



Corset- Front View

The Process

Its anatomical geometry required over **72 hours of continuous 3D printing**, combining **structure, flexibility, and refinement**.

Each piece is **hand-painted with gold pigments** and sealed with a top coat to achieve a luminous, high-fashion finish.

Each design is a **unique** sculptural object, **hand-finished** to push the boundaries of digital couture.

Shooting Corset-1



The Details

3d Printing_Corset



Assembly_Corset



Fitting_Corset





Corset-Back View



Corset-3/4 View

Shooting Corset-2



Shooting Corset-3





SECTION 2

Manifest 2 - Crop

The Bloom Crop

The Signature Size-Control System

This **modular crop** merges **heritage and technology**, combining **3D-printed jasmine petals with traditional Maghrebi hayek fabric**.

Each modular unit is removable and repositionable, allowing the wearer to adjust the fit up or down by one size, redefining adaptability and comfort in digital couture.

The Concept Piece

Designed as a three-dimensional bouquet, the Bloom Crop builds volume through overlapping petals that create movement and sculptural depth.

It expresses the brand's vision of **modular, evolving fashion**, where each edition can be reinterpreted through **new colours, materials, and geometries** — blurring the line between garment and wearable sculpture.



Shooting Crop_1

The Process

Printed in **recyclable TPU**, the crop was developed through a modular fabrication process where each floral component connects seamlessly to form a flexible, organic structure reminiscent of a **blooming jasmine cluster**.

The hybrid construction combines **3D printing and textile craftsmanship** — printed directly onto the **hayek** base, then manually refined and assembled to maintain softness and movement.

The back closure adopts a **corset-inspired lacing system**, providing both structure and fluid adjustability.

Each set of petals required about **four hours of printing**, resulting in nearly **eighty hours in total** for the full top.

Post-processing extended over **four days**, including manual polishing, **eco-certified protective coatings** (anti-UV and anti-humidity), and final detailing for a **soft, pearlescent finish**.

Shooting Crop_2



The Details



3D Modelling Rhino_Modular System



Zoom_Assembling_Modular System



Shooting Crop_3



Shooting Crop_4



Shooting Crop_5



Shooting Crop_6

SECTION 3

Manifest 3 - Skirt

The Stem Skirt

Material System

This piece extends the modular construction language into a sculptural couture form. **It combines composite, recycled, and hybrid materials**, expressing the dialogue between craft and technology.

- **Composite, biodegradable flexible material derived from marine biomass** — used for the warmer-toned petals.
- **Recyclable, flexible polymer from a European source**
- **Hybrid printing on textile**
- **Recycled material, hand-painted finish**

Design Concept

The skirt translates modular couture into movement.

Its waistline features a corset-inspired closure, merging structure and flexibility.

Each layer adjusts fluidly around the body, forming a dynamic silhouette that captures rhythm, depth, and light — a statement of modular couture in motion.



The Process

Considering the skirt's full volume and multi-layered assembly, the piece involved **nearly 240 hours of combined 3D fabrication and manual work, excluding post-processing and finishing.**

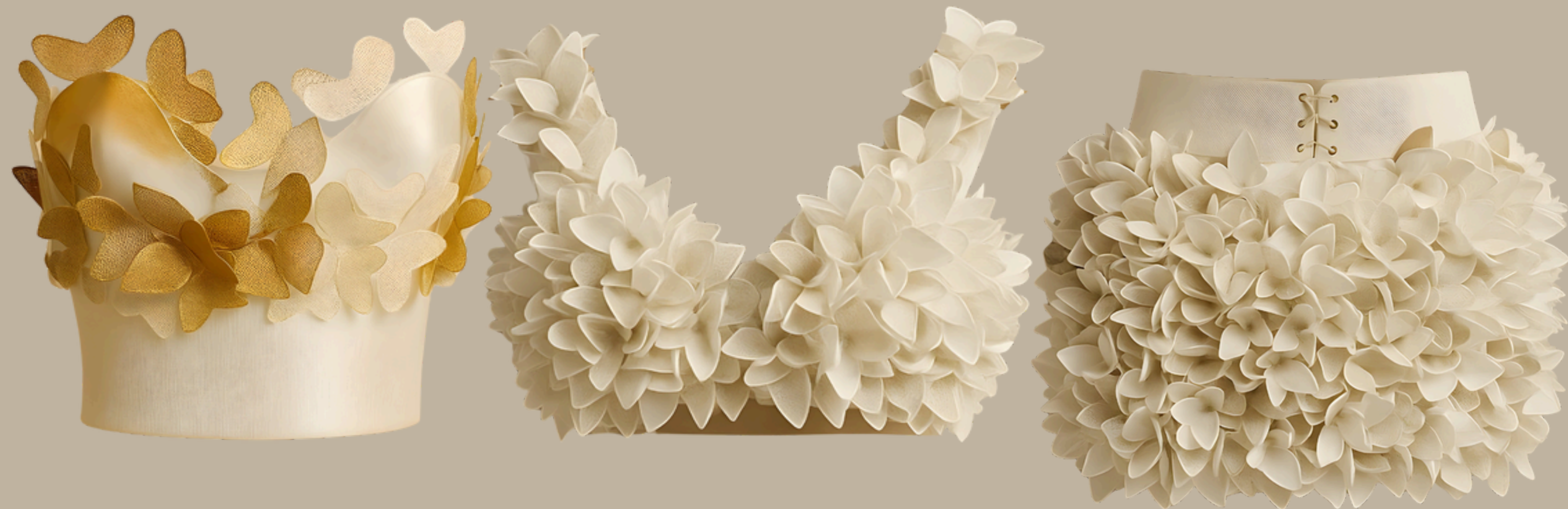
Post-print refinement included **hand assembly, gold detailing, and protective sealing to ensure both structural integrity and long-term wearability.**

The result is a three-dimensional textile sculpture, blending precision, patience, and craftsmanship — a bridge between fashion design and advanced making.

Shooting skirt_2







ACT I – FASHION CATEGORY

Global Visualisation

For overall capsule visualisation only

The three concept visuals were created exclusively for this project and remain the full property of their creator.

PART 4

The Sub Brand

Launch 2027

The 3D Couture Line

This is a future sub-line in development

Rooted in Maghreb heritage and the symbolism of feminine deities, this couture line will merge ancestral embroidery with 3D-printed textile structures, developed through deep material research and cross-disciplinary collaboration.

Core Principles

- **Material hybridisation** – handwoven fabrics × bio filaments
- **Precision embroidery** – developed with regional artisans
- **Couture finishing** – constructed at an atelier level with meticulous craftsmanship

The design language explores duality — transparency vs. opacity, fluidity vs. structure, ritual vs. modern form.

This line demands advanced technical expertise and artistic collaboration — bridging tradition and innovation.

It is planned for a later development stage, once the brand's foundation is fully established.

The Signature Look_Couture Line



Data Base_Line Couture



Note: *The official launch is planned in one month.
Photos were taken at home as part of the creative process —
a professional shooting is scheduled for the launch.*

THANK YOU

A preview of a larger journey where craft and technology meet.