

172NM Excimer Skin-Sensitive Board

Not all excimer skin-sensation boards are called 3IN1

The Hermès Among Excimer Boards

www.debilong.com



Transform life with technological power

Catalogue



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DBL 3IN1 Excimer Skin Sensation Board

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Transform life with technological power

Skin Sensation Board

Definition

As the name suggests, it is a type of panel with a skinlike surface touch. The surface is soft and smooth, just like the tender texture of a baby's skin. When touched, it delivers an extremely comfortable sense of closeness that makes you fondle it endlessly. Additionally, it features an ultra-matte visual texture, bringing a warm, calm, soft and elegant aesthetic.



Transform life with technological power

Skin Sensation Board

In whole-house customization, the emerging skin sensation boards are highly popular. They can be widely applied in interior decorations such as kitchens, bedrooms, wardrobes, and living rooms. Home products made of skin sensation boards exude a healthy, fashionable and highend taste both visually and tactilely.



Current Status of Skin Sensation Boards

With the continuous improvement of consumers' requirements for living quality and furniture quality, skin sensation boards have become the most popular decorative surface materials recently. The current market situation is as follows:

A large number of product brands

Diverse production processes

Ununified standard requirements

Uneven product quality

Comparison of Skin Sensation Board Types



Melamine Skin Sensation Board

Process Characteristics

Refers to the use of skin-feel and low-matte steel templates to directly hot-press melamine paper onto the board through a hot press, thereby forming a certain skin-feel and low-matte effect on the board surface.

Disadvantages

Prone to scratches, poor fingerprint resistance, poor stain resistance, and has been basically eliminated by the market.

Film Laminated Skin Sensation Board

Process Characteristics

Refers to rolling UV topcoat on the board with primer, then using the casting process to transfer the matte skin-feel coating on the skin-feel film to the topcoat and flatten it, and curing it with UV light source to obtain the filmlaminated skin-feel product with surface skin-feel effect.

Disadvantages

Prone to scratches, poor fingerprint resistance, poor stain resistance, and has been basically eliminated by the market.



Process Characteristics

Refers to curtain-coating UV topcoat on the board with primer, then using 185nm or 254nm wrinkle lamps to cure the topcoat, thereby forming a surface with skin-feel effect and low matte finish.

Disadvantages

Easy to yellow, non-durable matte skin-feel effect, average stain resistance, average surface physical and chemical properties, and prone to edge chipping during processing.

PET Skin Sensation Board

PET or PETG materials are currently widely used for skin sensation boards, with imported films being slightly better. Its principle is also to apply skin-feel UV on the PET film to make the surface have a skin-feel effect. then flat-laminate it onto the board through the lamination process.

Disadvantages

Chaotic market, many fake products, few color choices, average heat resistance, and hardness of 1-2H.



Chemical Ultra-Matte Principle

Matting **agents** (**ultra-matte powders**) are added to solvent-based paints. After the **paint cures**, the ultra-matte powders on the surface will almost completely diffusely reflect the light projected onto the paint surface, thereby forming an **ultra-matte surface**.

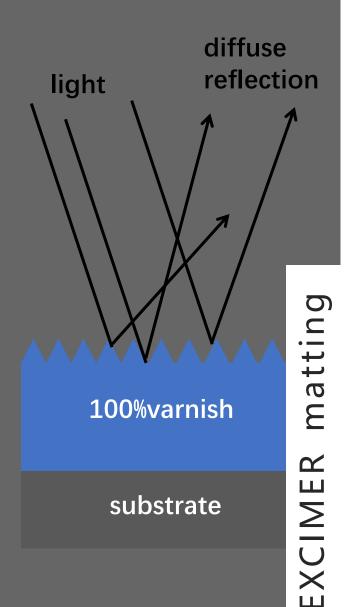
Since ultra-matte powders cannot form chemical bonds with the paint, the paint containing ultra-matte powders is often very soft, resulting in low surface hardness, poor scratch resistance, poor wear resistance, and poor fingerprint resistance. Moreover, when the paint surface is gently scratched with a hard object, bright marks (called "metal marking") will be formed.

The biggest problem of chemical ultra-matte is that the addition of a large amount of matting agents reduces the transparency of the paint, making the paint film dull and the color and texture of the board unclear. In addition, the skin-feel touch, surface matte finish, fingerprint resistance, and stain resistance will age and decline over time.

Skin Sensation Board

What is "Excimer Skin Sensation Board"

The melamine board with the surface attached is coated with paint and cured by 172nm excimer curing equipment, forming a decorative panel with a comfortable skin-feel touch, ultra-low matte vision, and excellent surface physical properties.



Excimer Laser

Excimer laser is generated by exciting xenon dimers with electron beams, with a wavelength of 172nm. Its energy of 7.23EV is sufficient to directly break all major bonds of organic molecules, making it the best choice for surface modification, photo-cleaning, and photo-curing.

Excimer Coating Technology

When a 172nm excimer lamp irradiates the surface of ultra-matte paint in an oxygen-free pure nitrogen environment, the paint surface shrinks to produce uniform wrinkles, which are immediately cured. This forms diffuse reflection of light to achieve a matte effect. Since this matting method does not require matting agents in the paint, it is called "physical matting". Meanwhile, polymerization and crosslinking on the surface under 172nm can increase coating density, forming high surface hardness.

How to Distinguish Genuine from Fake "Excimer"

Skin Sensation Board



Whether it is an excimer lamp with a wavelength of 172nm

The central wavelength of the 172nm excimer lamp is 172nm, with a lamp power of 15Watt/cm, achieving an irradiation intensity of over 50mW/cm², the strongest among similar products. Many use mercury lamps, LED lamps, and light beams of other wavelengths to pass off as genuine and shoddy products.







Whether it is equipped with a high-purity liquid nitrogen tank as standard

Under a 99.999% high-purity nitrogen environment, the laser penetrates the surface for complete curing, avoiding incomplete coating curing caused by oxygen inhibition in the traditional oxygen-containing environment and yellowing during curing in oxygen-containing environments. The high-purity inert gas perfectly solves these pain points. (HANGYA Hangzhou Oxygen)



DOUBLOON 3IN1 Nano Excimer Skin Sensation Board

3IN1 172NM Excimer Skin Sensation Board

The Hermès Among Excimer Boards

The meaning of 3 In 1

part 1

German Imported 172nm Excimer Equipment

Introduces the core 172nm curing equipment and complete control system imported from Germany's IST company. Under a high-purity nitrogen environment, high-quality imported coatings can polymerize and crosslink on the board surface, forming an extreme surface touch and excellent physical properties.

part 2

German Original Imported Full Range of Hot-Melt Paints
Adopts German Hotcoating reactive polyurethane base
material, which polymerizes between the board surface
layer and decorative layer to form a strong yellowingresistant base film, keeping the surface bright as new for
a long time. It also has extremely high toughness to solve
material deformation and edge chipping during cutting,
and 100% chemical adhesion to eliminate peeling risks.

part 3

DBL's 20-Year Decorative Surface Management

Process System

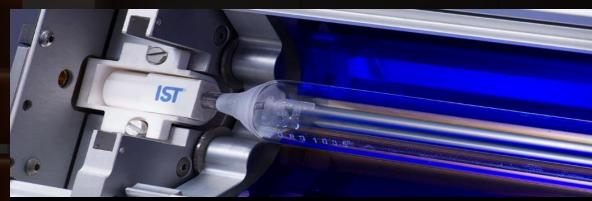
Relying on DBL Group's color development and board production supporting capabilities, it continuously develops and innovates, integrating texture and aesthetics to create trendy and creative colors for high-quality home furnishing enterprises.



Imported Equipment

The 172nm excimer laser curing equipment (EXCIMER) developed by Germany's IST company has unique performance, known as the "black technology" of curing technology. As a global leader in instant curing equipment, IST pioneered innovations in 172nm excimer light sources and control systems, nitrogen control systems, and equipment technology.





The 172 NM

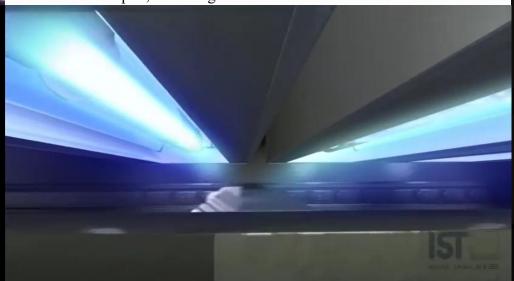
The penetration depth of 172nm is only 100 to 500 nanometers, so only an extremely thin surface layer of the coating is cured. The polymerization and crosslinking of this thin layer cause shrinkage and wrinkles, forming diffuse reflection to achieve a matte skin-feel effect.

Physical Matting

This matting method is called "physical matting" because it does not require matting agents. The physical matting process ensures that the surface skinfeel matte finish and physical-chemical performance indicators never degrade.

Matte Effect

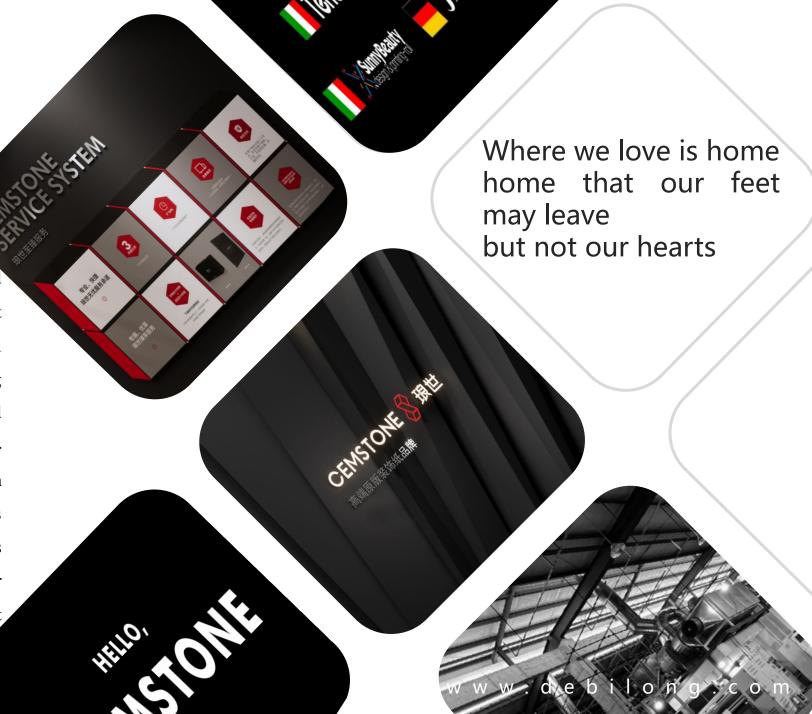
The excimer process adopts a multi-stage curing process to ensure full curing of each paint layer. In particular, after the topcoat is rolled onto the cured primer, it is irradiated with 172nm excimer laser. Due to the 100-500nm penetration depth of the 172nm process, only an extremely thin surface layer of the coating is cured. The polymerization and crosslinking of this layer cause shrinkage, forming an uneven surface that floats on the uncured lower liquid, achieving a matte effect.

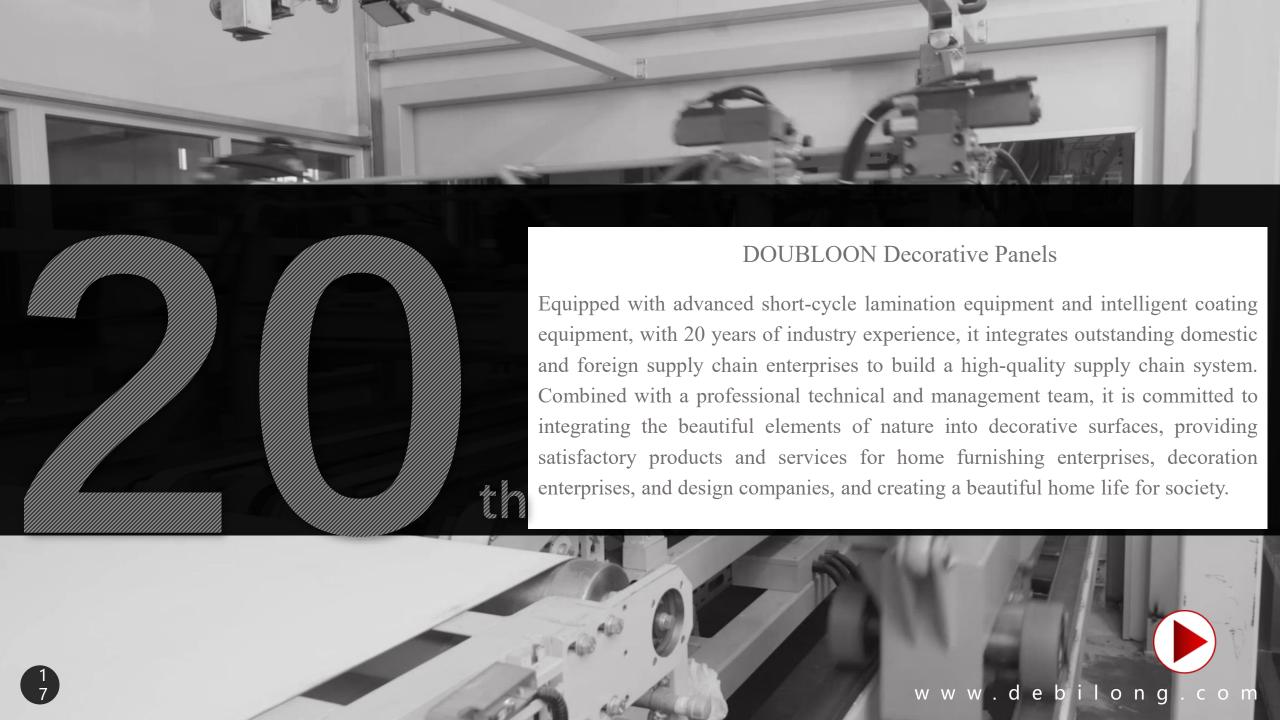


PART 2

Manufacturing System

GEMSTONE is a high-end original decorative paper brand under DBL. With an advanced and trendy vision, it researches, develops, produces, and sells high-end original decorative paper. GEMSTONE adheres to providing personalized and original services for China's customized home furnishing, continuously developing original paintfree colors. It has assembled cutting-edge designers from Italy's Tehanna Studio, international brands such as Italy's SunnyBeauty, Germany's SAUERESSIG, and Switzerland's CD, and jointly established an original color R&D center with Pinsen Design (with an international perspective). It continuously develops over 300 original colors annually.



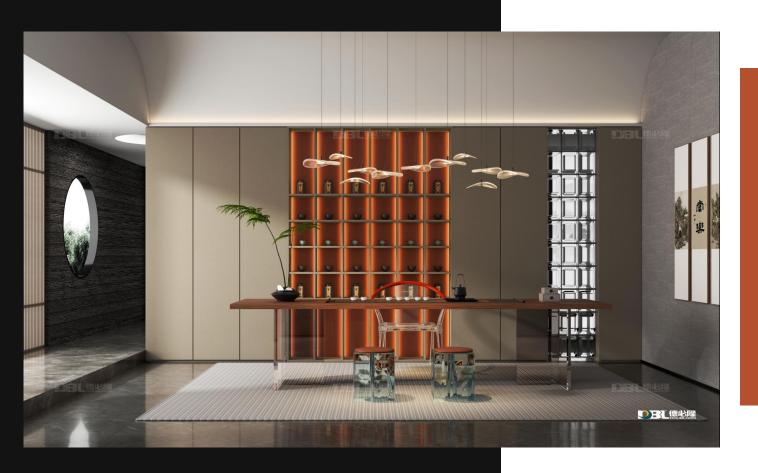


3IN1 Nano Excimer Skin Sensation Board

DBL 3IN1 Excimer
Skin Sensation Board

Born for High-End





EUROPEAN TECHNOLOGY GLOBAL LEADER

EUEUROPEAN QUALITY
THE BEAUTY OF SCIENCE
ANTECHNOLOGY



Pproduct Comparison

No.	Equipment	Mnlded Touch board	UV Teuch board	PET Touch board	DBL 3IN1 Excimer Skin Sensalldon Board
1	Price	300-500K	100~300K	300~500K	4M+
2	Process environment	Average	Average	Regular	High purity inert gas
3	Sensation effect	Average	Good	Good	Good
4	Scratch resistance	Average	Loss of sensitivity after several months	Good	Long-lasting, permanent
5	Pollution resistance	Fair	Average	General, hardness 2H	Good, hardness 4H
6	Fingerprint resistance	Fair	Focus colors lighter colors	Good	Good, one-wipe slean
7	Yellowing resistance	Fair	Good	General	Good, no traces
8	Gloss	3-5 deg	5 degrees	Good	<2
10	Scratch repair	No	No	Yes	Yes
11	Stability	No	No	Yes	Yes
12	Product risk	High risk of	Fair, low end	Good	Good
12	Product risk	batch Incidents	market	Stable, low risk	Stable, low risk

What is the Difference Between 3IN1 Excimer Skin Sensation Board and Other Excimer Skin Sensation Boards?

The current market is highly competitive, requiring new products for strategic upgrading. With the booming excimer market, many counterfeit excimer boards have emerged. A genuine excimer board must adopt the production process of 172nm excimer under an oxygen-free pure nitrogen environment; only products produced by this process can be called excimer boards.

In addition to the excimer process, the choice of excimer equipment, production environment, and paint is more important. Most excimer products on the market use domestic equipment and paint, with a one-primer-one-topcoat process. In contrast, DBL 3IN1 Excimer Skin Sensation Board adopts curing equipment imported from Germany's IST, a Class 100,000 cleanroom (medical grade) for production workshops, and formaldehyde-free and benzene-free three-primer-one-topcoat excimer paint from Germany's KLEIBERIT. In particular, the KLEIBERIT hot-melt paint can easily distinguish it from most ordinary excimer products on the market.

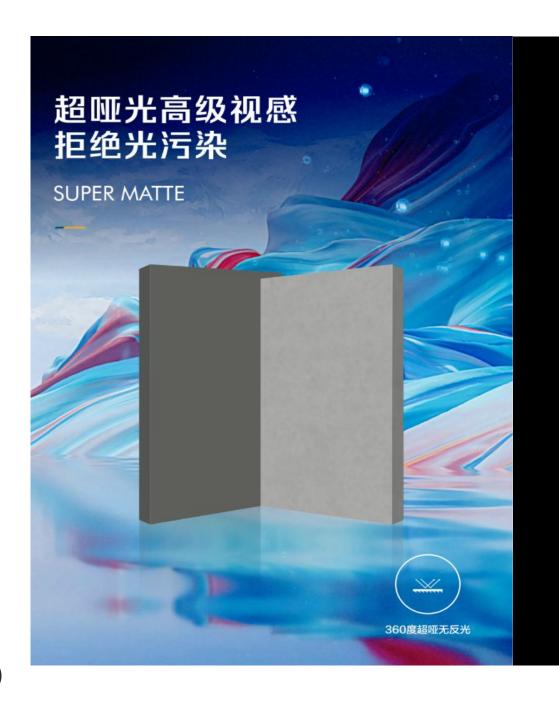
Thanks to imported curing equipment and fully original imported paint, its product performance is far superior to ordinary excimer products on the market. It has advantages such as more stable quality, finer and fuller skin-feel touch, resistance to yellowing, superior physical-chemical properties, balanced tension on both sides of the board due to the tough hot-melt paint base (preventing deformation), and no edge chipping during production and cutting. A high-quality excimer board requires not only the full excimer process but also a high-quality decorative panel. With 20 years of manufacturing experience in the decorative panel industry, DBL ensures that each panel meets the producing high-quality requirements of excimer boards. All DBL staff are committed to producing high-quality panels.



3IN1 Nano Excimer Skin Sensation Board

Advantages





LEVEL OF APPEARANCE

It starts with its appearance and ends with its quality.

360° ultra-matte, non-reflective curing technology creates a pure texture.

172 nm excimer curing "black technology"
Let the surface coating form nano scale folds under the environment of oxygen and pure nitrogen. Produce low light diffuse reflection, and the dumb light will never fade Form a super dumb high-level visual sense, and have a panoramic view of fine texture. Refuse light pollution, so that eyes can be more protected.



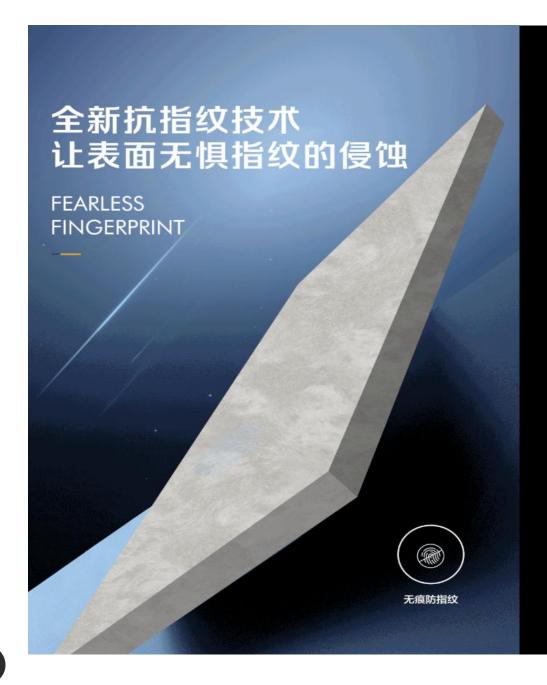
BABY SKIN TOUCH

You'll love it at first touch Enjoy the silky smooth feel

Feel the touch of a baby's skin, revealing its gentle and delicate texture.

Using 172 nanometer excimer curing technology Polymerize and crosslink the coating floating on the surface. Reduce the drop between fold peaks

Create Nano fine and smooth touch on the surface.



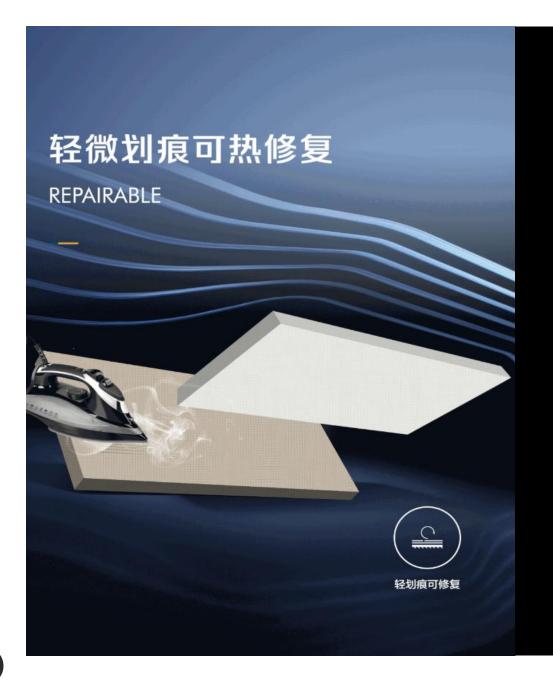
ANTI FINGERDRINT

Leaves no trace – an ultimate new experience – powered by cutting-edge nanotechnology.

Say bye bye to fingerprints

Adopt nano black Technology

Form excellent hydrophobic structural layer Fingerprint sweat evaporates instantly. Truly realize that there is no trace left after pointing.



THERMAL MICROREPAIR

Turn "accident" into "no big deal"

Unaffected by surface scratches high-temperature heat can repair them.

The surface is cured by 172 excimer to form a reconfigurable malecular microstructure. Scratches can activate molecules at high temperature. Daily bump, knife and fork scratch and other surface light scratches. With hot cloth and electric iron, the mark can be removed and repaired, and the surface can be restored as new.

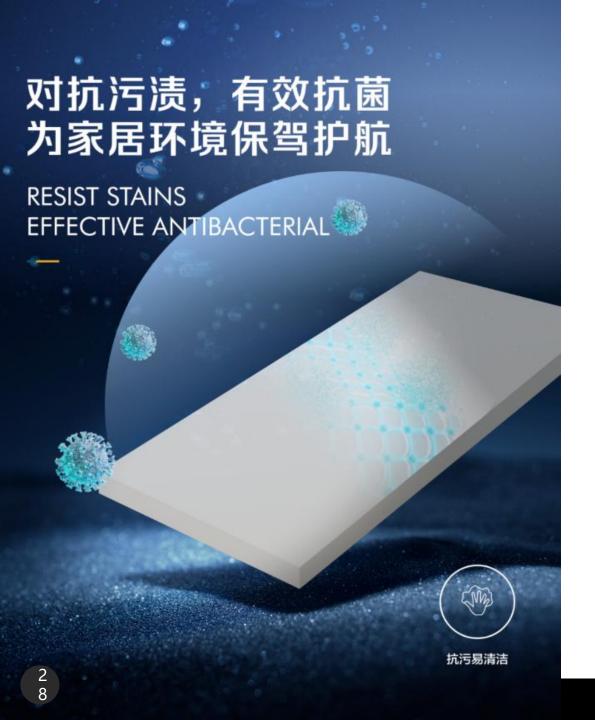


4H HIGH HARDNESS

Surface treatment is a true skill real ability is the only true measure of success.

Ultra-hard nanotechnology creates a 4H high-hardness finish.

Hard core exciter technology shrinks and solidifies the finish paint to improve the density Create a wear-resistant scratch resistant and impact resistant skin surface with a hardness of up to 4h Calmly deal with the bumps in daily life.



EASYTO CLEAN

A stain remover expert, making cleaning a breeze.

High-density microstructure, making it difficult for stains to penetrate and effectively preventing bacteria.

The surface of excimer products has a dense layer of ultra shallow pores with high density The stain is difficult to penetrate, and it can be bright as new with a gentle wipe with alcohol Fearless of kitchen acid-base corrosion, fruit and vegetable juice, kitchen oil pollution. Daily hygiene and cleaning. Cleaning is easy and labor-saving The surface is extremely smooth, and harmful bacteria are not easy to adhere, which can effectively play an antibacterial role.

耐日晒 不黄变 颜值永不变 SUN RESISTANCE NO YELLOWING 不易变黄

INVARIANT YELLOW

It's people who are "fickle," not me.

Sun-resistant, does not yellow, stands the test of time, and its appearance will never change.

German KLEIBERIT hot melt paint as a revolutionary new primer Because it is a special polyurethane with complete yellowing resistance. Under 168 hours of ultra long intensity ultraviolet light No yellowing and fading, and the plate is always as new.



TEMPERATURE TOLERANCE

Having survived countless battles unscathed forged through a thousand trials, it is ultimately steel.

Unaffected by seasonal temperature changes, durable

Resistance to temperature difference between cold and heat and humidity and heat drying Tested by climate temperature difference and dry wet heat Whether in a high temperature of 70 degrees on an extremely cold climate with a low temperature of -20 degrees The surface is intact without change, and the quality is always stable.



ENVIRONMENT PROTECTION

More than just good looks, her inner beauty is even greater.

Premium quality, pinnacle of environmental protection

Select pure natural fresh wood as raw materials Application of MDI formaldehyde free adhesive production technology. The produced plates comply with the new national standard aldehyde free enf standard Large planer without any peculiar smell, high static bending strength, not easy to deform. It also has high moisture resistance, high substrate recognition and more noble combination with excimer.



Doubloon Brand Story

Founded in Shanghai in 2002



"Skyscrapers rise from the ground; century-old enterprises are rooted in fundamentals." The DBL brand logo integrates Chinese and English, with the thick bold English "DBL" as the root and cornerstone of the enterprise.

Brand Story

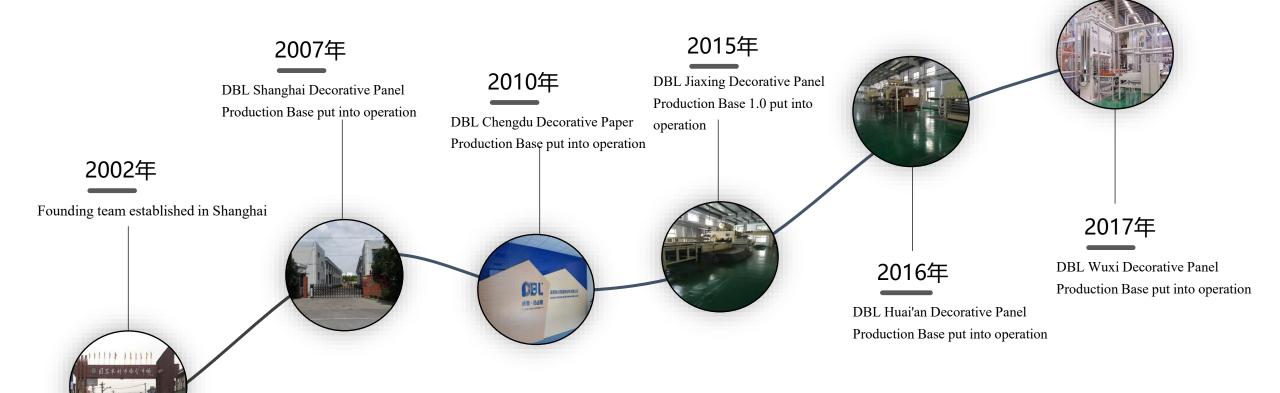
Two arcs cleverly outline the letter "D"; the dynamic curves endow the stable font with strong vitality, making the logo overall vivid.

The dynamic arcs are centripetal to "D" (representing "De" in DBL) and expand outward based on "De", reflecting DBL's strong centripetal cohesion and outward tension.

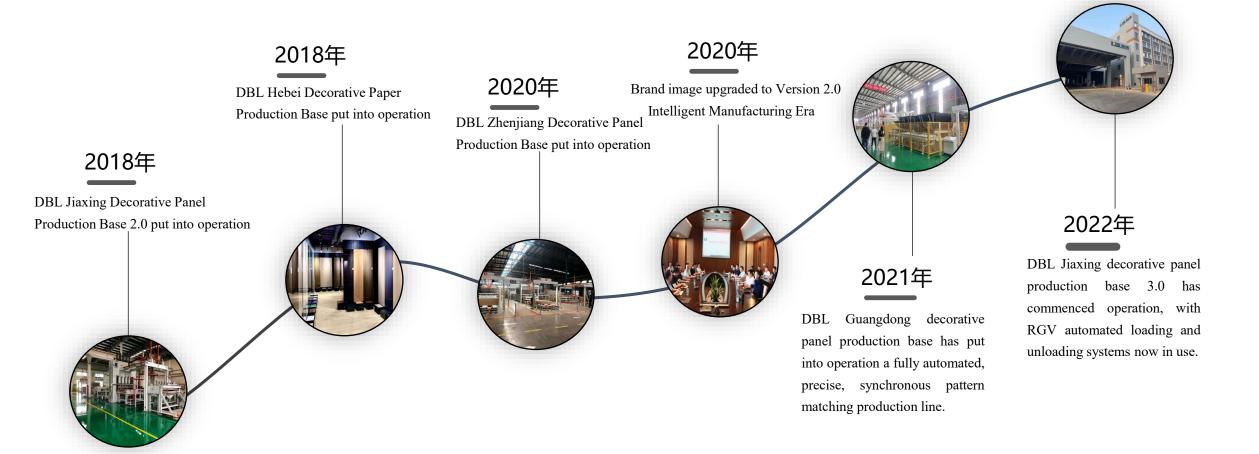
The color application: "calm and wise technology blue" embodies the rationality and innovation of technology; the sunrise yellow is the soul and direction of the logo, containing wisdom and strength.

The bold and powerful Chinese and English fonts of the logo reflect the enterprise's strong strength and social responsibility.

Development History



Development History



Capacity Strength

Lamination Production Lines

46 units

Decorative Panel Capacity

Over 15 million pieces/year

Total Workshop Area

Over 120,000 square meters

Annual Original Color Development

Over 300 styles

Impregnation Lines

10 units

High-Speed Printing Machines

10 units

Printing Paper Capacity

Over 15,000 tons/year























































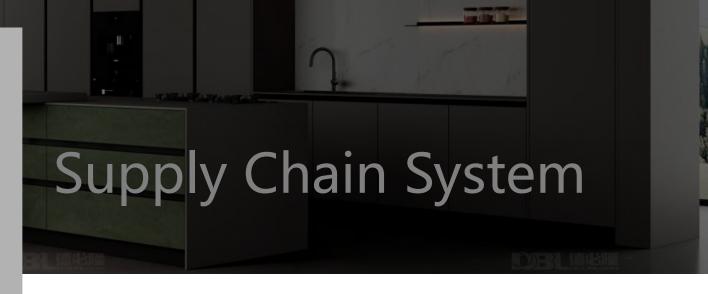




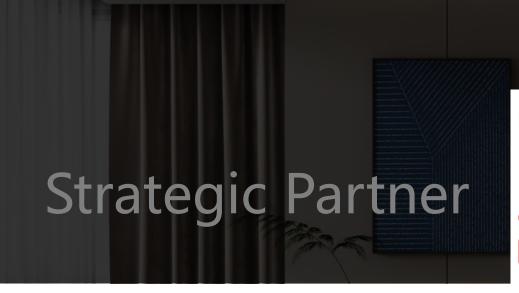








DBL integrates outstanding domestic and foreign supply chain enterprises to build a high-quality supply chain system. Combined with a professional technical and management team, it is committed to integrating the beautiful elements of nature into decorative surfaces, providing satisfactory products and services for home furnishing enterprises, decoration enterprises, and design companies, and creating a beautiful home life for society.































Over the past 20 years, adhering to the corporate culture of "Integrity-Based, Unity and Struggle, Pragmatism and Innovation", DBL has become a long-term strategic partner of many leading domestic furniture and decoration enterprises.































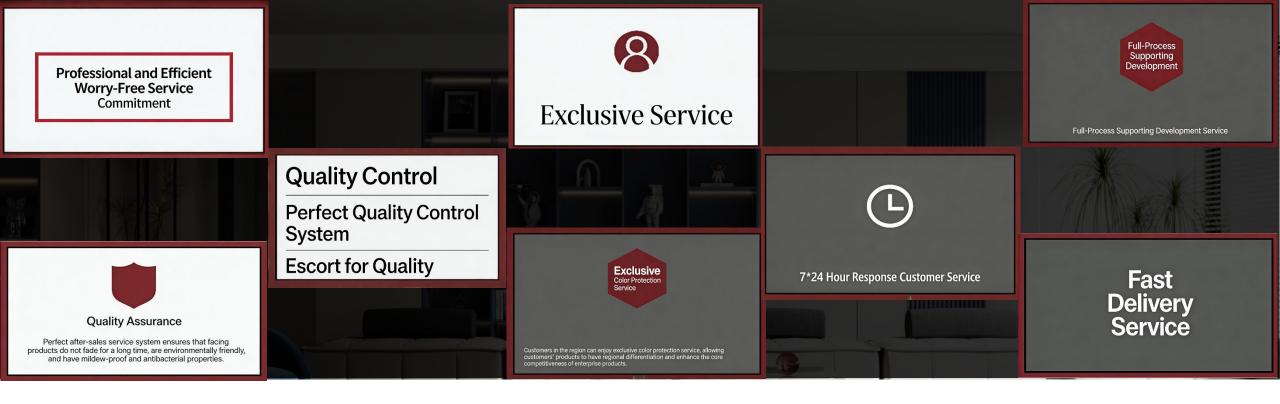












Premium Services





Product System



Pure Full Eucalyptus F4-Star Particleboard

4*9*18mm/4*9*25mm







Not all excimer skin-sensation boards are called 3IN1 Thank you for Watching