

HI-MACS[®]
Acrylic Solid Surface

A's
Blue Ace



 **LG Hausys**

HI-MACS[®]

Acrylic Solid Surface

- 1. General Information**
- 2. Application**
- 3. Technical Information**
- 4. Manufacturer – LG Hausys**

1. General Information

What exactly is HI-MACS®?

HI-MACS® is Acrylic Solid Surface manufactured from (% by weight):

- Natural minerals
(Alumina Tri hydrate) : 52~62%
- Acrylic PMMA
(Butyle Acrylate-Methyl Methacrylate): 30~47%
- Copolymer Colorants : 1~5%

Colour overview

HI-MACS® is currently available in a wide range of shades. The range of colours is almost limitless and new shades are added to the collection every year.



1. General Information

Design feature I: It can be moulded to suit

Design feature II: An extensive range of colours

Design feature III: Its translucency

Functional feature I: Visual seamlessness

Functional feature II: Simple to work with

HI-MACS® joints are seamless in their appearance. Moulded components, such as sinks and bowls, can be integrated within a work surface without any joint being visible. This seamless joining process has a further benefit, in terms of hygiene, in that dirt cannot become lodged in the joints.



1. General Information

Eco-friendly features

HI-MACS® is an eco-friendly material through and through and has also been accredited with the ISO14001 Environmental Management Certificate.

- Its composition from ecologically-sound raw materials. Aluminium hydroxide is a by-product in the production of aluminium.
- It is produced with an outstanding energy balance. The plant in Atlanta fulfils every obligation in terms of eco-friendliness.
- It is fabricated with minimal wastage.
- It can be disposed of in normal domestic waste.



1. General Information

Other arguments in favour of HI-MACS®

- Boundless applications
- Infinite opportunities for customised design
- Superior, laboratory-tested source material
- Advanced manufacturing methods that meet the most exacting environmental standards
- Straightforward and easy to work with
- Easy to care for
- Resistant to almost all household chemicals
- Exceptionally good price-performance ratio



2. Application

References

HI-MACS® is simply an all-rounder and is widely used in a number of very different market segments.

The list below includes reference projects from the following sectors:

- Kitchens
- Bathrooms
- Hotels
- Restaurants
- Laboratories
- Exhibitions and Shop fitting
- Airports
- Offices and Showrooms



2. Application

Kitchens

The benefits of using HI-MACS® in kitchens:

- Easy to care for
- Resistant to almost all household chemicals
- Ideal for working with food
- Heat-resistant
- Extensive range of products
(that can be flush-mounted)



2. Application

Bathrooms

The benefits of using HI-MACS® in bathrooms:

- Pleasing, warm feel
- Smooth poreless surface
- Extensive range of casted and moulded products
- Easy to care for
- Insensitive to humidity



2. Application

Hotels

The benefits of using HI-MACS® in hotels:

- Outstanding price-performance ratio
- Sophisticated look
- Superior value
- Longevity
- Extensive design options
- Translucency
- Easy to look after



3. References

Hospitals and laboratories

The benefits of using HI-MACS® in hospitals and laboratories:

- Good price-performance ratio
- Longevity
- Visually seamless workmanship
- Non porous surface
- Hygienic, insensitive to dirt
- Resistant to bacteria and many chemicals



3. References

Trade fairs and Shopfitting

The benefits of using HI-MACS® in the building of exhibitions stands and in shop fitting:

- Stunning appearance
- High level of functionality
- Extremely hard-wearing
- Longevity
- Sophisticated, high-quality appearance
- Pleasing to touch



2. Application

Airports

The benefits of using HI-MACS® in airports:

- Ultra-functional
- Extremely hard-wearing
- Long life
- Sophisticated, high-quality appearance
- Outstanding price-performance ratio



2. Application

Offices and Showrooms

The benefits of using HI-MACS® in offices and showrooms:

- Good price-performance ratio
- Pleasing to touch
- Longevity
- Easy to care for
- Sophisticated, high-quality appearance



2. Application

Facades

The benefits of using HI-MACS® in façade applications:

- Easy to care for
- Insensitive to humidity
- Sophisticated look
- Visually seamless workmanship



2. Application

Furniture and Light

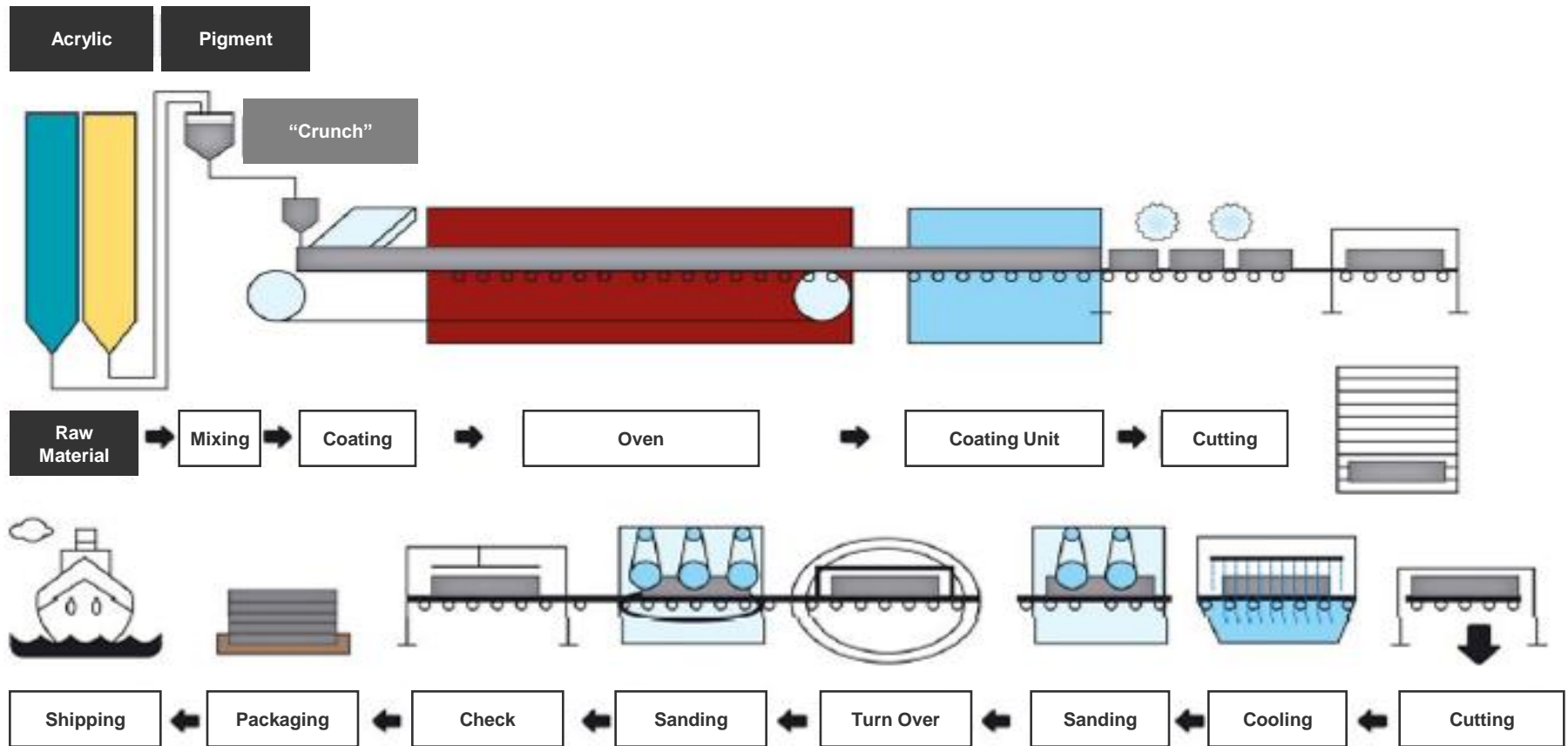
The benefits of using HI-MACS® in furniture and light applications:

- Easy to care for
- Sophisticated look
- Visually seamless workmanship
- Translucency



3. Technical Information

Producing a sheet of HI-MACS®



3. Technical Information

Hints on the care of your product

- HI-MACS® can simply be cleaned with a damp cloth, sponge and mild detergent.
- More difficult stains, small burn marks or nicotine stains can be simply and easily removed with a scouring pad.
- Even small cuts and scratches can be easily repaired yourself using sandpaper.



3. Technical Information

Test results I: Chemical resistance

HI-MACS® has a pore-less, dirt-repellent surface that moisture cannot permeate. For this reason, obstinate stains, such as lipstick, acids, cleaning agents and foods containing colouring, leave no traces on the material, even after an application time of 16 hours.

Test results II: Technical data sheet

HI-MACS® is extremely tough and hard-wearing, as demonstrated by all the relevant material tests. HI-MACS® achieves top marks in terms of its impact strength, thermal conductivity, water vapour permeability, food tolerance and hygiene.

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TEST REPORT

520-8, Gajwa 3-dong, Seo-gu, Incheon, KOREA TEL: 82-32-5789-700 FAX: 82-32-575-5810

Report No: TAB-01980 Receipt Date: Jun.15.2009
Client: Myung Ho Han Test Completion Date: Jul.15.2009
LG HAUSYS Co., Ltd
430, Yeosu-dong, Youngdeungpo-gu, Seoul, Korea.

Sample: Installation Marble(Granite) - large

TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Specific Gravity(23/23) °C	-		1.69	ASTM D 702 : 2001(Method A)
Rockwell Hardness(HRM)	-		89	ASTM D 785 : 2003(PROCEDURE A)
Tensile Strength	MPa		90.3	ASTM D 638 : 2001(1)
Tensile Modulus of Elasticity	GPa		11.7	ASTM D 638 : 2001(1)
Flexural Strength	MPa		64.3	ASTM D 790 : 2003(1)
Flexural Modulus of Elasticity	GPa		8.18	ASTM D 790 : 2003(1)
Load Impact Strength	kJ/m ²		4.9	ISO 180 : 2000(Notch TYPE: UNNOTCHED)
Water Absorption	%		0.319	ASTM D 570 : 1998(24h IMMERSION)
Leakage(°C)	g/or		1.35	ASTM D 708 : 1998(Method A)
Appearance(Discoloration) after Heat Resistance(170±2) °C × 1 h	-		No Defects	By The Client
Heat Water Resistance	-		No Defects	JS K 6802 : 1998
Deflection Temperature Under Load(1.82 MPa)	°C		99	ASTM D 648 : 2001(Method B)
Thermal Expansion	1/°C		3.4 × 10 ⁻⁶	JS K 6811 : 1998
Pencil Hardness(Wisu-bishi pencil)	-		BH	KS D 6711 : 1992

* Test Speed : 5 mm/min, Test Specimen : TYPE I
** Test Speed : 5 mm/min, Support Span : 190 mm
USAGE : QUALITY CONTROL

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Jul.15.2009

Korea Testing & Research Institute
President *Kim Young-woo*

3. Technical Information

Certificate

All HI-MACS® products are manufactured in compliance with the ISO 9001 Quality Standard for Systems and Processes and the ISO 14001 Standard for Environmental Management.

- BS 8800
(Certificate of Compliance with Occupational Health and Safety Management Systems)

- NSF-51
(Health certificate)

- LGA Hygiene Certificate
(Hygiene certificate)



3. Technical Information

- B1 / DIN 4102-1
(Certificate for Low Flammability)



- M1
(Certificate for Low Flammability)



- IMO - Modules B+D
(Certificate for Low Flammability in yachting environment)



- Bodycote Warrington Fire - Class 0
(Certificate for Low Flammability)



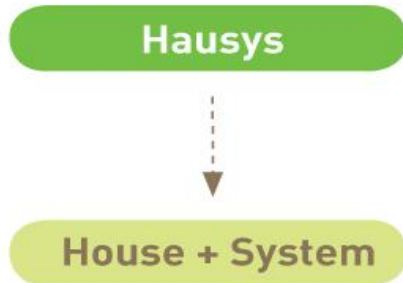
- MPA NRW
(Certificate for Low Flammability)



4. Manufacturer – LG Hausys



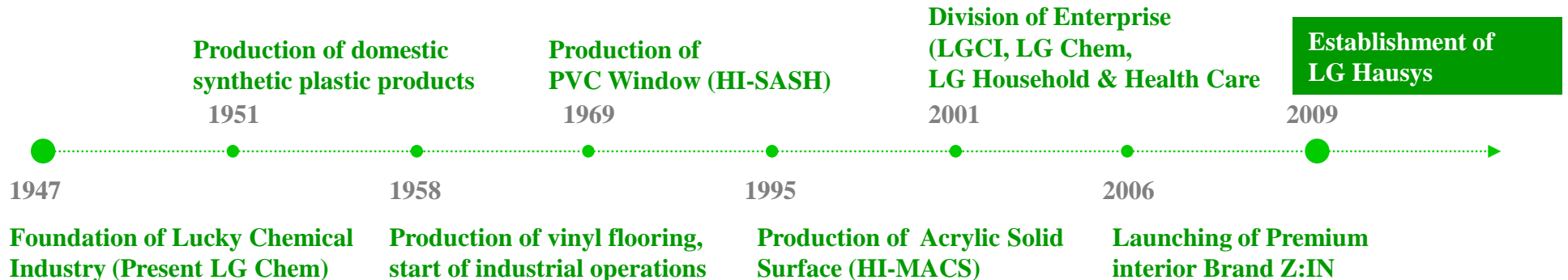
Fifty years of our history with customers is the history of Korea's living space



LG Hausys is one of Korea's largest construction materials corporation that initiated A new start in April of 2009 after being divided from the materials division of LG Chemical.

We recall creating a happy and prosperous living space for over 50 years beginning as a vinyl flooring company in 1958 and evolving to offer differentiated products and services such as Korea's first plastic window known as "High Sash", our acrylic solid surface "HI-MACS", building integrated photovoltaics (BIPV), and ranking number one in the global market for glossy sheets.

[History]



4. Manufacturer – LG Hausys

[Vision]

Resembling Nature, Associating People,
Creating a Happy Living Space.



Resembling Nature

Supply of environmentally friendly materials, advancement of energy efficiency: Aspiring a space befitting nature to benefit customer health and affluent lifestyle.

Resembling People

Leading in future living space trend by elevating lifestyle value through beautiful, emotional and environmentally friendly designs for people.

Happy Living Space

Creating a happy living space for customers by placing customer satisfaction as the top priority.

[Common Value]

