INTERNATIONAL EXPERTISE IN SOLVENT **FREE & ECO FRIENDLY ADHESION** TECHNOLOGY **PROFESSIONAL PRODUCER IN TAIWAN** FOR 30 YEARS OUR BUYERS : ADIDAS, NIKE, FENGTHAI..ETC

**KEY PRODUCTS** : HOT MELT ADHESIVE FILMS **INK JET HEAT TRANSFER FILMS** 

**TURNOVER**: 3 MILLION USD

**EMPLOYEES**: 25

#### **STATE OF ART MACHINES** :

2 T-DIE EXTRUDER / 1 BLOW EXTRUDER / EUROPEAN THICKNESS QUALITY MEASUREMENT MACHINE & CONTINUE **EXPANSION IN 2020** 

PRODUCTION CAPASITY: T-DIE / SHIFT – 40 MICRONS \*10,000 M ~ 200 MICRONS \* 5000 M BLOWING / SHIFT – 40 MICRONS \*15,000

#### **OTHERS FACILITY: IN HOUSE OEM** LAMINATION HTTPS://YOUTU.BE/Q5JUV9W2 BU

#### **INTERNATIONAL R&D EQUIPMENT**



### HMA DATASHEET

-	品名 Item	硬度Hardness (ASTM2240)	外觀Appearance	流動溫度 (RDA-II)Fluid Temperature	100% Modulus (kgf/cm²)	抗拉強度 Tensile Strength CNS13336 (kgf/cm <sup>2</sup> )	建議操作條件 Recommended Operation Condition
0	CH-815	90±3A	半透明 Translucent	100°C±5°C	49±5	230	120°C_9.8kgf/cm²_20sec
	CH-817	73±3A	透明Transparent	90℃±5℃	27±5	100	120°C_9.8kgf/cm <sup>2</sup> _20sec
	CH-822	62±3A	透明Transparent	110℃±5℃	17±5	270	140°C_9.8kgf/cm <sup>2</sup> _20sec
	CH-824	78±3A	透明Transparent	105℃±5℃	24±5	350	130°C_9.8kgf/cm <sup>2</sup> _20sec
	CH-826	76±3A	透明Transparent	105℃±5℃	38±5	300	140°C_9.8kgf/cm <sup>2</sup> _20sec
	CH-826A	80±3A	透明Transparent	115℃±5℃	29±5	210	150°C_9.8kgf/cm²_20sec
	CH-829	80±3A	透明Transparent	95℃±5℃	45±5	350	130°C_9.8kgf/cm²_20sec
	CH-910	95±3A	半透明 Translucent	60°C±7°C	90±5	300	120°C_9.8kgf/cm²_20sec
	CH-922	80±3A	絲狀結構Non- woven	110°C±5°C	-	-	130°C_9.8kgf/cm <sup>2</sup> _15sec
	CH-927A	80±3A	半透明 Translucent	105℃±5℃	50±5	230	130°C_9.8kgf/cm <sup>2</sup> _30sec
	CH-966	53±3D	半透明 Translucent	55℃±5℃	85±5	220	80°C_9.8kgf/cm <sup>2</sup> _20sec
	EH-342	85±3A	透明Transparent	80°C±5°C	69±5	150	110°C_9.8kgf/cm <sup>2</sup> _20sec
	EH-343	80±3A	透明Transparent	80℃±5℃	67±5	200	140°C_9.8kgf/cm <sup>2</sup> _20sec
						-	9



品名 Item	硬度Hardness (ASTM2240)	外觀Appearance	流動溫度 (RDA-II)Fluid Temperature	100% Modulus (kgf/cm²)	抗拉強度 Tensile Strength CNS13336 (kgf/cm²)	建議操作條件 Recommended Operation Condition	
EH-346	88±3A	透明Transparent	110℃±5℃	62±5	185	150°C_9.8kgf/cm²_30sec	
EH-931	90±3A	半透明Translucent	115℃±5℃	45±5	150	180°C_9.8kgf/cm²_30sec	
EH-933B	81±3A	透明Transparent	135℃±5℃	33±5	160	150°C_9.8kgf/cm²_20sec	
EH-935F	88±3A	半透明Translucent	88℃±5℃	43±5	70	105°C_9.8kgf/cm <sup>2</sup> _20sec	
EH-936	84±3A	透明Transparent	112℃±5℃	45±5	160	140°C_9.8kgf/cm²_15sec	
PH-924	57±3D	絲狀結構Non- woven	105℃±5℃	-	-	130°C_9.8kgf/cm²_20sec	
РН-942	95±3A	半透明Translucent	110°C±5°C	110±5	370	150°C_9.8kgf/cm <sup>2</sup> _20sec	0
<b>RF-110</b>	-	微黃半透明 Translucent	-	-	-	備膠 pre-lamination: 110℃_9.8kgf/cm <sup>2</sup> _20sec 貼合Bonding: 160℃_9.8kgf/cm <sup>2</sup> _1~8min	

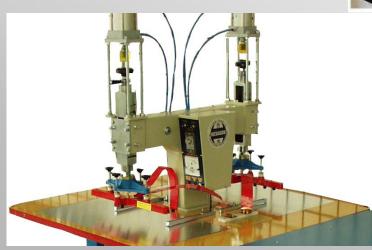


### **TEMPERATURE / TIME / PRESSURE / QUALITY TESTS**

FOR DIFFERENT MATERIALS AND DIFFERENT FILM THICKNESS, THE CONDITIONS SHOULD BE ADJUSTED.

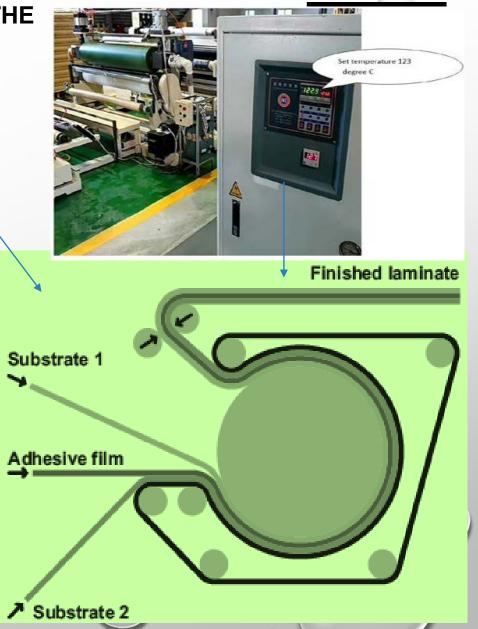
#### **COMMON PROCESSING METHODS / CAUTIONS**







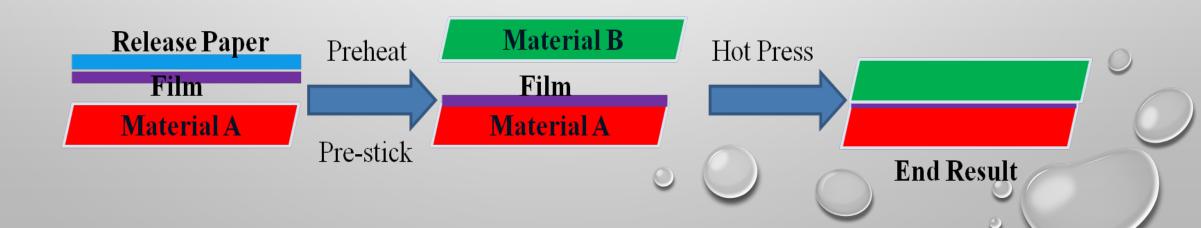


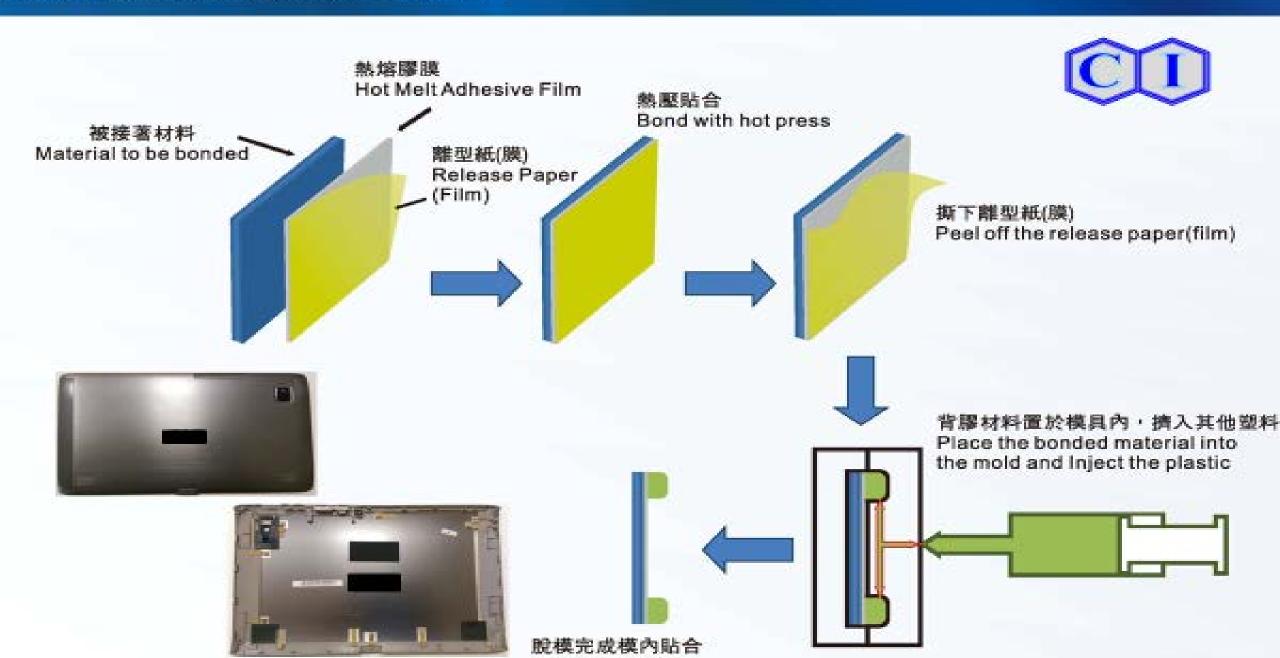


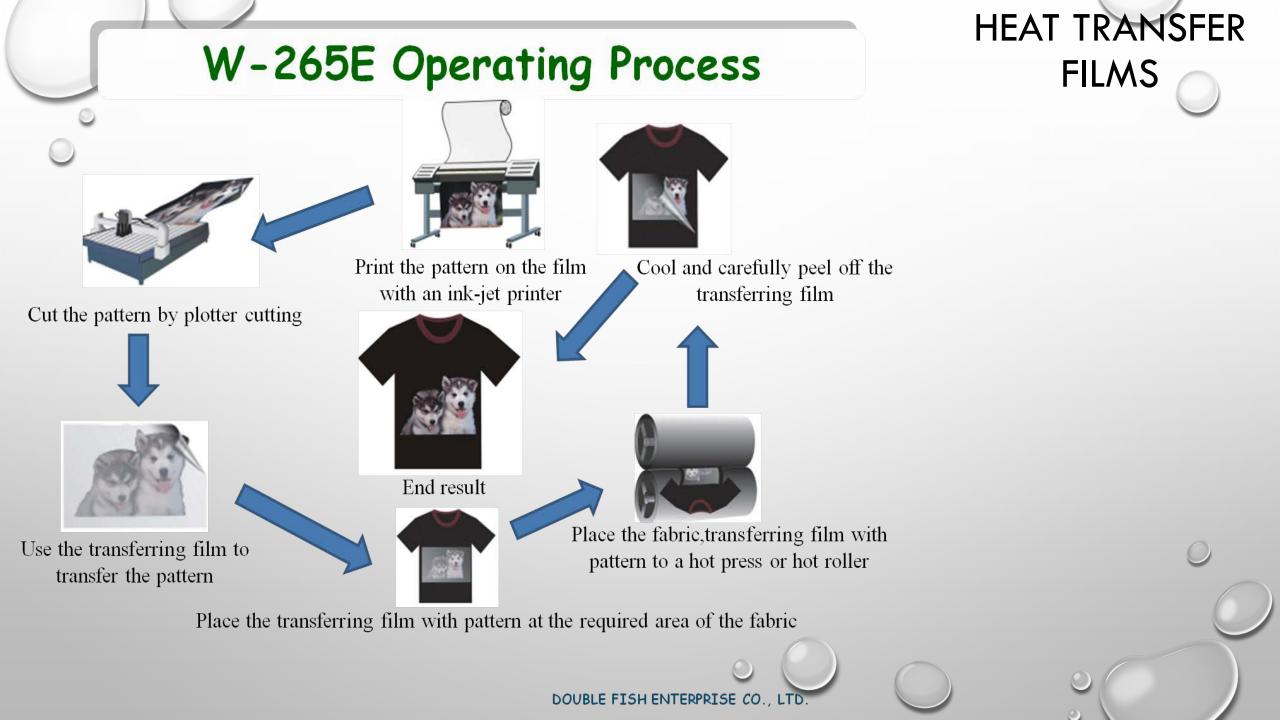
SOP

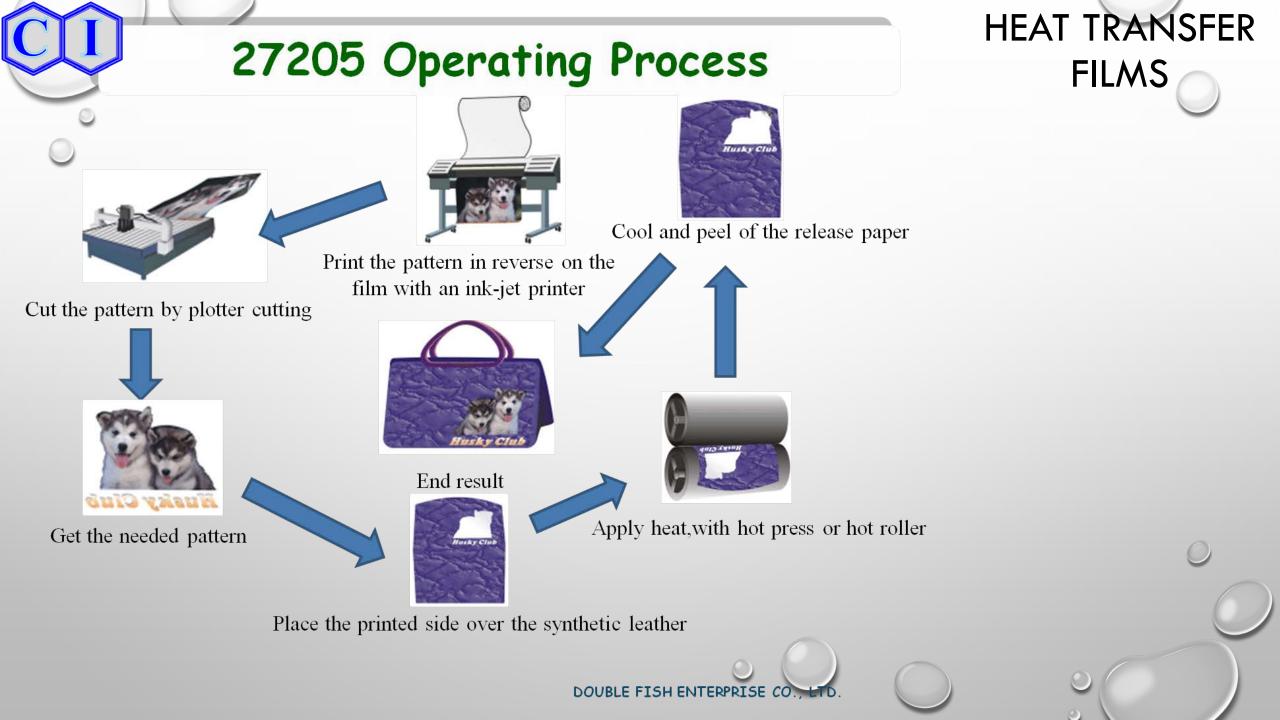
### WHAT MATERIAL YOU WANT TO ADHERED WITH WHAT OPERATION CONDITIONS YOU ARE GOING TO WORK WHAT STANDARDS ARE NEEDED TO PASS MATERIAL SURFACES DETERMINES FILM THICKNESS NEEDED

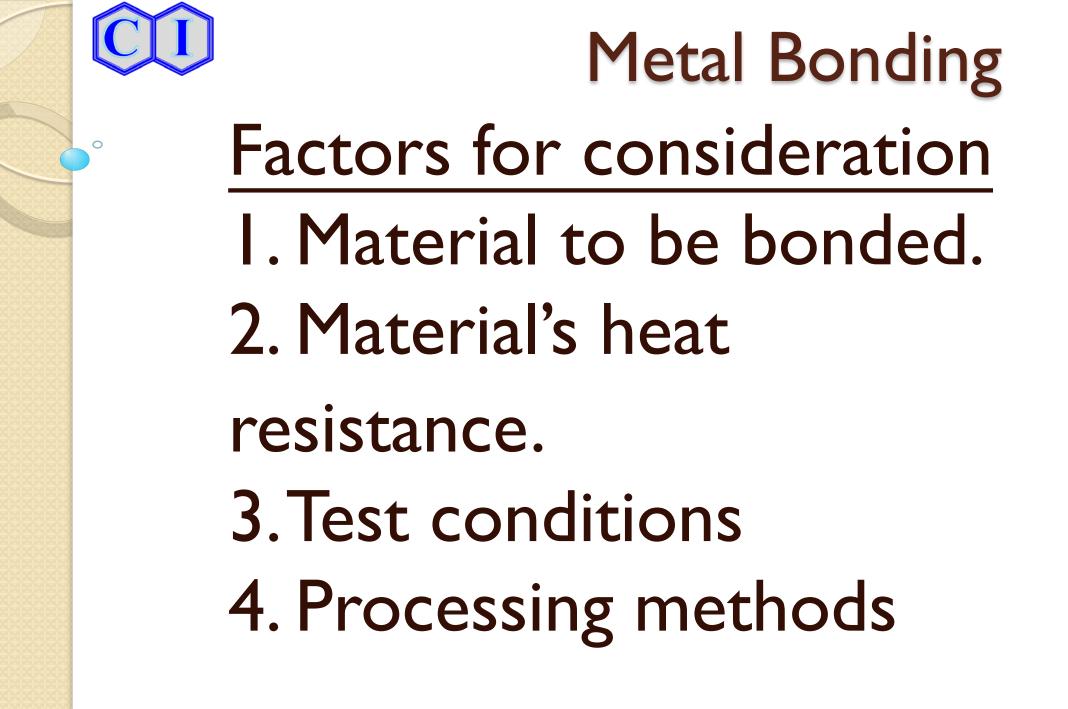
## No Sew Hot Melt Film Operation Guide











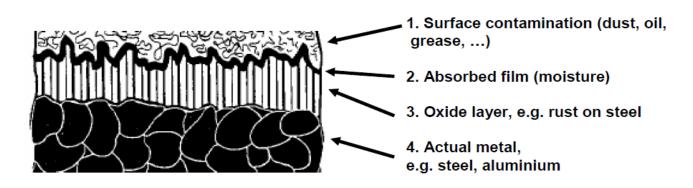
# Principle of Metal Bonding- with & without Primer

- Without Primer : HMA itself is a polymer has to be modified to have a functional group, that is able to bond metals directly, under suitable conditions, e.g. temperature, pressure and timing.
- With Primer :When HMA cannot bond with metals, the metal surfaces will need to undergo chemical treatment. Our primer technologies are highly developed.



### **Metal Surfaces**

 Contaminants that create bonding problems on metal surfaces include grease, dust, dirt, oil and oxide caused by air corrosion. Grease and oil not only interfere with bonding, but also make certain types of preparation operations, such as chemical surface modification ineffective.





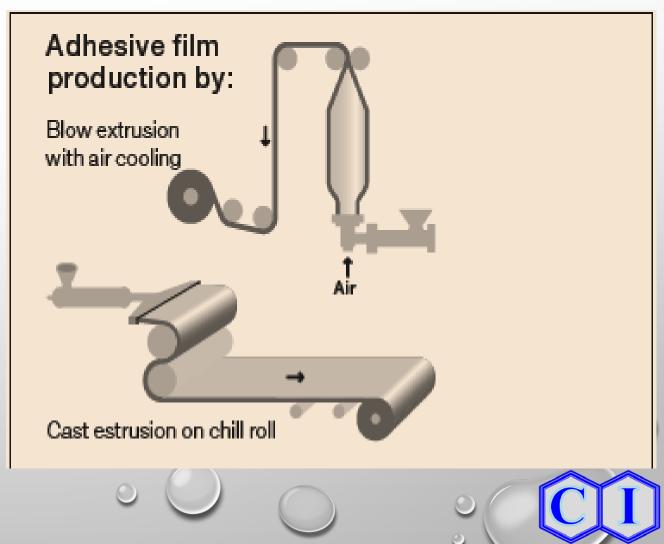
### Primer Objective

- I. Thoroughly clean surface from oils and dust.
- 2. Rid any oxidization on the metal's surface either with an acid bath or abrasion.
- 3. Allow for setting time after adhesion.
- 4. Treatments on the metal surface such as plating may affect results.
- 5. Anodized film is densely oxidized aluminum which forms a surface sealing property. Thus prior to priming the surface, heat treat to at least 160 °C. Once cooled, apply the primer which will enable better primer wetting outcomes.



Material A	Material B	PRIMER	Film
Zinc-plated board	PE	Not Required	EH-931
Stainless Steel	PP	Not Required	EH-932
	Fiber cloth	Not Required	EH-931,EH-346
Aluminum	Fiber cloth	Not Required	EH-342
Bronze	Fiber cloth	Not Required	EH-342
Stainless Steel	PU	Required	CH-824
	PC	Required	CH-910
Aluminium Bronze	PU	Required	CH824

- TEXTILES & FOOTWEAR
- AUTOMOTIVE CAR ROOF LINER
- HOME OR CONSTRUCTION HDPE & STEEL ROOF APPLICATIONS
- METAL APPLICATIONS
- CARBON FIBER COMPOSITES
- GLASS BONDING & WOOD
- PLASTICS
- ELECTRONICS
- SADDLE
- KITCHEN & BATHROOM DESIGNS
- SEAM TAPES
- SPLINTS



VERSATILE

**APPLICATIONS** 



#### **DOUBLE FISH ENTERPRISES CO LTD,**

#### NO.80-17 TONG ANG LIAO, MING ANG LI, CHIALI DIST, TAINAN CITY, TAIWAN, ZIP CODE 72256

**OFFICE +886 06 7225056** 

FAX +886 06 7223883

CELL +886 963 756 978

CHIATA@DOUBLEFISH.COM.TW

HTTP://WWW.DOUBLEFISH.COM.TW/INDEX.PHP?LANG=EI