

# IMD Technology / Film Insert Molding



The long established screen printing ink **NORIPHAN® HTR N** is used worldwide for IMD/FIM as well as speedometer applications. Our state of the art Research and Development Department continues to develop additional inks for the IMD/FIM process including **NORIPHAN® XWR** and **NORIPHAN® XMR**. Both inks utilize two-component chemistry and can be used for overprinting conductive pastes in IME (In Mold Electronics) applications due to their high electrical resistance.

We are pleased to introduce our **NEW NORIPHAN® HTR N 990 NC** black ink, which is carbon free, **non-conductive** and designed for applications where electrical conductivity is critical.



1 screen printed film



2 formed film



3 trimmed film



4 back molded part

Mercedes-Benz C + E-Class HVAC panel



TactoTek injection molded structural electronics panel (IMSE)



Smart climate control panel



3D formed speedometer panel

## Ink System:

**NORIPHAN® HTR N**  
**NORIPHAN® PCI N**  
**NORIPHAN® N2K**  
**NORIPHAN® XWR**  
**NORIPHAN® XMR**  
**NoriAmid®**  
**Noricryl®**  
**NoriPET®**  
**NORIPHAN® XWR**  
**NoriCure® IMS**

## Adhesion Promoter:

**NORIPHAN® HTR N**  
**NORIPHAN® HTR N**  
**NoriAmid® APM**  
**NoriPress® PP**  
**AquaPress®** or  
**NORIPHAN® XMR + HTR N**

## Substrate:

**Makrofol®/Bayfol®** films  
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**PC (<125µm)** and **PET** films  
**PC** and **PET** films  
**PC** and **PET** films  
**PA** films  
**PLEXIGLAS®** films  
**PET** films  
**PP** films  
**PC** films

## Injection Resin:

**PC/ABS/PMMA**  
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**PC/ABS**  
**PC/ABS**  
**PC/ABS**  
**PA/PMMA/PC/ABS**  
**PMMA/ABS**  
**ABS**  
**PP**  
**PC**

[www.proell.us](http://www.proell.us)

NoriPress® SMK (solvent-based) and AquaPress® (water-based) are adhesion promoters / bonding agents for IMD/FIM technology. These products can be used as an overprinting adhesion primer to enhance the bonding of IMD/FIM inks to various low melting point resins as well as for laminating different film types. AquaPress® can be back molded with PC, ABS, and PMMA resins. NoriPress® SMK can be back molded with PA additionally. NoriAmid® APM is an adhesion promoter especially developed for PA materials. NoriPress® PP is suitable for back molding with PP resin. NoriCure® IMS is a formable UV screen printing ink for film insert molding applications. Overprinting with suitable IMD/FIM adhesion promoters is compulsory! Process inks for printing high resolution 4C pictures are available.