

IMD Technology / Film Insert Molding



*Innovative Inks &
Functional Lacquers*

Proell

The proven and tested NORIPHAN® HTR N ink system from Proell is used worldwide for film insert molding applications and dial printing. Thanks to permanent product development further ink systems have been developed, such as the formable two-component ink systems NORIPHAN® XMR and NORIPHAN® XWR. Both of these ink systems can be used as a washout barrier during the injection molding process

while showing excellent adhesion in compound and long term durability in the final part.

The black color shades of the ink systems NORIPHAN® XMR and XWR can be used for back printing of conductive pastes in functional IMD/FIM parts due to their high electric resistance.



1 screen printed film



Tactotek injection molded structural electronics panel (IMSE)



2 formed film



Smart HVAC panel



3 trimmed film



Motorcycle fairing – PP-IMD



4 back molded part

Mercedes-Benz C + E-Class HVAC panel



3D formed speedometer panel

Ink System:

NORIPHAN® HTR N
NORIPHAN® PCI N
NORIPHAN® N2K
NORIPHAN® XWR
NORIPHAN® XMR
NoriAmid
Noricryl®
NoriPET®
NORIPHAN® XWR + NoriPress® PP

Substrate:

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

Injection Resin:

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

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NoriPress® SMK, NoriPress® PP (solvent-based) and AquaPress® (water-based) are bonding agents for IMD/FIM technology. AquaPress® can be back molded with PC, ABS, and PMMA resins. NoriPress® SMK can be back molded with PA as well as the previously mentioned resins. These products can be used as an overprinting adhesion primer to enhance the bonding of IMD inks with various low melting point resins as well as laminating different film types. NoriPress® PP is available for back molding with PP resin.

Norilux® DC, a broad range of formable, abrasion, and chemically resistant dual cure lacquers, can be used to protect first surface decoration or polycarbonate surfaces with various matte and glossy finishes.