# Heat resistant coating to prevent damages on film caused by heat sealing

Z327 Heat resistant coating

Z327 Heat resistant matt coating

Reduces heat shrinkage during bag or pouch making
Expands the range of heat sealing temperatures by 20°C
Enhances the production of PE film based pouches at higher speed

Application

Food packaging

**Test example (A)** Z327 Heat resistant coating / MDOPE (25 μm) / Ink / Laminating adhesive / LLDPE (50 μm)

Heat sealing conditions 2 kgf/cm², 1 s	Heat shrinkage evaluation		
	Without coating	With Z327 heat resistant coating	With Z327 matt heat resistant coating
120°C	Good	Good	Good
130°C	Limited	Good	Good
140°C	Bad	Good	Good
150°C	Bad	Good	Good

#### Heat sealing temperature 140°C



Without With heat resistant coating heat resistant coating





#### Z327 Heat resistant overprint varnish / MDOPE (25µm) / Ink / Test example (B) laminating adhesive / LLDPE (50 µm)

Collaborative work with Totani Engineering Co., Ltd.



Scenario 1

Horizontal sealing 170°C, vertical sealing 190°C,

# Scenario 2

Horizontal sealing 170°C, vertical sealing 210°C,

### sealing time 500 ms

# Zipper part



Without overprint varnish

Improved heat absorption in the seal area

# Hole punching areas



#### sealing time 200 ms

# Zipper part

#### Without overprint varnish



With overprint varnish

Without overprint varnish

#### Film breakage improved

## **Bottom part**



Improved heat fusion of the substrate surface



#### Film breakage in the zipper area improved