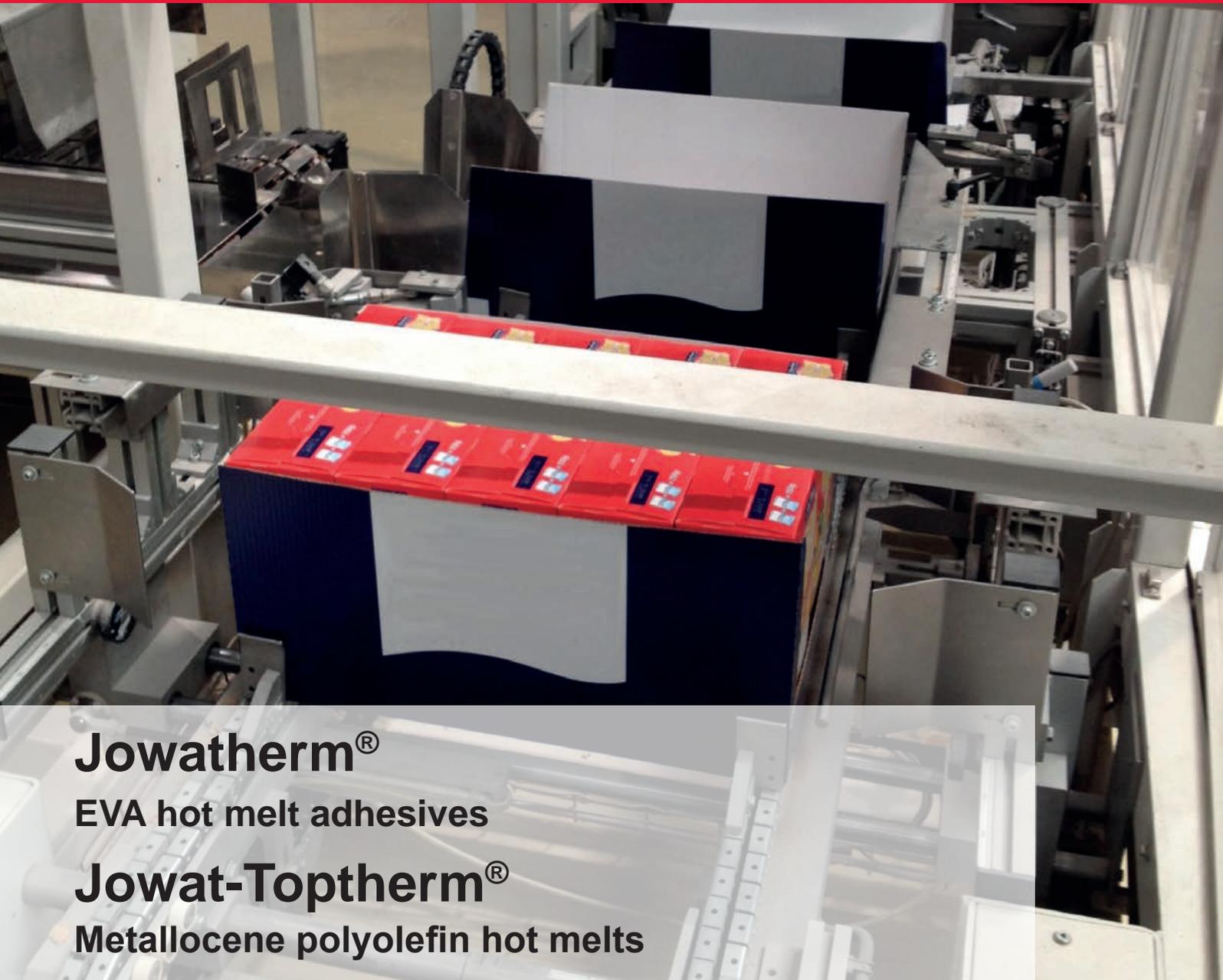


# End-of-Line packaging

- Hot melt adhesives for tray assembly, folding boxes and carton closing
- Clean, high-value and efficient adhesive solutions
- Unlimited suitability on automatic feeding systems



**Jowatherm<sup>®</sup>**

EVA hot melt adhesives

**Jowat-Toptherm<sup>®</sup>**

Metalocene polyolefin hot melts

# Powerful hot melt adhesives for modern packaging processes



Powerful Jowat adhesives facilitate reliable End of Line processes for the assembly and sealing of primary and secondary packaging, such as folding boxes, trays, wrap-arounds, or special shelf-ready packaging.

Hot melt adhesives from the **Jowatherm®** and **Jowat-Toptherm®** series tailored to the requirements of packaging processes have been used for years in diverse applications and are renowned beyond the packaging industry for superior performance. A high yield, in combination with clean processing, facilitate sustainably reduced manufacturing costs due to minimised maintenance and shorter production downtime.

Due to high initial strength and fast setting, these adhesives ensure a reliable closure of the packaging even at unfavourable pressure or high line speeds, and master challenging conditions such as high restoring forces. Jowat hot melt adhesives have a wide range of adhesion and are therefore also suitable for difficult to bond surfaces. Due to the excellent flow performance of the granulate, the adhesive can be processed on melting units with automatic feed systems from all leading manufacturers. Jowat adhesives are characterised by a high colour stability in the melt, virtually no odour, and meet the demands of food contact regulations. Whether high ambient temperatures during hot filling or transport, or low temperatures down to -40 °C in deep-freeze applications – the high-performance **Jowatherm®** and **Jowat-Toptherm®** hot melts are resistant to extreme temperatures.

From cost-optimised solutions, to special applications, such as deep freeze, chocolate, or tea packaging, and low temperature and high-end formulations – **Jowatherm®** products are tried and proven EVA hot melt adhesives which meet the most demanding requirements.

The modern metallocene polyolefin hot melts from the **Jowat-Toptherm®** product group are characterised by outstanding processing properties and resistance to challenging conditions. **Jowat-Toptherm®** products are high-performance adhesives, which easily meet even the highest requirements, and are, therefore, renowned in the packaging industry. In addition to adhesives with excellent adhesion, very fast setting, and minimal stringing, the product group also includes low-temp hot melts. A low processing temperature of these adhesives, starting from 120 °C, permits energy savings and has a positive effect on workplace safety.

Jowat also supplies “green” alternatives which are formulated with renewable raw materials and are particularly sustainable.

These modern adhesives meet all requirements of End-of-Line processes, and the extensive advisory expertise of Jowat ensures that you always have the perfect solution for every application. Always aimed at providing sustainably improved packaging processes.

## EVA hot melts

### Jowatherm® 252.70

High adhesion, for critical surfaces, for deep-freeze packaging

Viscosity at 170 °C	[mPas]	approx. 1,500
Processing temperature	[°C]	160 - 180
Setting time	[s]	1 - 2
Open time	[s]	7 - 9
Softening range	[°C]	approx. 100

### Jowatherm® 257.20

Low processing temperature, minimal stringing

Viscosity at 140 °C	[mPas]	approx. 1,000
Processing temperature	[°C]	130 - 150
Setting time	[s]	0.5 - 1
Open time	[s]	4 - 6
Softening range	[°C]	approx. 110

### Jowatherm® 258.50

General-purpose, low-cost

Viscosity at 150 °C	[mPas]	approx. 1,200
Processing temperature	[°C]	140 - 160
Setting time	[s]	approx. 1
Open time	[s]	approx. 5
Softening range	[°C]	approx. 110

## Metalocene PO hot melts

### Jowat-Toptherm® 256.00

Excellent adhesion, for critical surfaces, for deep-freeze packaging

Viscosity at 160 °C	[mPas]	approx. 1,500
Processing temperature	[°C]	140 - 170
Setting time		short - medium
Open time	[s]	3 - 5
Softening range	[°C]	approx. 110

### Jowat-Toptherm® 256.65

High heat resistance

Viscosity at 160 °C	[mPas]	approx. 1,600
Processing temperature	[°C]	140 - 170
Setting time		short
Open time	[s]	4 - 6
Softening range	[°C]	approx. 115

### Jowat-Toptherm® 256.73

Green line: formulated with renewable raw materials

Viscosity at 150 °C	[mPas]	approx. 1,400
Processing temperature	[°C]	140 - 160
Setting time		short
Open time	[s]	4 - 6
Softening range	[°C]	approx. 115

### Jowatherm® 255.10

High heat resistance, minimal stringing

Viscosity at 160 °C	[mPas]	approx. 1,250
Processing temperature	[°C]	150 - 170
Setting time	[s]	0.5 - 1
Open time	[s]	3 - 5
Softening range	[°C]	approx. 120

### Jowat-Cleartherm® 257.30

Universell, hohe Farb- und Oxidationsstabilität

Viscosity at 160 °C	[mPas]	approx. 950
Processing temperature	[°C]	150 - 170
Setting time	[s]	approx. 1
Open time	[s]	6 - 8
Softening range	[°C]	approx. 105

### Jowat-Toptherm® 256.10

High adhesion, for critical surfaces, minimal stringing

Viscosity at 160 °C	[mPas]	approx. 1,000
Processing temperature	[°C]	140 - 180
Setting time		short
Open time	[s]	3 - 5
Softening range	[°C]	approx. 110

### Jowat-Toptherm® 256.70

General-purpose, excellent colour stability and resistance to oxidation

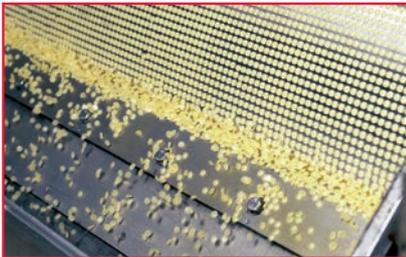
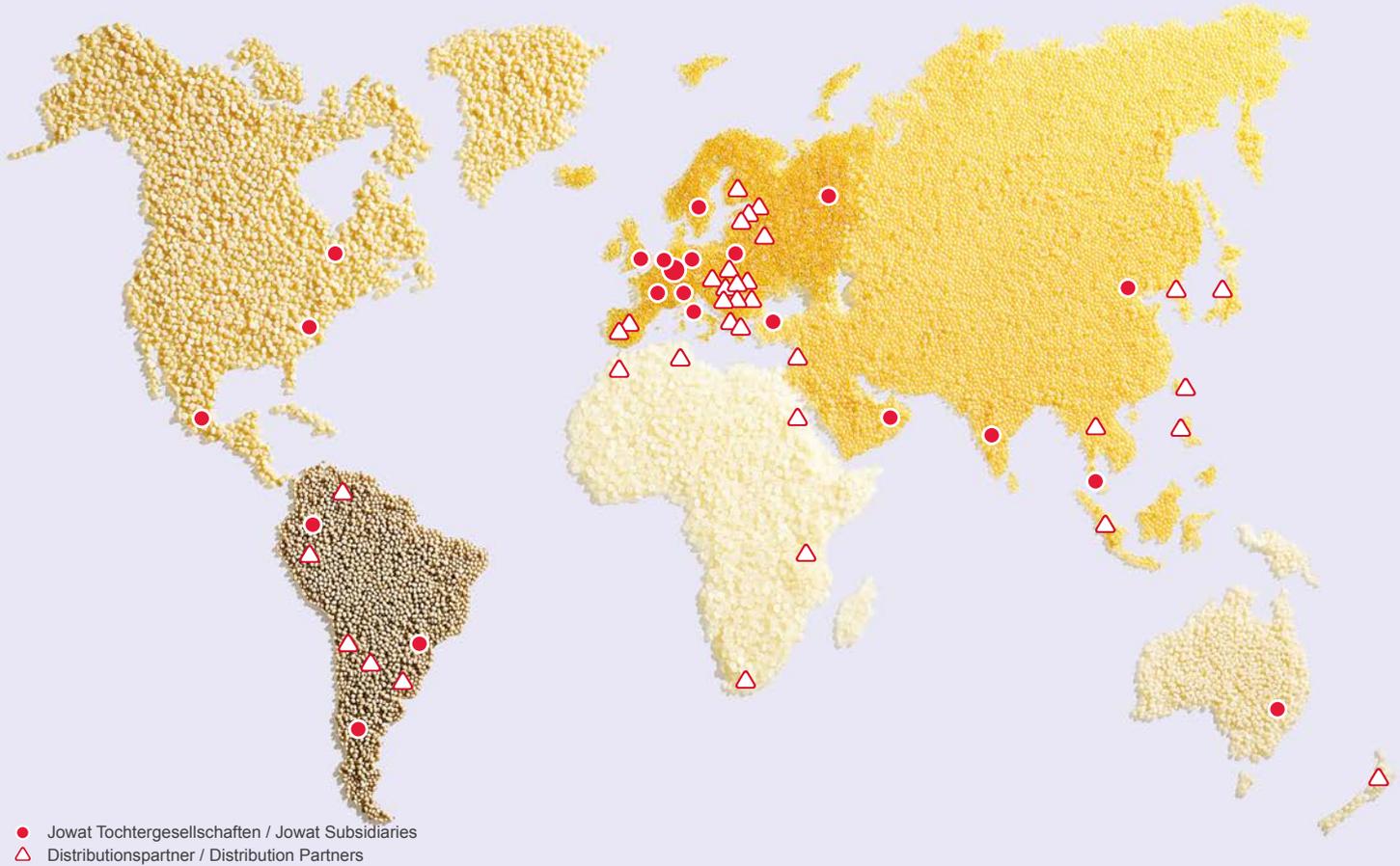
Viscosity at 160 °C	[mPas]	approx. 1,600
Processing temperature	[°C]	140 - 170
Setting time		short
Open time	[s]	4 - 6
Softening range	[°C]	approx. 115

### Jowat-Toptherm® 256.91

Low Temp: low processing temperature, minimal stringing, excellent resistance to oxidation

Viscosity at 140 °C	[mPas]	approx. 1,000
Processing temperature	[°C]	130 - 160
Setting time		short
Open time	[s]	3 - 5
Softening range	[°C]	approx. 110

**Jowat | Ihr Partner in Sachen Kleben**  
**Jowat | Your Partner in bonding**



**Jowat – Kleben erster Klasse**  
**Jowat – first class bonding**

**Jowat**   
Klebstoffe

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