



markem-imaje

a **DOVER** company



Print & Apply

## 2200 Series

Case, pack and pallet  
applicator solutions guide

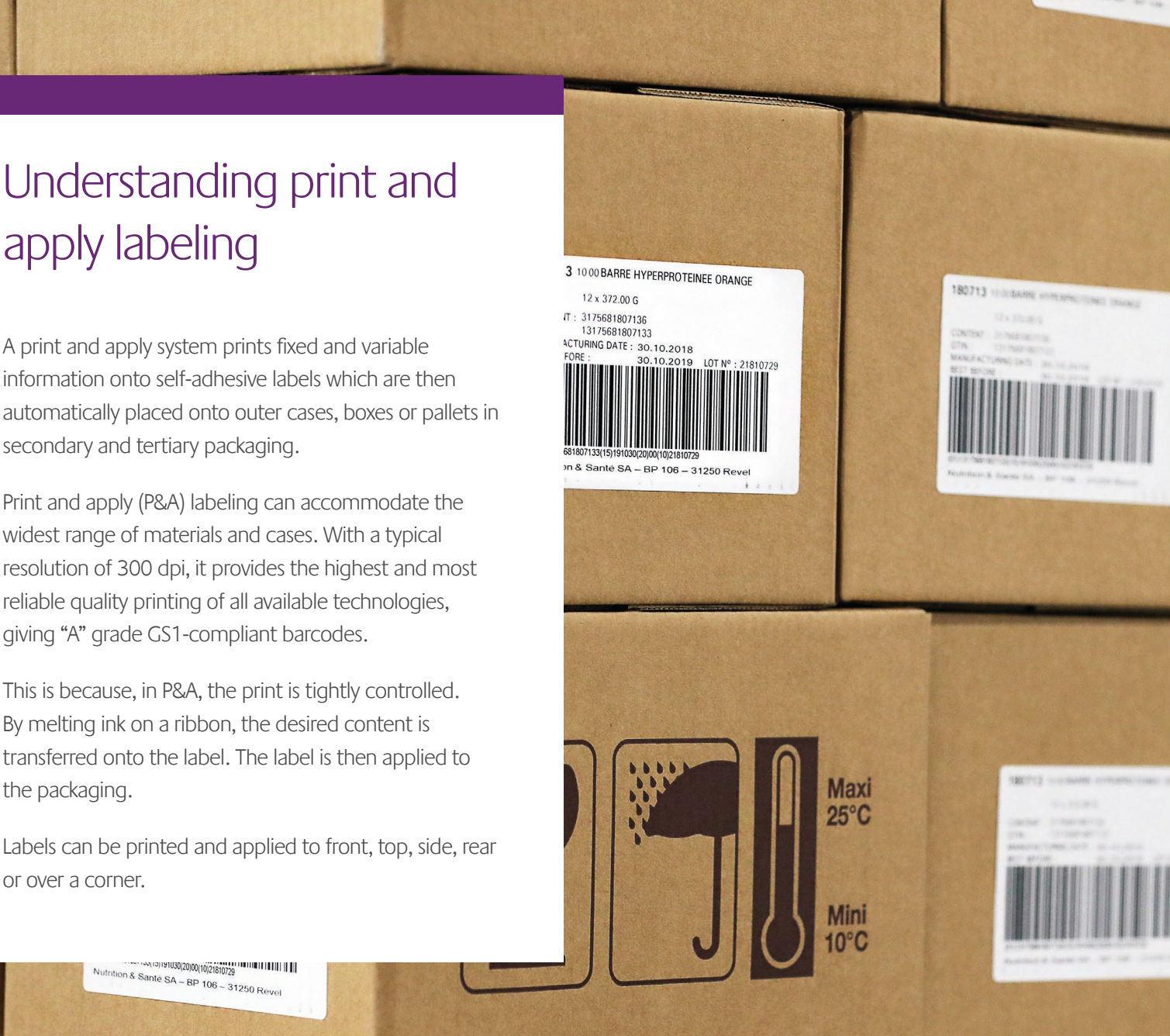
# Understanding print and apply labeling

A print and apply system prints fixed and variable information onto self-adhesive labels which are then automatically placed onto outer cases, boxes or pallets in secondary and tertiary packaging.

Print and apply (P&A) labeling can accommodate the widest range of materials and cases. With a typical resolution of 300 dpi, it provides the highest and most reliable quality printing of all available technologies, giving “A” grade GS1-compliant barcodes.

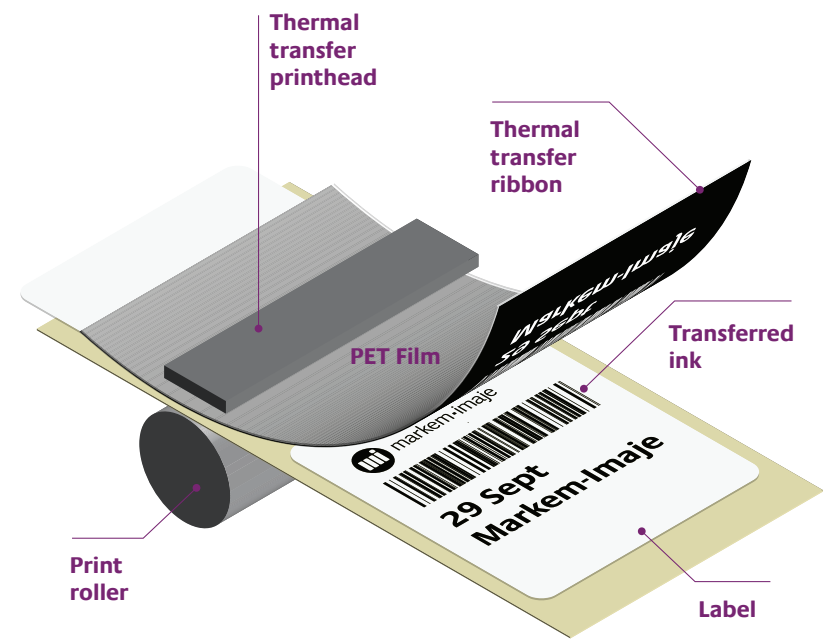
This is because, in P&A, the print is tightly controlled. By melting ink on a ribbon, the desired content is transferred onto the label. The label is then applied to the packaging.

Labels can be printed and applied to front, top, side, rear or over a corner.



## Print and apply systems use the thermal transfer digital printing technology

The main elements are the thermal transfer printhead, the inked ribbon and the roller.



# Four most common types of application method



## Tamp

Tamp is the most common method of application, well suited to many scenarios. Tamp applicators use either a pneumatic or electronic drive to extend the applicator and push the label onto the product.



## Blow

This is a contactless labeling technique which relies on a burst of air to propel the label to the product surface. This method is best for fragile, soft, curved or uneven shapes.



## Tamp-Blow

A combined tamp and blow method is useful for sticking labels to uneven surfaces. This contactless technique has a tamp applicator with a vacuum which holds the label in place after being removed from its liner. The pad brings the label close to the product and then uses compressed air to blow the label.



## Wipe

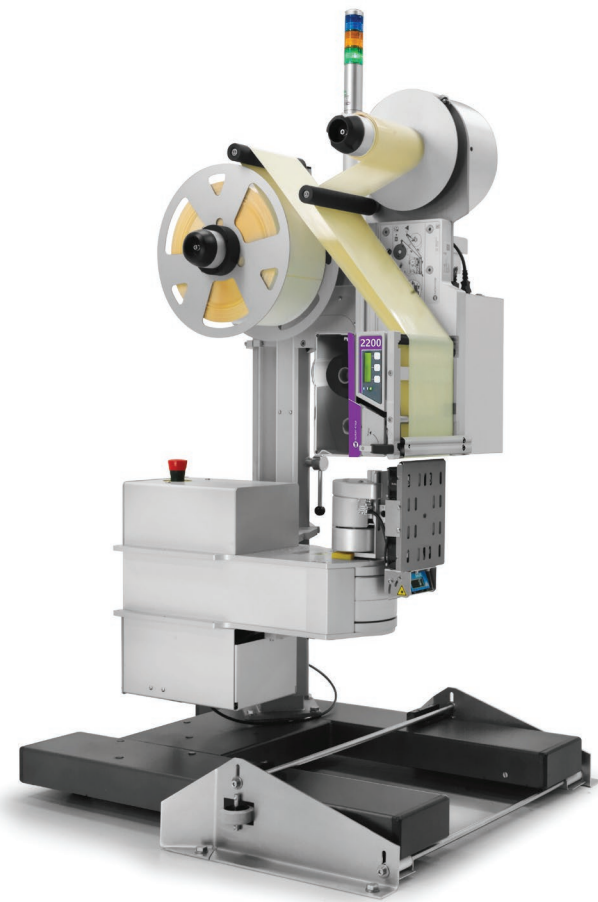
With the wipe method, labels are applied directly to the product on the front, side, rear or around a corner. The label is printed as it is applied, which means that printing and applications speeds must be synchronized. This method is particularly suitable for long labels.



# 2200 print and apply systems

Efficient and reliable GS1-compliant solutions for all case, pack and pallet labeling requirements.

The 2200 Series and 2200 Pallet build on a proven concept. With thousands of units installed in demanding 24/7 environments, they provide reliability, efficiency and ease of use to minimize coding errors.



## 2200 Pallet

Designed to maximize your uptime with a simple user-friendly interface and several key features that reduce line stoppages, while guaranteeing operator safety with an automatic stop function.



## 2200 Series

The 2200 Series features distinctive technologies that will help you to achieve a low cost of ownership through maximum production uptime, high performance and minimum downtime.

## Case, pack and pallet solutions to increase your line efficiency

### Higher operational effectiveness

#### Simple to use

Thanks to its intuitive design, labeling has never been easier

#### Simple to interact with

Thanks to its optional large 10.1" touch screen, daily operations are easy and straightforward with the 2200 Series

#### Increased operational efficiency

Thanks to its longer media lengths and simple media path



### Unmatched reliability

#### Retail compliance

Compliant ANSI grade A/B codes even at the highest application speed

#### Minimum maintenance requirements

Simple routine maintenance regimes with no tools required

#### Investment protection

Wide range of applicators suitable for every application



### High performance printing

#### High application rate

Over 150 packs per minute regardless of the data complexity or content

#### Eliminate downtime

Thanks to its auto-change/tandem functionality

#### Consistent label management

Thanks to its consistent label application and automated label tension



# eTouch-S® intelligent labeling system



The cutting-edge eTouch-S applicator offers the ability to fully comply with safety and GS1 standards, without the need to regulate production throughput or for disruptive and expensive changes to existing production methods and/or pack control.

### Ensuring the highest safety standard

Markem-Imaje proprietary design and several patented technologies bring disruptive innovations to electronically driven applicators providing full compliance to EN 415-10.

No operational risk and no guarding required, even at extreme speeds.



### Artificial intelligence for more output

Highly accurate coding on variable pack size without unnecessary force or throughput reduction with the unique **SoftTouch technology**.

Fully automate labeling operations on variable speed production lines with the optional **Advanced Trigger Sensor** with no operational intervention required.



### Lower environmental impact

Easy to install and to use, the eTouch-S is an airless solution reducing costs and environmental impact.

Advanced **EcoFlow** pad reduces air consumption on blow application mode by more than 95%\*.

Its rugged design and longer printhead life ensure low maintenance requirements, even for the most demanding environments.



# Unique forward-thinking technology



## Artificial Intelligence is here

The innovative eTouch-S® applicator is built with artificial intelligence to ensure that labels are applied to your exacting standards on every pack, at the highest production speeds, and in the safest manner possible.

		eTouch-S 25		eTouch-S 45		eTouch-S 80	
Application method	Product type	Flat or uneven corrugated and shrink-wrapped cases and trays					
	Label position	Application of a single label on top or side					
	Product motion	Moving or stationery					
	Application distance	250 mm		450 mm		800 mm	
	Application method	Touch	Blow	Touch	Blow	Touch	Blow
	Product contact	Yes	No	Yes	No	Yes	No
Application rate (pack per minute)**	100 x 20 mm label size 25mm apply	155	140	150	140	145	135
	100 x 20 mm label size full apply	70	65	45	40	25	20
	150 x 100 mm label size 25 mm apply	90	85	85	80	85	80
	150 x 100 mm label size full apply	50	50	35	35	20	20
	150 x 100 mm label size full apply (Overdrive mode)	60	60	50	45	35	35
Label size	Label maximum size (mm)	178 x 225		178 x 225		178 x 225	
	Label minimum size (mm)	40 x 20		40 x 20		40 x 20	
Operational characteristics	Average air consumption (Litres/cycle)**	Airless	0.05	Airless	0.05	Airless	0.05
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing					
	Compliance	EN415-10					
	Options	Blow module, Advanced Trigger Sensor and online scanner					

\* Laboratory test shows consumption from 1.6L cycle to 0.05L, in typical application using 100 x 100 mm labels.

\*\* Indication of average application rate may increase or decrease depending upon the final calibration.



Blow



High-efficiency labeling

Designed for high-performance production lines, the Blow applicator is ideal for non-contact applications providing excellent application on light, fragile, flat, or uneven surfaces while protecting the product.

Thanks to its robust design, it is also perfectly suited for wide distance application up to 100 mm.

		Blow
Application method	Product type	Flat or uneven corrugated and shrink-wrapped cases and trays
	Label position	Application of a single label on the top or side
	Product motion	Moving or stationery
	Application distance	50 to 100 mm
	Application method	Blow
	Product contact	No
Application rate (pack per minute)*	110 x 100 mm label size	105
Label size	Label maximum size (mm)	110 x 100
	Label minimum size (mm)	40 x 40
Operational characteristics	Average air consumption (Litres/cycle)*	1.00
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing
	Compliance	EN415-10

Typical applications

The Blow applicator can be used in various industries such as Food, Beverage, Wood, Automotive, Tobacco and Telecommunications.

Suitable for small-medium applications.



\* Indication of average application rate may increase or decrease depending upon the final calibration.

Flex SE



Flexible GS1-compliant labeling

The Flex SE offers versatile GS1-compliant labeling on front or side of products, from shrink-wrapped to corrugate substrates. It adapts to changes in product type or production speed with minimal or no operator intervention required. It also facilitates close pack spacing on the conveyor belt with gaps down to less than 250 mm at the maximum application rate in front application.

		Flex SE - S	Flex SE - M	Flex SE - L
Application method	Product type	Flat corrugated and shrink-wrapped cases and trays		
	Label position	Application of a one or two labels on the front and/or side		
	Product motion	Moving		
	Application distance (arm length)	115 mm	180 mm	225 mm
	Application method	Wipe/tamp		
	Product contact	Yes		
Application rate (pack per minute)*	40 x 40 mm label size (front apply)	90	85	65
	40 x 40 mm label size (side apply)	125	105	90
	150 x 120 mm label size (front apply)	70	60	50
	150 x 120 mm label size (side apply)	75	65	55
Label size	Label maximum size (mm)	150 x 120		
	Label minimum size (mm)	40 x 40		
Operational characteristics	Average air consumption (Litres/cycle)*	1.60		
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing		
	Compliance	EN415-10		

Typical applications

Suitable for all applications — The Flex SE applicator can be installed from the side or above, using one of three arm lengths for maximum speed or the longest application reach.



\* Indication of average application rate may increase or decrease depending upon the final calibration.

# Enhanced Wipe



## Dual labeling system

The Enhanced Wipe applicator precisely applies a label on one or two sides of one pack (front and side), or around a corner. It can be easily configured to apply labels in more than one location on one pack without the need of turning it around.

This applicator can be mounted left or right and from above, in line with the conveyor to meet all your needs.

		Enhanced Wipe	Enhanced Wipe - L
Application method	Product type	Flat corrugated cases	
	Label position	Application of a one or two labels on the front and/or side, or around a corner	
	Product motion	Moving	
	Application distance	50 to 220 mm	50 to 380 mm
	Application method	Wipe	
	Product contact	Yes	
Application rate (pack per minute)*	Front apply	40	
	Side apply	50	
Label size	Label maximum size (mm)	175 x 155	
	Label minimum size (mm)	40 x 23	
Operational characteristics	Average air consumption (Litres/cycle)*	1.00	
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing	
	Compliance	EN415-10	

## Typical applications

Great for lower speed applications in various industries such as Food, Beverage, Dairy and Wood.



\* Indication of average application rate may increase or decrease depending upon the final calibration.

# Corner Wrap



## High-quality corner label application

The Corner Wrap applicator is designed to apply a single label on equally adjacent faces of a moving case, providing a large print area for duplicated data, additional product or shipping data. This applicator enables more label data on a single larger label such as language variants or the same data visible from two sides of the box.

		Corner Wrap	
Application method	Product type	Flat corrugated cases	
	Label position	Application of a one continuous label on the front and side	
	Product motion	Moving	
	Application distance	Depends on label size and placement	
	Application method	Wipe	
	Product contact	Yes	
Application rate (pack per minute)*	Side/rear apply	30	
Label size	Label maximum size (mm)	115 x 400	
	Label minimum size (mm)	55 x 200	
Operational characteristics	Average air consumption (Litres/cycle)*	5.00	
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing	
	Compliance	EN415-10	

## Typical applications

Suitable for product with a minimum weight of 3 kg.

The corner wrap applicator is perfectly suited to be used in challenging applications, such as in the Food, Frozen and Pharmaceutical industries.



\* Indication of average application rate may increase or decrease depending upon the final calibration.



# Wipe 700



### Fast non-stop pallet labeling

Designed for fast-paced lines, the Wipe 700 applicator applies a single A5 or A6 label to one or two adjacent sides without stopping the pallet.

Safe, this solution does not require additional guarding or protection and is perfectly suited for wide distance application up to 700 mm.

Wipe 700		
Application method	Product type	Corrugated and shrink-wrapped pallets
	Label position	Side and rear to conform to the GS1 regulations
	Product motion	Moving
	Application distance	100 to 700 mm
	Application method	Wipe
	Product contact	Yes
Application rate*	DIN A6 (148 x 210 mm) per hour	250
	DIN A5 (148 x 105 mm) per hour	250
Label size	Label maximum size (mm)	148 x 210
	Label minimum size (mm)	148 x 105
Operational characteristics	Average air consumption (Litres/cycle)*	2.00
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing
	Compliance	EN415-10
	Options	Applicator mounted scanner with no-read or data validation configurations

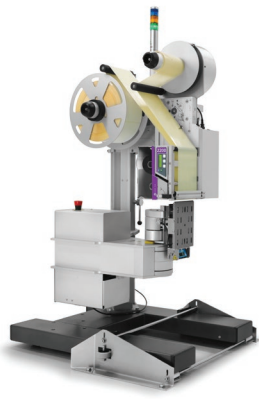
### Typical applications

Ideal for applications where full compliance to GS1 logistics label standards are required such as in the Food and Beverage industries.



\* Indication of average application rate may increase or decrease depending upon the final calibration.

# Pallet



### High-performance pallet labeling

The best solution to fully meet the GS1 standards for pallet labeling to achieve seamless end-to-end supply chain traceability.

The fast and reliable Pallet applicator accurately applies a label on one or two sides, with only one pallet stop. Its integrated scanner ensures that 100% of pallets leave the site with readable barcodes.

Pallet		
Application method	Product type	Corrugated and shrink-wrapped pallets
	Label position	Side and rear to conform to the GS1 regulations
	Product motion	Stationery
	Application distance	300 to 480 mm
	Application method	Tamp
	Product contact	Yes
Application rate*	DIN A6 (148 x 210 mm) per hour	180
	DIN A5 (148 x 105 mm) per hour	180
Label size	Label maximum size (mm)	148 x 210
	Label minimum size (mm)	105 x 105
Operational characteristics	Average air consumption (Litres/cycle)*	3.80
	Operating range	Temperature: 0-45° Celsius / Humidity: 20 to 85% non-condensing
	Compliance	EN415-10
	Options	Applicator mounted scanner with reprint, no-read or data validation configurations

### Typical applications

Thanks to its robust design, the Pallet applicator is perfectly suited for durable 300 dpi print quality in harsh environments and for heavy usage.



\* Indication of average application rate may increase or decrease depending upon the final calibration.

# Applicator solutions guide

	eTouch-S	Blow	Flex SE	Enhanced Wipe
Printer compatibility	2200 Series	2200 Series	2200 Series	2200 Series
Product type	Corrugated and shrink-wrapped cases and trays	Corrugated and shrink-wrapped cases and trays	Corrugated and shrink-wrapped cases and trays	Corrugated cases
Label position	Top or side	Top or side	Front, side or dual	Front, side, dual or over a corner
Product motion	Moving or stationary	Moving or stationary	Moving	Moving
Application method	Touch or blow	Blow	Wipe and tamp	Wipe
Product contact	Yes (Touch) - No (Blow)	No	Yes	Yes
Application rate* (Labels per minute)	Over 150	Over 100	Over 90	Up to 60
Label maximum size (mm)	178 x 225	110 x 100	150 x 120	175 x 155
Label minimum size (mm)	40 x 20	40 x 40	40 x 40	40 x 23
Print technology	Thermal transfer or direct thermal, no change required	Thermal transfer or direct thermal, no change required	Thermal transfer or direct thermal, no change required	Thermal transfer or direct thermal, no change required
Printhead compatibility	108 mm (4") 162 mm (6")	108 mm (4")	108 mm (4")	108 mm (4") 162 mm (6")
Resolution	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)
Compliance	EN415-10	EN415-10	EN415-10	EN415-10
Safety guarding required**	No	No	No	No

	Corner Wrap	Wipe 700	Pallet
Printer compatibility	2200 Series	2200 Pallet	2200 Pallet
Product type	Corrugated cases	Corrugated and shrink-wrapped pallets	Corrugated and shrink-wrapped pallets
Label position	Over a corner	Side and rear	Side and rear
Product motion	Moving	Moving	Stationary
Application method	Wipe	Wipe	Tamp
Product contact	Yes	Yes	Yes
Application rate* (Labels per minute)	Up to 30	4	3
Label maximum size (mm)	115 x 400	148 x 210	148 x 210
Label minimum size (mm)	55 x 200	148 x 105	105 x 105
Print technology	Thermal transfer or direct thermal, no change required	Thermal transfer or direct thermal, no change required	Thermal transfer or direct thermal, no change required
Printhead compatibility	108 mm (4")	162 mm (6")	162 mm (6")
Resolution	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)	8 dots/mm (203 dpi) 12 dots/mm (300 dpi)
Compliance	EN415-10	EN415-10	EN415-10
Safety guarding required**	No	No	No

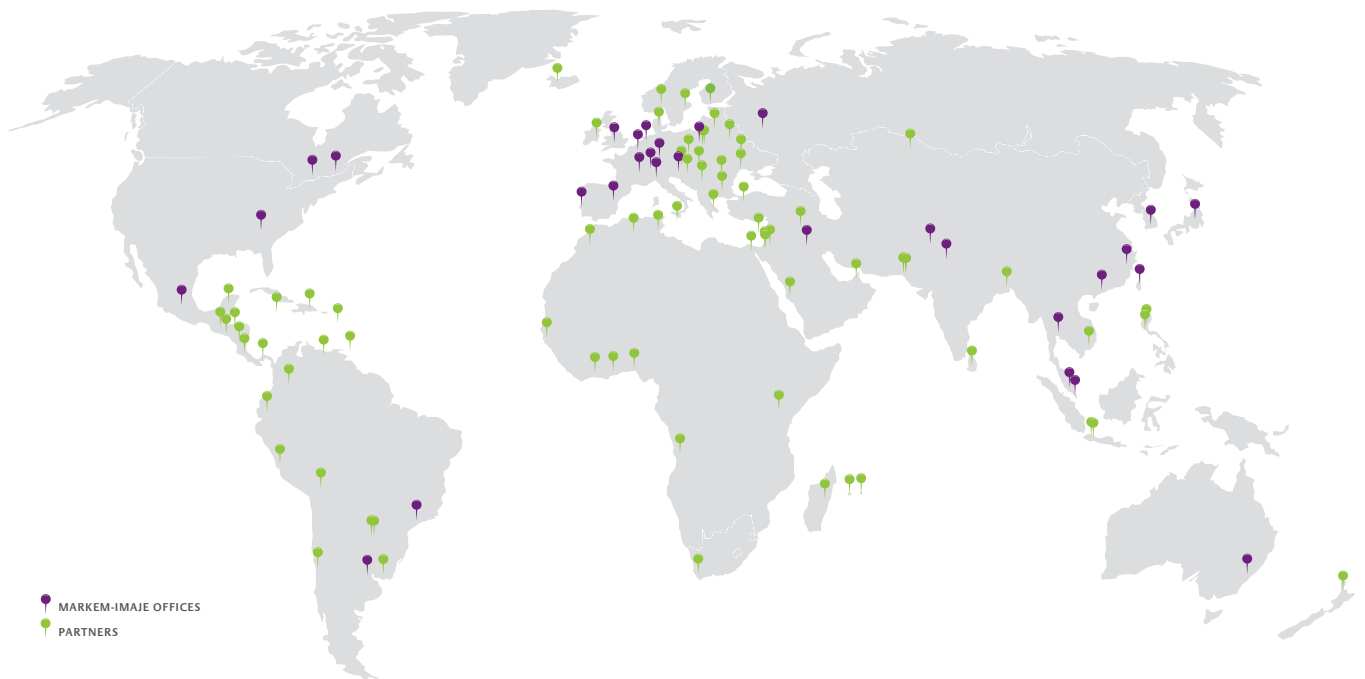
\* Dependent upon final calibration  
\*\* We recommend that you always refer to the latest safety manual available on our website.



# About Markem-Imaje

Markem-Imaje, a wholly owned subsidiary of Dover Corporation, connects products and protects brands through intelligent identification, traceability and consumer engagement solutions. We offer the industry's most comprehensive range of marking and coding systems seamlessly integrated with trusted software, services and consumables. Over 50,000 customers worldwide partner with us to help them unlock the power of information in codes.

With decades of proven expertise provided through the most extensive global network, we empower our customers to optimize supply chain efficiencies, achieve sustainability and compliance objectives, keep products safe and engage their consumers. This is intelligence, beyond the mark.



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