

# Perfect Dot<sup>®</sup>



I.M.C. GmbH  
Marketing für die graphische Industrie



# Meiji Group

Meiji Rubber & Chemical Co., Ltd. (MRC) established in 1900, has offered numerous innovations as the pioneer of rubber and plastic products following the specific needs of each decade.

Utilizing every aspect of accumulated technology – developed through persistent improvement research – Meiji products and services are well reputed in the global markets.

Following these ideas, it is Meiji's sincere desire to achieve further development and growth by pursuing further innovative changes in the various industries through realization of liberal and flexible ideas. This all in accordance to the President's leading corporate identity motto:

*"For the satisfaction of our clients and employees, we contribute to our society and world."*

Already since 1961, MRC has been involved in the production of high quality printing blankets for the offset printing industry. Due to its constant success in the Japanese printing industry, MRC decided at an early stage to become a global player in the industry.

In a next consequent step, MRC started already in 1970 its cooperation with IMC GmbH, in order to cover the European printing market. By further growth and success, MRC acquired the shares of IMC in two major investments, which was completed in year 2009.

Today IMC GmbH is part of Meiji Rubber Group, an international, global acting group of companies serving the leading printing press manufacturers, converters and printing houses worldwide on high level of innovation with top quality printing blankets.

Meiji factory



# About the company

IMC GmbH – Marketing for the graphic industry – established 1970 in Frankfurt/Main, initially has had a different business concept in mind. But the time was not ready for such a general and global focus.

By a consequent change and adaption to meet new business demands, the company then was successfully active for many years as an international graphic arts supply house, offering a broad range of various consumables. In those years the company achieved an excellent reputation in the distribution of high quality printing blankets.

Since the acquisition of a majority share of IMC GmbH in 1994 by Meiji Rubber & Chemical Co., Ltd. (MRC), Tokyo/Japan the activities have been mainly concentrated on the marketing, service and distribution of our top brands Perfect Dot® and Ultra Dot®.

Due to its continuous success story, MRC reacted consequently by establishing in 2004 a European plant for the production and development of IMC's high quality printing blankets.

According to MRC's international growth strategy, the acquisition of the remaining shares of IMC GmbH has taken place in spring 2009. Since then, the company has become an important member of Meiji Rubber Group, while serving the printing markets in Europe and many other regions worldwide, by offering a broad, well-balanced range of modern, high quality blankets for almost all kind of printing applications.

More information you will find on [www.perfect-dot.de](http://www.perfect-dot.de)



# Perfect Dot® MX

PERFECT DOT® MX was launched to the industry at Drupa 1990, and has been constantly modified over the years according to the changing requirements of high quality sheetfed printing.

Due to its good ink transfer properties, excellent dot sharpness and a controlled dot gain in the mid-tones PERFECT DOT® MX succeeded at printing press manufactures and leading printing plants all around the world.

The base for these properties is the selection of specially produced fabrics and a compressible layer with closed micro-structure.

Experts appreciate these quality characteristics.

Users’ advantages

- Optimal ink transfer
- Controlled dot gain
- High quality solids
- Low sinkage factor
- Premium quality

Range of application

- In conventional high quality sheetfed:  
for paper and for premium carton

Surface structure  
Perfect Dot®MX



Product data Perfect Dot® MX

Parameter	Test method	Measuring unit	typ. Value
Surface roughness		DIN 4768	
■ Ra	mechanical measuring system	µm	0.6
■ Rz	mechanical measuring system	µm	4.0
Hardness		DIN 53505	
■ Top layer		IRHD-micro	65
■ Total		Shore-A	80
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	>4000
Stretch		ISO 12636-4.2	
■ at 500 N/50 mm		%	0.80
■ at 1000 N/50 mm		%	1.40
Compressibility		ISO 12636-4.5	
■ 1 <sup>st</sup> cycle		%	7.7
■ 5 <sup>th</sup> cycle		%	8.1
Printing pressure			
■ at 0.10 mm impression		N/cm²	77
■ at 0.20 mm impression		N/cm²	142

Colour of top layer: green

Surface: finest grinding



# Perfect Dot® MR

The increased speed of the new generation of sheet-fed and web offset presses demands a new quality of printing blanket with optimum compressibility and good damping characteristics.

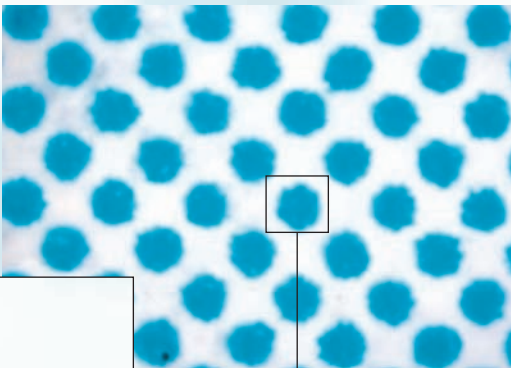
Aiming for the above mentioned goals PERFECT DOT® MR (Max. Rotation) was developed. In streak test diagrams a positive effect can be proved.

In addition PERFECT DOT® MR has been successfully applied to print on corrugated carton. Under these conditions PERFECT DOT® MR adapts superbly to the impression forces in the nip. Therefore it is possible to print on G- and F-flute while the favourable ink transfer allows a good printing result, regardless of the differences in the structure of the carton. PERFECT DOT® MR is therefore highly focussed on the special demands of such kind of stocks.

For the general application PERFECT DOT® MR is suitable for printing on paper and carton. Due to the good damping characteristics very good print results can be achieved on older web offset presses. It also shows a reduction in cylinder gap marks in this application.

Users' advantages

- Optimal sheet rotation
- Minimized cylinder gap marks
- Controlled dot gain
- Excellent solids
- Premium quality



Dot reproduction  
Perfect Dot® 4-MR

Product data Perfect Dot® MR

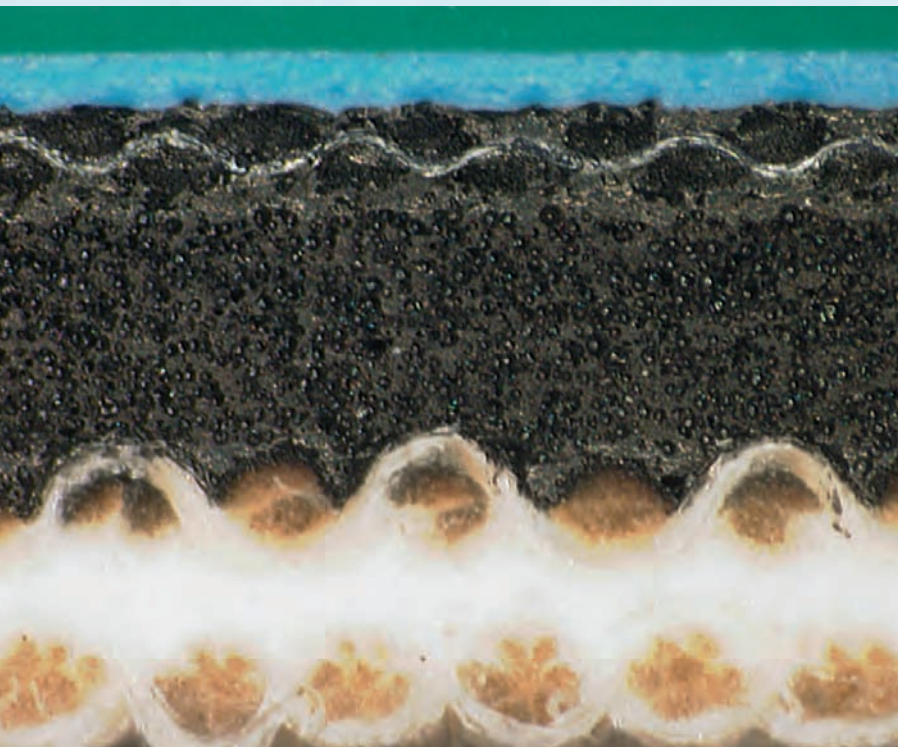
Parameter	Test method	Measuring unit	typ. Value	
			4-MR	3-MR
Surface roughness	DIN 4768			
■ Ra	mechanical measuring system	µm	0.6	0.6
■ Rz	mechanical measuring system	µm	4.5	4.5
Hardness	DIN 53505			
■ Top layer		IRHD-micro	62	62
■ Total		Shore-A	80	80
Thickness	ISO 4593:1993	mm	1.95	1.70
Tensile strength		N/50 mm	>4000	>4000
Stretch	ISO 12636-4.2			
■ at 500 N/50 mm		%	0.80	0.70
■ at 1000 N/50 mm		%	1.50	1.00
Compressibility	ISO 12636-4.5			
■ 1 <sup>st</sup> cycle		%	9.0	8.6
■ 5 <sup>th</sup> cycle		%	9.3	9.3
Printing pressure				
■ at 0.10 mm impression		N/cm²	88	95
■ at 0.20 mm impression		N/cm²	173	170

Colour of top layer: blue

Surface: finest grinding



# Perfect Dot® QR



Cross cut of  
Perfect Dot® QR

PERFECT DOT® QR represents the further development of the well known PERFECT DOT® SR.

The improved quality contains an innovative compressible layer, manufactured utilising our new **Dura-Elastic-Technology**. With this feature the running temperature of the blankets is reduced resulting in enhanced ink transfer and dot reproduction with extended lifetime of the blanket.

The finely ground surface produces an excellent printing image. The barrier layer within the double surface layer prevents the penetration of solvents and other chemicals thus reducing swelling.

### Users' advantages

- True reproduction of the original copy
- Highest machine running speed
- Minimized gauge loss
- Extended lifetime
- Excellent easy clean features
- Superb quick release properties
- Reduced running temperature
- Premium quality

### Range of application

- In conventional sheetfed: for paper and carton
- Dual purpose, changing between conventional and UV ink

## Product data Perfect Dot® QR

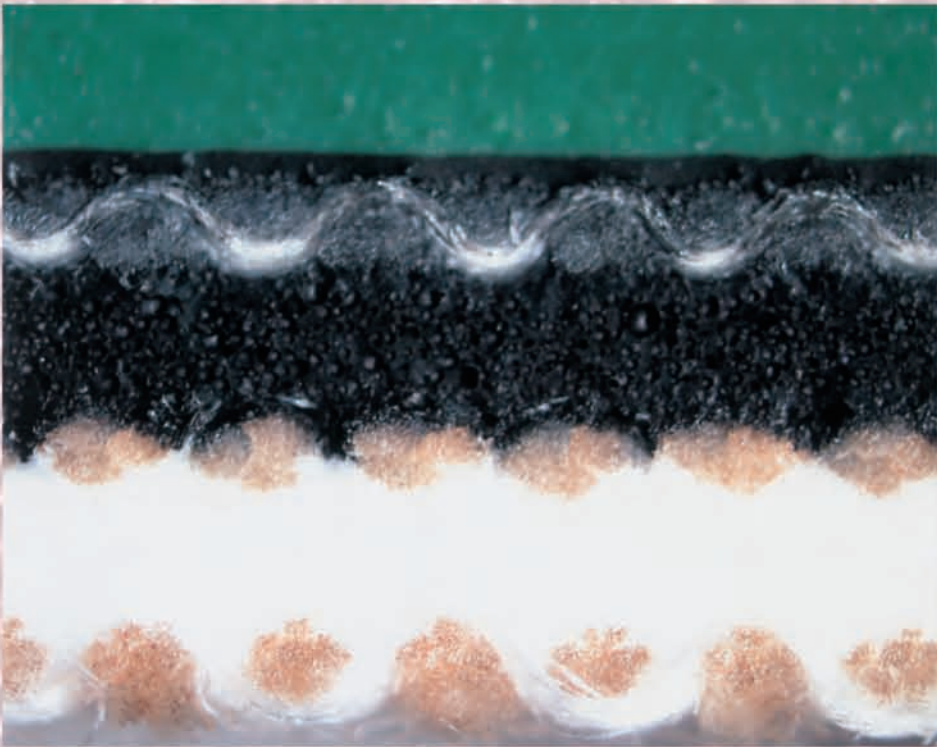
Parameter	Test method	Measuring unit	typ. Value
Surface roughness	DIN 4768		
■ Ra	mechanical measuring system	µm	0.9
■ Rz	mechanical measuring system	µm	5.2
Hardness	DIN 53505		
■ Top layer		IRHD-micro	66
■ Total		Shore-A	81
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	>4000
Stretch	ISO 12636-4.2		
■ at 500 N/50 mm		%	0.76
■ at 1000 N/50 mm		%	1.07
Compressibility	ISO 12636-4.5		
■ 1 <sup>st</sup> cycle		%	7.0
■ 5 <sup>th</sup> cycle		%	7.6
Printing pressure			
■ at 0.10 mm impression		N/cm²	100
■ at 0.20 mm impression		N/cm²	180

Colour of top layer: green

Surface: finest grinding



# Perfect Dot® DL



Cross cut of Perfect Dot® DL

In response to aggressive market competition the request was made to produce a blanket with three fabric layers in a thickness of 1,95 mm.

In order to serve this market segment PERFECT DOT® DL (DreiLagig = 3-ply) was developed.

This blanket is now regarded as the “Allround” version of the Perfect Dot® qualities.

Apart from a fine ground surface and a micro-porous layer with closed cells this blanket uses a low stretch carcass with three fabric layers to ensure stable cylinder dressing.

PERFECT DOT® DL achieves optimal printing results across a wide range of materials and fulfills the actual market requirements.

In particular for the food packaging industry PERFECT DOT® DL is the right choice, as it has achieved since 2008 constantly the ISEGA certificate approval.

### Users’ advantages

- Good dot sharpness
- Full ink coverage
- Good resistance to solvents
- Reduced carton edge marks
- “Allround” capabilities
- ISEGA certified

### Range of application

- In conventional sheetfed: for paper and carton

## Product data Perfect Dot® DL

Parameter	Test method	Measuring unit	typ. Value
Surface roughness	DIN 4768		
■ Ra	mechanical measuring system	µm	0.7
■ Rz	mechanical measuring system	µm	5.0
Hardness	DIN 53505		
■ Top layer		IRHD-micro	66
■ Total		Shore-A	80
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	>4000
Stretch	ISO 12636-4.2		
■ at 500 N/50 mm		%	0.60
■ at 1000 N/50 mm		%	0.95
Compressibility	ISO 12636-4.5		
■ 1 <sup>st</sup> cycle		%	7.5
■ 5 <sup>th</sup> cycle		%	7.8
Printing pressure			
■ at 0.10 mm impression		N/cm <sup>2</sup>	90
■ at 0.20 mm impression		N/cm <sup>2</sup>	185

Colour of top layer: green

Surface: finest grinding



# Perfect Dot® UV

Packaging / Paper / Carton

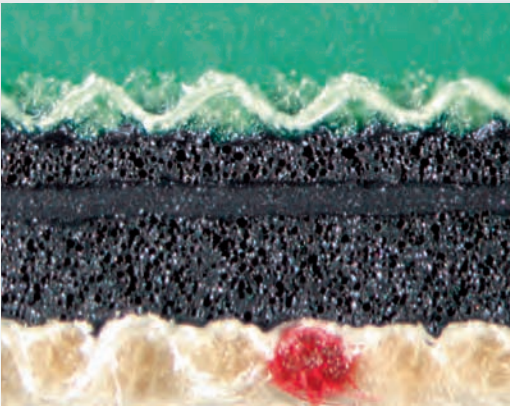
The approved PERFECT DOT® UV is a dedicated EPDM printing blanket, which is offering beside excellent solids and good halftones, a superb ink transfer when using modern pure UV-inks.

PERFECT DOT® UV utilises a special surface layer with outstanding swell and solvent resistance properties. It is easy to clean and provides an excellent lifetime on the press.

Low gauge loss behaviour during the whole lifetime is another advantage of the PERFECT DOT® UV. An outstanding resistance against smashes and edge marks results from the especially thick compressible layers.

### Users' advantages

- Excellent solids and good dot sharpness
- Very good ink transfer
- High swell and solvent resistance
- Suitable for LE-UV/LED-UV
- Outstanding resistance to smash and edge marks
- Low gauge loss
- Extended lifetime
- Easy to clean
- Wide range of absorbent substrates, e.g. carton, paper
- ISEGA certified



Cross cut of Perfect Dot® UV

# Perfect Dot® UV-F

Foil / Plastic / CD / Metal

PERFECT DOT® UV-F is particularly designed for UV-application on non-absorbent substrates, while the printer is asking for the best dot sharpness.

It contains a special surface layer for printing on rigid and hard materials, which supplies excellent dot sharpness and good solids at the same time and which is optimally qualified for printing on foils, plastic and metal.

PERFECT DOT® UV and UV-F are also suitable for the new LE-UV and LED-UV printing process.

### Users' advantages

- Excellent dot sharpness and good solids
- Very good ink transfer
- High swell and solvent resistance
- Suitable for LE-UV/LED-UV
- Outstanding resistance to smash and edge marks
- Low gauge loss
- Extended lifetime
- Easy to clean
- Wide range of non-absorbent substrates, e.g. foil, plastic, metal



Cross cut of Perfect Dot® UV-F

## Product data Perfect Dot® UV and UV-F

Parameter	Test method	Measuring unit	UV	UV-F
Surface roughness	DIN 4768			
■ Ra	mechanical measuring system	µm	1.0	1.3
■ Rz	mechanical measuring system	µm	4.3	5.6
Hardness	DIN 53505			
■ Top layer		IRHD-micro	56	60
■ Total		Shore-A	79	80
Thickness	ISO 4593:1993	mm	1.95	1.95
Tensile strength		N/50 mm	>3100	>4000
Stretch	ISO 12636-4.2			
■ at 500 N/50 mm		%	1.00	0.67
■ at 1000 N/50 mm		%	1.38	1.14
Compressibility	ISO 12636-4.5			
■ 1 <sup>st</sup> cycle		%	5.4	7.0
■ 5 <sup>th</sup> cycle		%	5.9	7.2
Printing pressure				
■ at 0.10 mm impression		N/cm <sup>2</sup>	120	100
■ at 0.20 mm impression		N/cm <sup>2</sup>	224	237

Colour of top layer: green

Surface: finest grinding



# Perfect Dot® TP

PERFECT DOT® TP – the **most** innovative blanket available today for offset presses – TP comprises of a 1.95 mm blanket, with two fabric layers and **two** compressible layers.

PERFECT DOT® TP's unique construction enables the introduction of two compressible layers to produce optimum performance for the printing of good solids and the reduction of pressure lines which often occur with solids. With TP's new design it is now possible to utilise **Dual-Air-Technology** without compromising either feature.

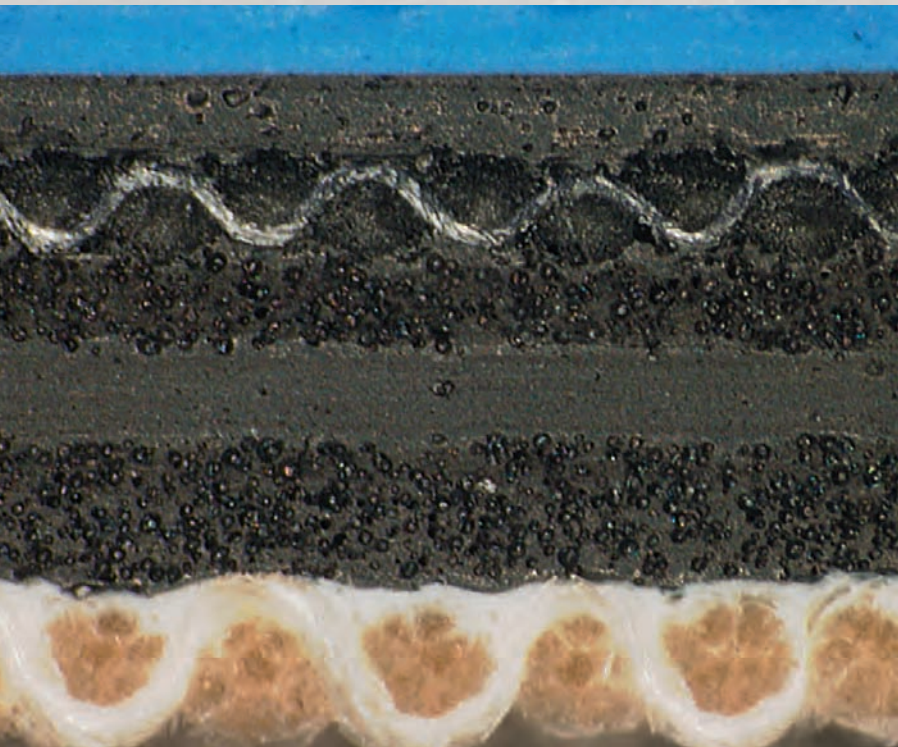
Extensive research led to the development of a blanket that employs two compressible layers and two fabric layers into one carcass.

The first compressible layer produces exceptional printing quality with solids and halftones while the second compressible layer reduces visible pressure lines and provides exceptional smash recovery leading to extended life time of the blanket.

PERFECT DOT® TP is suitable for printing on both paper (especially recycled paper) and carton up to 250g.

Users' advantages

- Good solids and halftones and high reduction of pressure marks (streaks)
- Excellent smash resistance and recovery
- Low gauge loss on cylinder
- Extended lifetime



Cross cut of Perfect Dot® TP

## Product data Perfect Dot® TP

Parameter	Test method	Measuring unit	typ. Value
Surface roughness		DIN 4768	
■ Ra	mechanical measuring system	µm	1.1
■ Rz	mechanical measuring system	µm	5.4
Hardness		DIN 53505	
■ Top layer		IRHD-micro	55
■ Total		Shore-A	78
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	>3000
Stretch		ISO 12636-4.2	
■ at 500 N/50 mm		%	1.20
■ at 1000 N/50 mm		%	1.60
Compressibility		ISO 12636-4.5	
■ 1 <sup>st</sup> cycle		%	7.8
■ 5 <sup>th</sup> cycle		%	8.5
Printing pressure			
■ at 0.10 mm impression		N/cm²	95
■ at 0.20 mm impression		N/cm²	152

Colour of top layer: blue

Surface: finest grinding



# Ultra Dot® ECO

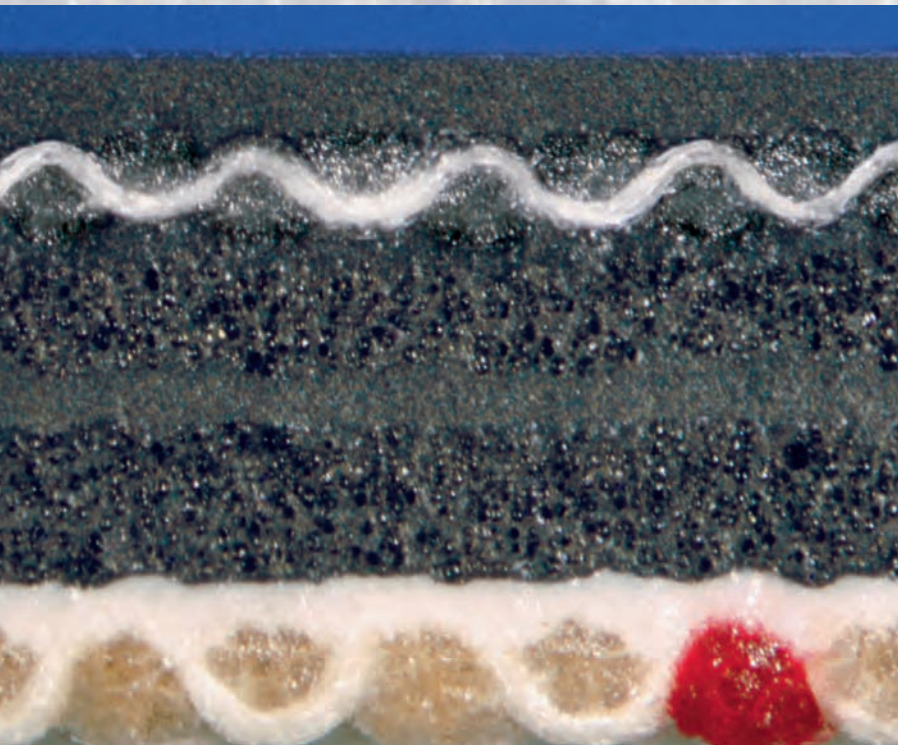
With the introduction of the new ULTRA DOT® ECO we have succeeded in making the innovative and successful concept of **Dual-Air-Technology** – i.e. two fabric layers and the characteristic two compressible layers – even more attractive.

ULTRA DOT® ECO obtains good printing results on coated and uncoated paper, carton, various recycled stocks and on metal decorating. The ground breaking design involving two compressible layers offers the printer good solids whilst simultaneously reducing streaks. Durability is also greatly extended. Low gauge loss, as a result of the special blanket design is an useful benefit for many customers.

PERFECT DOT® ECO provides users in the sheetfed printing as well as in metal decorating with a good quality printing blanket at an excellent price-performance ratio. Consequently it is the ideal, competitively priced introduction for new customers to our range of high quality printing blankets.

Users' advantages

- Good solids and halftones *and* high reduction of pressure marks (streaks)
- Excellent smash resistance
- Minimized gauge loss
- Extended lifetime
- Value for money



Cross cut of Ultra Dot® ECO

Product data Ultra Dot® ECO

Parameter	Test method	Measuring unit	Value
Surface roughness		DIN 4768	
■ Ra	mechanical measuring system	µm	1.6
■ Rz	mechanical measuring system	µm	6.8
Hardness		DIN 53505	
■ Top layer		IRHD-micro	63
■ Total		Shore-A	81
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	> 3000
Stretch		ISO 12636-4.2	
■ at 500 N/50 mm		%	1.30
■ at 1000 N/50 mm		%	1.77
Compressibility		ISO 12636-4.5	
■ 1 <sup>st</sup> cycle		%	7.0
■ 5 <sup>th</sup> cycle		%	7.5
Printing pressure			
■ at 0.10 mm impression		N/cm²	92
■ at 0.20 mm impression		N/cm²	157

Colour of top layer: blue

Surface: fine grinding



# Perfect Dot® STRIP

PERFECT DOT® STRIP is a modern varnishing and spot varnishing blanket, which delivers excellent results using aqueous or UV (short runs) coatings. It offers the printer a very good varnish transfer with even thicknesses.

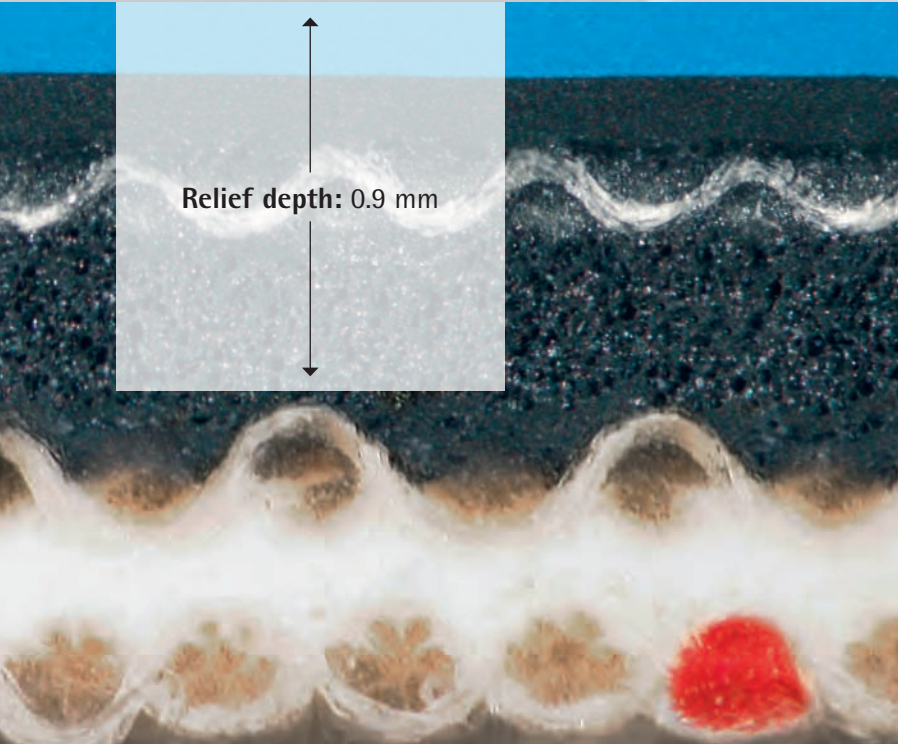
Due to its special top surface layer, it delivers as well an optimal varnish gloss on various substrates with precise sealed areas.

PERFECT DOT® STRIP has a perfect stripping relief, which surface is easy and quick to be peeled off for a fast and trouble-free preparation. The stencil depth of 0.9 mm reduces varnish build-up in the relief area for a cleaner profile and a longer running period.

It provides the user with a very good dimensional stability for reuse on repeating jobs and can be perfectly cut by using both, plotter or scalpel.

User's advantages

- Excellent varnish transfer
- Even thicknesses
- Precise sealed areas
- Optimal varnish gloss on various substrates
- Easy peel-off
- Reduced varnish build-up
- Long running periods



Cross cut of Perfect Dot® STRIP

Product data Perfect Dot® STRIP

Parameter	Test method	Measuring unit	Value
Surface roughness		DIN 4768	
■ Ra	mechanical measuring system	µm	0.9
■ Rz	mechanical measuring system	µm	4.0
Hardness		DIN 53505	
■ Top layer		IRHD-micro	58
■ Total		Shore-A	78
Thickness	ISO 4593:1993	mm	1.95
Tensile strength		N/50 mm	> 4000
Stretch		ISO 12636-4.2	
■ at 500 N/50 mm		%	0.66
■ at 1000 N/50 mm		%	1.03
Compressibility		ISO 12636-4.5	
■ 1 <sup>st</sup> cycle		%	6.6
■ 5 <sup>th</sup> cycle		%	7.1
Printing pressure			
■ at 0.10 mm impression		N/cm²	105
■ at 0.20 mm impression		N/cm²	175

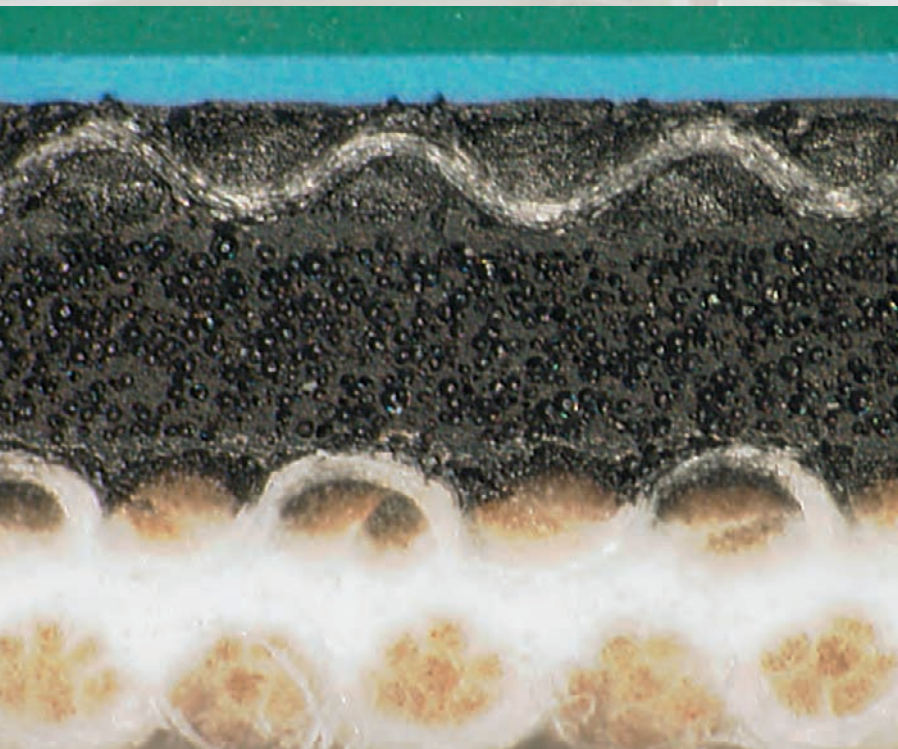
Colour of top layer: blue

Surface: finest grinding

Relief depth: 0.9 mm



# Perfect Dot® DURO



Cross cut of Perfect Dot® DURO

PERFECT DOT® DURO – the Premium quality for heatset offset presses – a 1.70 mm gauge blanket incorporates the new **Dura-Elastic-Technology**.

PERFECT DOT® DURO is designed to print on coated and LWC paper using high speed presses from 16- to 64- pages. The blanket in a thickness of 1.70 mm with three fabric layers contains a compressible layer manufactured using the **Dura-Elastic-Technology**, where the heat development in the press will be reduced.

The innovative design offers a totally new performance of the printed web and leads to a longer lifetime on the press.

### Users' advantages

- Good solids
- Excellent dot sharpness
- High running speed
- Reduced running temperature
- Good quick release properties
- Extended lifetime
- Premium quality

### Product data Perfect Dot® DURO

Parameter	Test method	Measuring unit	Value
Surface roughness		DIN 4768	
■ Ra	mechanical measuring system	µm	1.6
■ Rz	mechanical measuring system	µm	7.3
Hardness		DIN 53505	
■ Top layer		IRHD-micro	62
■ Total		Shore-A	83
Thickness	ISO 4593:1993	mm	1.70
Tensile strength		N/50 mm	> 4000
Stretch		ISO 12636-4.2	
■ at 500 N/50 mm		%	0.60
■ at 1000 N/50 mm		%	0.95
Compressibility		ISO 12636-4.5	
■ 1 <sup>st</sup> cycle		%	6.8
■ 5 <sup>th</sup> cycle		%	7.1
Printing pressure			
■ at 0.10 mm impression		N/cm <sup>2</sup>	121
■ at 0.20 mm impression		N/cm <sup>2</sup>	223

Colour of top layer: green

Surface: finest grinding



# Barring

In 1998 we commenced barring blankets which we are now supplying to more than 60 countries in the western world. For this purpose we use nearly 100 different bar profiles.

In a technical respect we continue to apply the traditional method of glueing by applying two part adhesives, as our test results have established that this guarantees the strongest adhesion between blanket and bar.

Regarding any further technical questions we are at your disposal at any time.



Converting department

Application range for Perfect Dot® printing blankets	Sheet fed											Heatset
	1,95 mm											1,7 mm
	MX	MR	QR	DL **	UV-LE**	UV-F	UV**	TP	ECO	STRIP	3-MR	DURO
Premium	■	■	■									■
High				■	■	■	■				■	
Medium								■		■		
Standard								■	■			
Packaging	■	■		■				■				
Dual Purpose (conv./UV)			■									
UV (Carton/Paper)							■					
UV (Plastics/Foil/Metal)					■	■						
LE-UV/LED-UV					■	■	■					
Metal Decoration						■			■			
Stripping/Spot Lack										■		
Money/Security Printing											■	
Quick Release												
Waterless			■									
Continuous Form												■
Label Printing						■						■
Heatset			■									■

\*\* ISEGA certified