

# Kemafoil® KTR TRANSFER RELEASE FILM







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THE VALUE OF INNOVATION

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## Coveme Today

Bologna, **Italy** Headquarter Gorizia, **Italy** Production Plant Europe

> Zhangjiagang, **China** Production Plant Asia

### Keyfacts

PRODUCTION PLANTS ITALY AND CHINA

PRODUCTION LINES

**28.500** SQM OF PRODUCTION PLANT

64 COUNTRIES CATERED AROUND THE WORLD

18.000 tons
OF POLYESTER FILM
HANDLED EACH YEAR

12% OF THE TURN OVER TECHNOLOGY AND R&D INVESTMENT

converts polyester film for various industrial RFID antennas, biomedical sensor strips, flexible packaging and textile industry. the development of new products for highly technological industries of rapid growth and continuous evolution. In this context, the strong partnerships with our clients and suppliers successful common growth. Today Coveme has Gorizia, Italy, and the second opened in 2011 in Zhangjiagang, China, around 200km north of Shanghai. They are the result of Coveme's entrepreneurial mindset, sagaciousness and know-how gained through the years. Our concern for the protection of the production technology and relationship with managers are responsible for their business 100%. highly technical support before and after sales. The **reliability** of Coveme, guaranteed by high quality standards and rigorous control, is the promise we keep to our clients.







### **Production**

Coveme has been converting polyester film for over 20 years and has successfully developed sophisticated technologies in the production of high-tech films for various industries.

The value Coveme adds to the film is vital for its clients who, themselves, work with advanced production processes.

In the two production sites, Gorizia, Italy, and Zhangjiagang, China, 9 production lines are installed and set up for the following converting processes: lamination, surface treatment, heat stabilization, coating and slitting.

Thanks to its own slitting department Coveme can provide all materials in customized rolls, sheets and punched formats. Coveme's manufacturing processes are completely focused on high quality for high performance. For us, this means strict and consistent adherence to measurable and verifiable standards to achieve uniformity of output that satisfies specific customer requirements.







Coveme is UNI EN ISO 9001-2008 Certified



# Research & Development

Our Research and Development laboratory has always been one of the most advanced and strong points of the company, where our technological and operative know how is at complete disposal of the clients' needs, with the aim to find for each of them the very best solution possible. Highly motivated teams of young technicians generate and sustain a technical/productive cross fertilization within the company while collaboration between clients and the production department and between the technical department and suppliers permits the exploitation of experience in order to realize innovative products. Our R&D labs continually strive to develop new and up to date solutions for future generations







## Sustainability

### Green production

In its two production sites Coveme works by adopting measures to protect the environment:





Coverne is ISO 14001:2004 certified

- **▶** EMISSION TREATMENT
- ► STORAGE OF CHEMICALS
- ▶ WASTE DISPOSAL
- ▶ PEST CONTROL PROCEDURE
- ▶ OPTIMIZATION OF ENERGY RESOURCES
- ▶ ROHS AND REACH COMPLIANCE





### Carbon footprint

Coveme is currently investing in balancing its Carbon footprint through 3 types of actions:

- IN 2010, 100KW OF SOLAR PANELS HAVE BEEN INSTALLED ON THE ROOF OF COVEME'S HEADQUARTERS IN BOLOGNA.
  - ► IN 2012, 158KW OF PHOTOVOLTAIC MODULES HAVE BEEN INSTALLED ON THE ROOFTOP OF COVEME'S GORIZIA PLANT.

COVEME IS SPONSORING
"THE MILLION TREE
PROJECT": THE PROJECT
AIMS TO PLANT ONE
MILLION TREES IN
INNER MONGOLIA.



# **Transfer Release** division

Look beyond new horizons, then reach them. This has been the philosophy at the heart of Coveme since its foundation in 1965. Our determination to produce the highest performance films is matched only by our dedication to the research and the development of new solutions for new materials.

This is why we are the renowned specialists we are today.

The Kemafoil® KTR product range includes heat stabilized and treated polyester films for both hot and cold peel applications.

There are versions for both CAD lettering and silk-screen printing, off-set or flexo, polyurethane inks, PVC, flock and digital. We are recognized both nationally and internationally for the superior quality of our products and the professional competence with which we meet any requirement.

Coveme - striving to anticipate your needs.



## Kemafoil® KTR product range:

For every type of printing the right type of film

films for the heat transfer of images onto for CAD lettering, digital, silk screen, off-set polyuretane (PU)

Coveme transfer release film guarantees elevated performance during both storage and print: In fact, its resistance to humidity, excellent dimensional stability and transparency problems found with paper supports, so-called "transfer paper".

treated polyester films for both hot and cold peel application, with opaque or glossy finish. Coverne is well-known, both nationally and and the superior quality of its products that are approved by the major producers of garment, eco-leather, and other technical products.

# Key benefits ✓ Long shelf life

- ✓ High dimensional stability



## Kemafoil® KTR product range:

### Matt film for screen print

TRANSFER OF SCREEN PRINTED IMAGES, VELVET EFFECT

### Glossy film for screen print

TRANSFER OF SCREEN PRINTED IMAGES, GLOSSY FINISH.

### Film for flocking

PRIMERED FILM SUITABLE FOR GLUE COATING IN FLOCK PROCESS APPLICATION

### Matt film for co-extrusion

CO-EXTRUSION TO VINYL AND POLYURETHAN FILMS, VELVET EFFECT

### Glossy film for co-extrusion

CO-EXTRUSION TO VINYL AND POLYURETHAN FILMS, LACQUER FINISH

### Matt film for digital print

TRANSFER OF DIGITAL PRINTED IMAGES, VELVET EFFECT



## KTR range comparison chart

	KTR 100	KTR 100 ATSL	KTR 100 ABL TS	KTR 0600 ATSL	KTR 1600 ATSL	KTR 3682 TSL	KTR 1682 TSL H	KTR 3682 TSL H	KTR 1685 TSL H *	KTR 1680 ATSL H
Screen Print				V	V	V	V	V	V	V
Digital						V		V		
Flocking	V	V	V							
Co-extrusion										
Cad lettering										
Solvent based PU				V			V		V	V
Plastisol					V	V		V		
PVC										
Matt finish						V	V	V	V	V
Glossy finish				V	V					
Hot peel							V	V	V	V
Antiblocking			V							
Antistatic		V		V	V					V

<sup>\*</sup> with antislipping treatment for roll-to-roll process

<sup>\*\*</sup> water-based PU

<sup>\*\*\*</sup> extra low residual shrinkage

## KTR range comparison chart

	KTR 0682 TSL H	KTR 3682 TSL HT***	KTR 0600 ABL TS	KTR ABL TS	KTR 6082 ATSL	KTR 1680 ABL TSL H	KTR 9830 ABL TS	KTR 9830 TS	KTR 9835 TS	KTR 9835 ABL TS
Screen Print	V									
Digital										
Flocking										
Co-extrusion			V	V	V	V	V	V	V	V
Cad lettering							V	V	V	V
Solvent based PU	**		V	V		V	V	V		
Plastisol		V								
PVC			V	V	V				V	V
Matt finish	V	V				V	V	V	V	V
Glossy finish				V						
Hot peel	V									
Antiblocking			V	V		V	V			V
Antistatic					V					

## KTR

### Matt film for screenprint

**Kemafoil KTR®** is a special polyester film used for the transfer of screen printed images. Compared to direct screen printing this method is more efficient, flexible and cheaper since its suitable also for smaller productions runs. Furthermore, the print quality and image resolution is higher.

The use of Kemafoil®KTR polyester film has many immediate and economic advantages compared to paper:

• It does not absorb humidity

 It has a very low residual shrinkage and therefore exceptional dimensional stability

 the quality and colour of print can be controlled throughout the entire printing process

 Very easy positioning of the image thanks to the film's transparency

Matt finish (velvet effect)

### Product benefits

**V** See trough

✓ Dimensional stability

✓ Suitable for all range of inks

Velvet effect



Product	Main characteristics	Treatment	Finishing	Thickness (μ)
KTR 3682 TSL	Suitable for plastisol inks. Cold peel-off	Matt release coating on both sides	Opaque	75,100
TR 1682 TSL H	Suitable for solvent based PU inks. Hot peel-off	Matt release coating on both sides	Opaque	75,100
KTR 3682 TSL H	Suitable for plastisol inks. Hot peel-off	Matt release coating on both sides	Opaque	75,100
KTR 1685 TSL H	Suitable for solvent based PU inks. Hot peel-off. Suitable for roll-to-roll printing	Matt release coating on one side, anti-slipping on backside	Opaque	75,100
KTR 1680 ATSL H	Suitable for solvent based PU inks. Hot peel-off	Matt release coating on one side, antistatic on backside	Opaque	75,100
KTR 0682 TSL H	Suitable for water based PU inks inks. Hot peel-off	Matt release coating on both sides	Opaque	75,100
KTR 3682 TSL HT	Suitable for plastisol inks. Extra low residual shrinkage	Matt release coating on both sides	Opaque	75,100

#### Note

Other thicknesses available on request

#### Standard supply specifications

Rolls with core diameter 3" or 6" on request (76 or 152 mm). Customized sheets available



## KTR

### Glossy film for screenprint

**Kemafoil KTR®** is a special polyester film used for the transfer of screen printed images. Compared to direct screen printing this method is more efficient, flexible and cheaper since its suitable also for smaller productions runs. Furthermore, the print quality and image resolution is higher.

The use of Kemafoil®KTR polyester film has many immediate and economic advantages compared to paper:

- It does not absorb humidity
- It has a very low residual shrinkage and therefore exceptional dimensional stability
- the quality and colour of print can be controlled throughout the entire printing process
- Very easy positioning of the image thanks to the film's transparency
- Glossy finish (lacquer effect)

### Product benefits

- **V**See trough
- **V** Dimensional stability
- Suitable for all range of inks
- ✓ Shining effect



Product	Main characteristics	Treatment	Finishing	Thickness (μ)
KTR 0600 ATSL	Suitable for solvent based PU inks	Glossy release coating one side, antistatic treatment on back side	Transparent	75,100
KTR 1600 ATSL	Suitable for plastisol inks	Glossy release coating one side, antistatic treatment on back side	Transparent	75,100

Other thicknesses available on request

**Standard supply specifications**Rolls with core diameter 3" or 6" on request (76 or 152 mm). Customized sheets available Kemafoil® is a Coveme registered trademark



## KTR Film for flocking

**Kemafoil KTR®** is a range of polyester films with all technical characteristics necessary for the production of high quality flock transfers. A special primer guarantees a perfect extrusion of the adhesive masses used for flocking. It maximizes the adhesion of the flock and thus guarantees a clean release without adhesive parts coming off and mixing with the flock fibres.

There are three versions: standard, with antistatic treatment and with antiblocking treatment.

The heat stabilization guarantees a perfect dimensional stability during multiple passages (flock 3D).

### Product benefits

✓ Dimensional stability

✓ High surface tension

Guarantee for clean release without adhesive parts



Product	Main characteristics	Treatment	Finishing	Thickness (μ)
KTR 100	Substrate for flocking process	One side primered for water based adhesives	Hazy	75,100
KTR 100 ATSL	Substrate for flocking process	One side primered for water based adhesives, backside antistatic treated	Hazy	75,100
KTR 100 ABL TS	Substrate for flocking process	One side primered for water based adhesives, backside antiblocking treated	Hazy	75,100

#### Note

Other thicknesses available on request

Standard supply specifications Rolls with core diameter 3" or 6" on request (76 or 152 mm). Customized sheets available Kemafoil® is a Coveme registered trademark



## KTR

### Matt film for co-extrusion

**Kemafoil KTR®** matt polyester film range for co-extrusion conveys to vinyl and polyurethan films a very effective surface finish. The release agent allows an easy peel preserving the mechanical characteristics of the extruded films. This matt version of Kemafoil® KTR conveys a permanent velvet touch matt finish, that resists to embossing.

### Product benefits

✓ Dimensional stability

Suitable for all range of compounds (PVC PU)

✓ Velvet effect



Product	Main characteristics	Treatment	Finishing	Thickness (μ)
KTR 1680 ABL TSL H	Substrate for the co-extrusion PU	Matt release coating one side, antiblocking on backside	Opaque	75,100
KTR 9830 ABL TS	Substrate for the co-extrusion PU for CAD lettering	Matt release coating one side, antiblocking on backside	Opaque	75,100
KTR 9830 TS	Substrate for the co-extrusion PU for CAD lettering	Matt release coating one side, untreated on backside	Opaque	75,100
KTR 9835 TS	Substrate for the co-extrusion PVC for CAD lettering	Matt release coating one side, untreated on backside	Opaque	75,100
KTR 9835 ABL TS	Substrate for the co-extrusion PVC for CAD lettering	Matt release coating one side, antiblocking on backside	Opaque	75,100

#### Note

Other thicknesses available on request

Standard supply specifications
Rolls with core diameter 3" or 6" on request (76 or 152 mm).
Customized sheets available
Kemafoil® is a Coveme registered trademark



## KTR

## Glossy film for co-extrusion

**Kemafoil KTR®** glossy polyester film range for co-extrusion conveys to vinyl and polyurethan films a very effectful surface finish. The release agent allows an easy peel preserving the mechanical characteristics of the extruded films. This glossy version of Kemafoil® KTR conveys a shiny finish with lacquer effect.

### Product benefits

**V** Dimensional stability

✓ Suitable for all range of compounds (PVC PU)

**✓** Shining effect



Product	Main characteristics	Treatment	Finishing	Thickness (µ)
KTR 0600 ABL TS	Substrate for the co-extrusion of PVC and PU	Glossy release coating one side, antiblocking on backside	Glossy	75,100
KTR ABL TS	Substrate for the co-extrusion of PVC and PU	Antiblocking on one side	Glossy	75,100
KTR 6082 ATSL	Substrate for the co-extrusion of PVC	Glossy release coating one side, antistatic on backside	Glossy	75

#### Note

Other thicknesses available on request

Standard supply specifications Rolls with core diameter 3" or 6" on request (76 or 152 mm). Customized sheets available Kemafoil® is a Coveme registered trademark



## KTR

### Matt film for digital print

**Kemafoil KTR**® is a special polyester film used for the digital print of transfer images. Compared to screen printing this method is more efficient, flexible and cheaper since its suitable also for smaller production runs. Firstly the image is printed digitally on the film, the second step is the screen printing of the thermo adhesive.

The use of Kemafoil®KTR polyester film has many immediate and economic advantages compared to paper:

- It does not absorb humidity
- It has a very low residual shrinkage and therefore exceptional dimensional stability
- the quality and colour of print can be controlled throughout the entire printing process
- Very easy positioning of the image thanks to the film's transparency
- Matt finish
- Photo quality and velvet touch

### Product benefits

- ✓ Dimensional stability
- ✓ High speed printable
- Velvet effect
- ✓ See trough



Product	Main characteristics	Treatment	Finishing	Thickness (μ)
KTR 3682 TSL	Suitable for all major digital printers. Cold peel-off	Matt release coating on both sides	Opaque	75,100
KTR 3682 TSL H	Suitable for all major digital printers. Hot peel-off	Matt release coating on both sides	Opaque	75,100

#### Note

Other thicknesses available on request

**Standard supply specifications**Rolls with core diameter 3" or 6" on request (76 or 152 mm). Customized sheets available Kemafoil® is a Coveme registered trademark







## Kemafoil<sup>®</sup> KTR Matt film for screenprint

	Unit	Method	Value 75 μ	Value 100 μ
Coating weight	gr/m²	internal	avg 8	avg 8
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Opacity	%	PHOTOVOLT	avg 30	avg 30
Smoothness	sec Bekk	SMOOTHMETER	avg 50	avg 50
Shrinkage (md)	%	ASTM D 1204	< 0,3	< 0,3
Shrinkage (td)	%	ASTM D 1204	< 0,3	< 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits













## Kemafoil<sup>®</sup> KTR Glossy film for screenprint

	Unit	Method	Value 75 μ	Value 100 µ
Coating weight	gr/m²	internal	98 - 113	133 - 148
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Shrinkage (md)	%	ASTM D 1204	< 0,3	< 0,3
Shrinkage (td)	%	ASTM D 1204	< 0,3	< 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits

Kemafoil® is a Coveme registered trademark











Coverne is UNI EN ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certified



## Kemafoil<sup>®</sup> KTR Film for flocking

	Unit	Method	Value 75 µ	Value 100 µ
Yield	m²/kg	internal	9,52	7,14
Dyne value (treated side)	Dynes/cm	ASTM D 2758	> 58	> 58
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Shrinkage (md) 150°C x 30 min	%	ASTM D 1204	< 0,3	< 0,3
Shrinkage (td) 150°C x 30 min	%	ASTM D 1204	< 0,3	< 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits













## Kemafoil<sup>®</sup> KTR Matt film for co-extrusion

	Unit	Method	Value 75 μ	Value 100 μ
Coating weight	gr/m²	internal	108 - 119	140 - 157
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Opacity	%	PHOTOVOLT	avg 40	avg 40
Smoothness	sec Bekk	SMOOTHMETER	typical 50	typical 50
Shrinkage (md)	%	ASTM D 1204	avg 0,3	avg 0,3
Shrinkage (td)	%	ASTM D 1204	avg 0,3	avg 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits













## Kemafoil<sup>®</sup> KTR Glossy film for co-extrusion

	Unit	Method	Value 75 μ	Value 100 µ
Coating weight	gr/m²	internal	98 - 113	133 - 148
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Shrinkage (md)	%	ASTM D 1204	avg 0,3	avg 0,3
Shrinkage (td)	%	ASTM D 1204	avg 0,3	avg 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits











## Kemafoil<sup>®</sup> KTR Matt film for digital print

	Unit	Method	Value 75 μ	Value 100 µ
Coating weight	gr/m²	internal	8 - 12	8 - 12
Tensile strength (md)	Мра	ASTM D 882	typical 186	typical 176
Tensile strength (td)	Мра	ASTM D 882	typical 196	typical 186
Opacity	%	PHOTOVOLT	avg 30	avg 30
Smoothness	sec Bekk	SMOOTHMETER	typical 50	typical 50
Shrinkage (md)	%	ASTM D 1204	< 0,3	< 0,3
Shrinkage (td)	%	ASTM D 1204	< 0,3	< 0,3
Elongation at break (md)	%	ASTM D 882	100 - 200	100 - 200
Elongation at break (td)	%	ASTM D 882	100 - 200	100 - 200

All the values stated are to be considered as typical experimental values and not specification limits

Kemafoil® is a Coveme registered trademark











Coverne is UNI EN ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certified



### Certifications



Coveme is UNI EN ISO 9001:2008, ISO 14001:2004 and OHSAS 18001:2007 certified











PER LE SEGUENTI ATTIVITA:
per usi industriali; Film per usi medicali; Film trattati per arti averanti autone di pannelli foi amento plan.



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