



PRESENTATION



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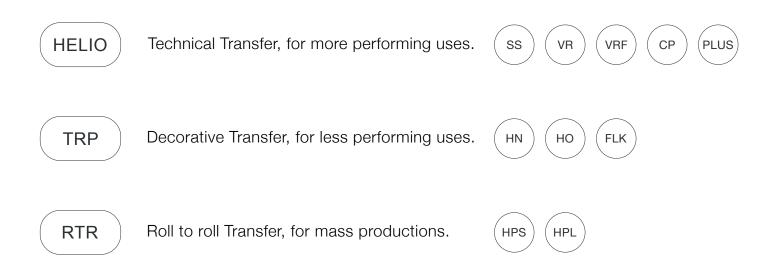


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HELIOTransfers®

HELIOTransfers[®] correspond to heat transfers produced by Heliotextil that allow to customize various products and substrates using hot application processes.

Technology used in printing processes and materials achieves the highest level. This constitutes a self know how that results from a continuous research and development strategy. The **range available** can generally be classified as follows:



Each quality has associated **technical specifications** and **special finishings**, allowing its suitability for the end use.

Beyond existing qualities, **adapted solutions** can be developed by our technical and research & development departments (r&d).

Among other products, Heliotextil creates, develops, produces and sells **heat transfers** under the **name HELIOTransfers**[®] using modern technologies, innovation, environmental sustainability, respecting human rights and health, by the orders of its customers mainly from the industrial domains of the textile and garments, sports, work wear, underwear, shoes and promotional items, located throughout the world.

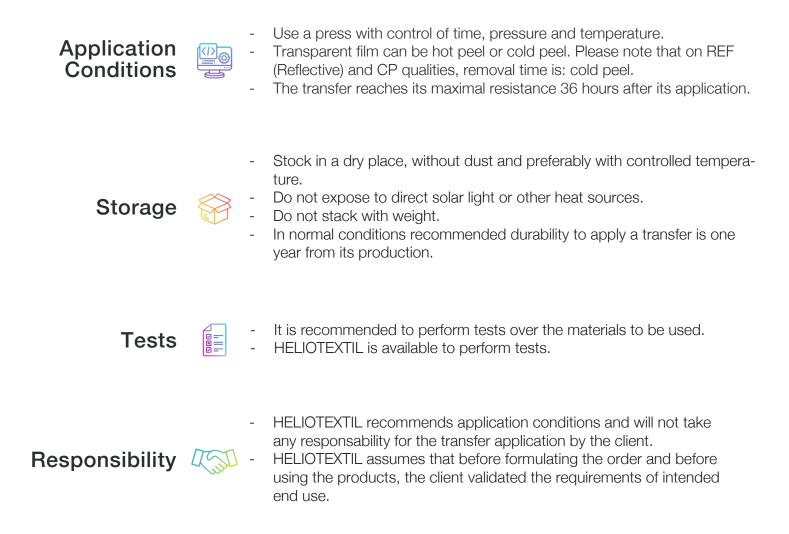


General Characteristics





Recommendations

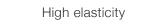




HELIO SS Super Stretch



Main Characteristics



Resistant

Smooth

Low temperatures application

Indicated Bases

Wide variety of materials: natural fibers (cotton), leather, synthetic fibers (polyester, polyamide-elastane), with high elasticity, sensitive to high temperatures.

Recommended Use

- Suits almost all textile materials
- Sportswear, underwear, bathwear, etc

Application conditions

- Temperature 140-160°c.
- Time 8-14 sec.
- Pressure 3-6 Bar.

- Removal Point: Hot peel.REF (Reflective) finishing removal point: Cold Peel.





HELIO VR Very Resistant



Main Characteristics

Very good resistance to friction

Washing up to 90°C

Indicated Bases

Polyester, Cotton or mixtures.

Recommended Use

- Workwear
- Industrial laundry

Application conditions

- Temperature 150-190°c.
- Time 10-14 sec.
- Pressure 6-7 Bar.

- Removal Point: Hot peel.REF (Reflective) and BM (Bright matte) finishings removal point: Cold Peel.

Washing Instructions



HELIO CP Coated Products



Main Characteristics

Suitable for coated materials only and special finishings

Low temperatures application

Indicated Bases

Coated materials, special finishings like repellants, PU, PVC.

Recommended Use

- Rainwear and seawear (fishing, sports)
- Special coated products

Application conditions

- Temperature 120-130°c.
- Time 10-12 sec.
- Pressure 1-2 Bar.

- Removal Point: Cold peel.REF (Reflective) finishing removal point: Cold Peel.





HELIO PLUS Special Supports



Main Characteristics

Very low temperatures application

Elasticity

Resistant

Smooth

Indicated Bases

High tech materials with high sensitivity to temperature.

Recommended Use

- Supports with high sensitive materials
- Sports balls

Application conditions

- Temperature 120-130°c.
- Time 15-20 sec.
- Pressure 4-5 Bar.
- Removal Point: Warm Peel.





HELIO VRF



Main Characteristics

Resistance to heat and flame

Very good resistance to friction

Washing up to 90°C

Indicated Bases

Polyester, Cotton or mixtures.

Recommended Use

- Workwear
- Firewear
- Industrial laundry
- Motorsports

Application conditions

- Temperature 180-200°c
- Time 12-16 sec.
- Pressure 5-6 Bar
- Removal Point: Hot peel. REF (Reflective): Cold Peel.





HELIO SP Sports



Main Characteristics



Resistant

Good Stretchability

Smooth

Indicated Bases

Synthetic fibers (polyester, polyamide-elastane), mainly with low color fastness to heat.

Recommended Use

- Sportswear
- Textiles with bleeding problems

Application conditions

- Temperature 150-160°c.
- Time 12-14 sec.
- Pressure 4-6 Bar.
- Removal Point: Hot peel.





HELIO REF Reflective



Main Characteristics



Strechability (SS charachteristic)

Coated products (CP characteristic)

Resistant (VR characteristic)

Flame Retardant (VRF characteristic)

Multi-Color Combination Available

Indicated Bases

For indicated bases, follow indicated qualities - SS, VR, VRF or CP

Recommended Use

- High Visibility
- Sportswear
- Motor Sports
- Workwear

Application conditions

For temperature, time and pressure follow indicated qualities - SS, VR, VRF or CP Removal Point: Cold Peel.

Washing Instructions

Follow indicated qualities SS, VR, VRF or CP.



HELIO BM Bright and Matte



Main Characteristics

Bright and Matte effect

Smooth

Indicated Bases

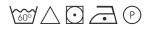
Wide variety of materials: natural fibers (Cotton, etc.), leather, synthetic fibers (Polyester, Polyamide-Elastane), with high elasticity, sensitive to high temperatures, etc.

Recommended Use

- Suits almost all textile materials
- Sportswear
- Fashion

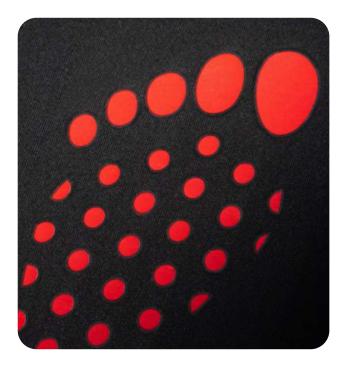
Application conditions

- Temperature 150-160°c.
- Time 12-14 sec.
- Pressure 4-6 Bar.
- Removal Point: Hot Peel.





HELIO SIL Silicone Transfers



Main Characteristics

Anti-slip

Soft and comfortable feel

Stretchable with good recovery

Indicated Bases

Wide variety of materials: polyester, polyamide-elastane.

Recommended Use

- Sportswear
- Fashion

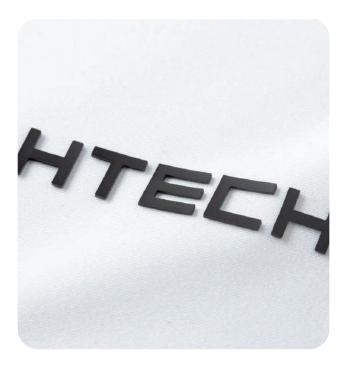
Application conditions

- Temperature 160°-170°c
- Time 20-25 sec.
- Pressure 5-6 Bar
- The transfer reaches its maximal resistance 36 hours after is aplication.



HELIOTransfers®

HELIO SIL 3D 3D Silicone



Main Characteristics

Thickness from 0,5mm to 1mm

Stretchable with good recovery

Anti-Slip

Soft and Comfortable feel

Indicated Bases

Wide variety of materials: polyester, polyamide-elastane.

Recommended Use

- Sportswear
- Fashion

Application conditions

- Temperature 160-170°c.
- Time 20-30 sec.
- Pressure 2-3 Bar.
- The transfer reaches its maximal resistance 36 hours after its application.





HELIO SD Super Digital



Main Characteristics

High definition printing

Smooth

Resistant

Indicated Bases

Materials composed by Natural fibers

Recommended Use

- Promotional
- Decorations

Application conditions

- Temperature 160-170°c.
- Time 12-14 sec.
- Pressure 4-6 Bar.
- Removal Point: Warm Peel.



| QUALITIES | DESCRIPTION | MAIN CHARACTERISTICS | WASHING INSTRUCTIONS |
|--------------|------------------|---|---|
| HELIO SS | Super Stretch | High elasticity Resistant Smooth Low temperatures application | $\textcircled{\texttt{P}} \frown \bigcirc \bigcirc$ |
| HELIO VR | Very Resistant | Very good resistance to friction Washing up to 90°C | |
| HELIO CP | Coated Products | Suitable for coated materials only and special finishings Low temperatures application | $\bigvee_{300} \bigwedge \boxtimes \boxtimes \boxtimes \bigcirc$ |
| HELIO PLUS | Special Supports | Elasticity Resistant Smooth Very low temperatures application | $\bigvee_{300} \land \boxtimes \frown \bigcirc$ |
| HELIO VRF | Flame Retardant | Resistance to heat and flame Very good resistance to friction Washing up to 90°C | $\mathbb{C} \subseteq \mathbb{C} \setminus \mathbb{C}$ |
| HELIO SP | Sports | Anti-MigrationResistantGood Stretchability | $\bigvee_{\delta 0 \circ} \bigwedge \bigtriangleup \ \bigcirc \ \frown \ \bigcirc \ \bigcirc$ |
| HELIO REF | Reflective | High visibility SS characteristics CP characteristics VR characteristics Low temperatures application | Follow indicated qualities SS,VR, or CP. |
| HELIO BM | Bright Matte | Brigth and Matte effectSmooth | $\overleftarrow{\mathbb{O}}\bigtriangleup$ |
| HELIO SIL | Flat Silicone | Stretchable with good recovery High anti-slip Soft and comfortable feel | $\boxtimes \textcircled{\odot} \textcircled{\odot} \textcircled{\odot} \textcircled{\otimes} \boxtimes$ |
| HELIO SIL 3D | 3D Silicone | Thickness form 0,5mm to 1mm Stretchable with good recovery Anti-Slip Soft and Comfortable feel | |
| HELIO SD | Super Digital | - High definition printing | |

QUALITY CERTIFICATIONS



| NORMS | DESCRIPTION | SS | VR | VRF | СР | PLUS | REF* | SP |
|----------------------------------|---|----|----|-----|----|------|------|----|
| EN ISO 20471 | High visibility clothing | • | • | | | | | • |
| EN ISO 11612 | Clothing to protect against heat and flame | | | • | | | | |
| ISO 17493 | Clothing and equipment for protection against heat | | | • | | | | |
| ISO 105-B02 | Colour fastness to artificial light: Xenon Arc fading lamp fest. | ٠ | • | | | | | ٠ |
| ISO 105-X12 | Colour fastness to rubbing. | ٠ | | | | | | ٠ |
| ISO 105-C06 | Colour fastness to washing. | ٠ | | | | | | ٠ |
| ISO 15797 | Industrial washing. | | • | | | | | |
| ISO 105-E02 | Colour fastness to sea water. | • | | | | | | ٠ |
| ISO 105-E03 | Colour fastness to chlorinated water (swimming pool water) | • | | | | | | ٠ |
| OEKO TEX 200 (2012) | Determination limit 0,01% (w/w) | • | | | | | | ٠ |
| ISO 14704-1 | Determination of the elasticity of fabrics | • | | | | | | ٠ |
| ISO 6330 | Domestic washing and drying | • | • | | | | | ٠ |
| EN 12947-2 | Abrasion Resitance (Martindale) | | • | | | | | |
| EN 71-3 | Safety of toys: Migration of certain elements. | • | | | | | | ٠ |
| OEKO-TEX STANDARD 100-CLASS I | Testing for harmful substances to the human health, including babies and toddlers up to 3 years old, meeting the needed human-ecological requirements. | • | • | • | • | • | • | ٠ |
| PVC FREE | Heliotransfers are certified as PVC free. | ٠ | • | | • | | | ٠ |

*Upon consultation - REF quality certifications may vary according to client's needs













Resistant to pigments migration of the bases.

Materials with low fastness on colours that represent risk of sublimation, like for instance some sports fabrics.



Can be produced on desired colour or multicolours on the same motif.

High visibility and decoration, details or logo reproduction on several colours.



Metallic Colors Gold or Silver, bright or matt. Metallic look.



Fluorescent effects and Fluorescent colors. Fashion or visibility effects.





PER Pearlescent

Pearlescent Effects. Pearl look for several uses.





UV Sensitive. Discrete mark, visible with UV light.





Phosphorescent finishing to use on mixed environments with light and dark.





Fine detail printing.

High resolution in reproducing photographic or half tones images.











EB Embroidery

Reproduction of the traditional textile embroidery, giving the thread look.

Suitable for logos with many colors or light bases, where traditional embroidery is difficult to apply.



Metallic Sparkles. Decorative and fashion.



Micro Holes.

Ideal for bigger prints that require breathable characteristics or aesthetics.



Combination of effects on the same motif, allows to combine bright and matt effects.



| REF | MAIN CHARACTERISTICS | HELIO SS | HELIO VR | HELIO CP | HELIO PLUS | HELIO VRF | HELIO SP | HELIO REF | HELIO SIL | HELIO SD | HELIO SIL 3D |
|-------------------------|---|-------------|-------------|-------------|---------------|--------------|-------------|--------------|--------------|-------------|-----------------|
| SP (Sports) | Anti-migration Resistant to pigments migration of the bases. | • | | | | | | | | | |
| REF (Reflective) | Reflective Can be produced on desired colour or multicolours on the same motif. | • | ٠ | • | | • | | | | | |
| MET (Metallic) | Metallic Colors Gold or Silver, bright or matt. | • | • | • | | • | | | | | |
| FLU (Fluorescent) | Fluorescent Effects Fluorescent colors. | • | • | • | • | • | | | | | |
| PER (Pearlescent) | Pearlescent Effects | • | • | • | • | • | | | | | |
| UV (Ultraviolet) | UV Sensitive | • | • | • | | | | | | | |
| GD (Glow in Dark) | Glow in the Dark | • | • | • | • | • | | | | | |
| HD (High Definition) | High Definition Fine detail printing. | • | • | • | • | • | | | | | |
| EB (Embroidery) | Embroidery Reproduction of the traditional textile embroidery, giving the thread look. | • | • | • | • | • | | | | | |
| GL (Glitter) | Metallic Sparkles | • | • | • | | | | | | | |
| BTH (Breathable) | Micro Printed Holes | • | ٠ | | | | | | | | |
| BM (Bright Matte) | Bright and Matte Combination of effects on the same motif. | | • | | | | | | | | |



Application Procedures



Positioning

Place motif (heat transfer) on the desired position over the textile material.



Application

Use a reliable heat press with accurate control of temperature, pressure and time. For more information consult our Heat Press offer.



Conditions

Follow recommended application conditions of each quality for the best results.

Recommendations

Application conditions are presented as a range and should be tested with the desired support for better results.

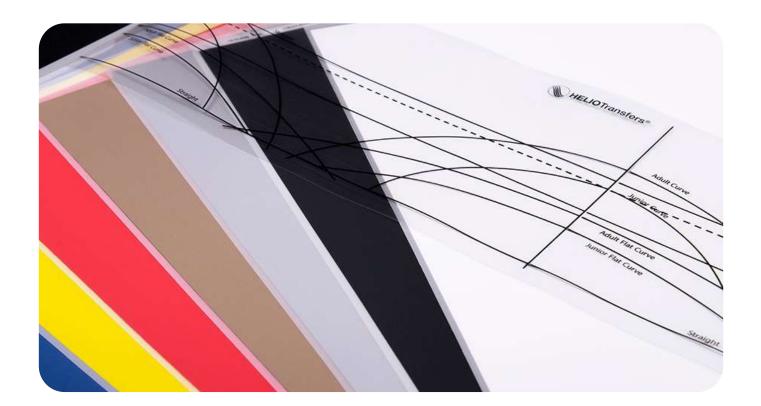
Textile support should be clean before application.

To improve final result it is recommendable to Pre-Press the textile support or use a Protection layer between the heat source and the support (paper for instance).

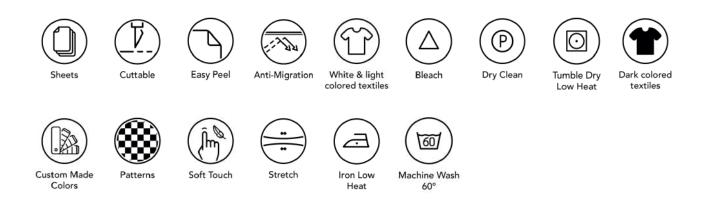


HELIOPRINTS[®]

Printing and converting materials for heat application



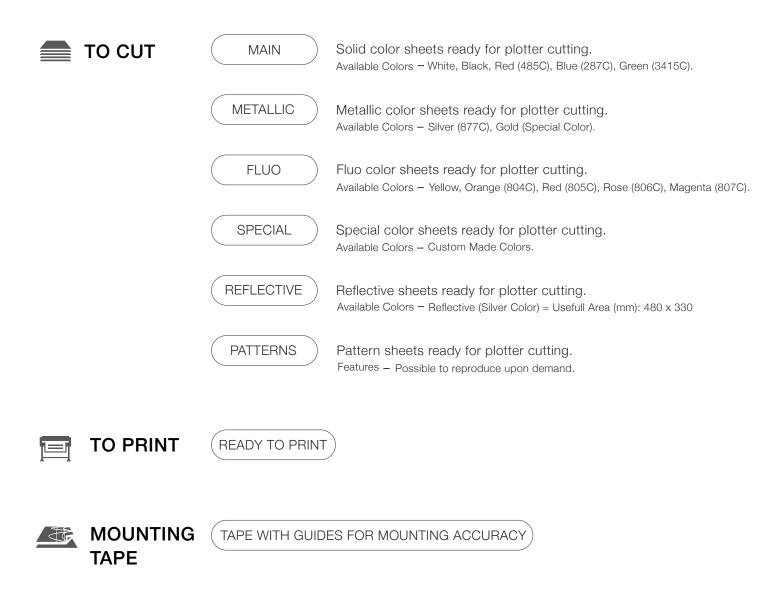
Main Characteristics





HELIOPRINTS®

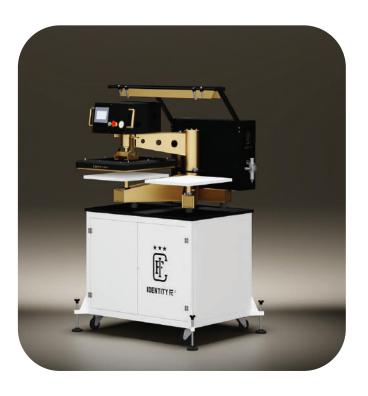
Printing and converting materials for heat application





HEAT PRESSES

To last and perform.



Main Characteristics

Strong Construction

Agile Software Configurations

Poduct

There are multiple presses available, from hydraulic to pneumatic presses, with one or two plates for transfer, sublimation and heat sealing.

In terms of accessories we have the curve heat head, caps base and balls base. We have custom made bases or common sizes (cm): 40x50; 38x38; 30x38; 20x30; 15x15.

Send us your items and experience our quality.

Handling

We have a center of excellence for the application of heat-transfers.

We also support skill development with high quality equipment and appropriate training.

Create your own capability to apply transfers, we support you.



IDENTITY BUILDER

New tools, digitizing business.



Main Characteristics

3D demo platform

Realistic results

For on-line stores

For interactive kiosks

Description

Decorating products by uploading or using catalogues and repositories to promote actively custom made projects and e-commerce strategies.

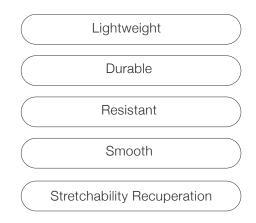


COVERSEALINGS[®]

Seamless applications, customizable.



Main Characteristics



Product Description

Using state of the art technologies on materials and coating techniques, high performances are achieved on heat applied products for textiles.

Coversealings® technology performs to be Functional, to make Finishing's or to enhance eye-catching details.

Advantages

- -No machines, no cutting or special operations required. -No take off job for surplus material, handling is reduced.
- -No limitations on colors or designs, fully customizable.
- -No waste of surplus material, less environmental impact.
- -Just apply end product with a regular heat press.

More Characteristics

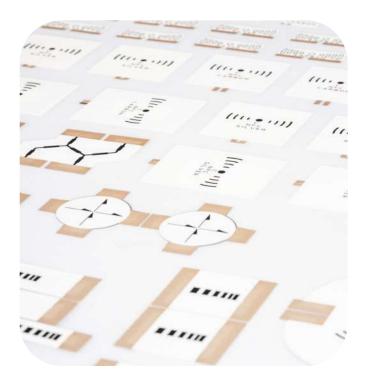
- Fully customizable in colors, patterns and shapes;
- Can be applied over seams to eliminate abrasion;
- Enhances water resistance properties;
- Avoids edge fraying;
- Excellent performance and compability with main substrates and fibers.

SPECIALITIES

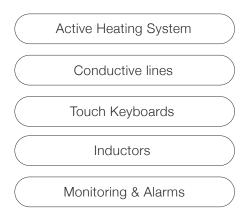


E-PRINT[®]

Printed electronic circuits for textiles using Heat Transfers.



Technological Applications



Product Description

Introducing conductivity on technical heat-transfers, managing all the engineering not only on raw-materials, printing technology but also electronics, software and hardware to achieve innovative applications.

E-Print Characteristics

- E-print® technology consists on printing electronic circuits using high-end Heat-Transfers technology.

- E-print® adds intelligence and functionality onto textile applications by the easiest way, using heat-transfers.

- All developments use mainly in house capabilities being an important factor for custom made solutions.



BRANDPROTECH®

Solutions to reinforce brands



Technologies For Brands

Protect and manage your brand

Be creative and digitize

Smarter ways of connecting

Brand Protection

-Security solutions for brand authenticity. -BRANDPROTECH® has its own high-security certified solutions.

-Rastreability, digital functionalities, low investment.

Fan Connection

-Brand connection to end user and more.

-Tap or scan to connect.

-Register users, verify authenticity, share contents, information, care instructions, story about the product and its life cycle, etc.

Interactive Technologies

-Products with digital content to connect and dematerialize.

-Holograms, QR, Rfid, AR, Smart Images, etc.

-Trigger interactivity or manage processes and be more efficient.





Quality and Environment

Implemented Quality management system provides framework tools to comply with all applicable statutory laws and regulations, as well as customers' requirements.

We, therefore, also strive to **reduce environmental pollution** to the absolute minimum, using environmentally friendly raw-materials and **reducing water consumption**.

These are commitments taken by our company and its products in order to **prevent any risks to** human health and environment.





We have implemented a PVC Free Certification.

Our products are **PVC Free** based not only on the selection and development of "clean" raw materials as well on the **highly controlled environment conditions** within production facilities, guaranteeing no possible contaminations from outside sources.

These detailed approach demonstrates our exigency to eliminate any potential risk of our products to contain PVC.



Our recognition!

Heliotextil is certified in accordance with ISO 9001, being thus a pioneer company in this business area to achieve this. Our Company is also certified by Oeko-Tex Standard 100 product class I.

This means **our products are tested for harmful substances**, showing the results of the inspection that the products meet the human ecological standard requirements.

Many other certifications are implemented and some represent unique products. Please consult our quality certifications table.



Research and Development

Our Driven Force!

Own R&D workgroup manages custom made projects to promote the research and development of better and innovative solutions, being aligned with company's strategic objectives.

In-house knowledge and prepared human resources allows us to focus on continuous improvement and on the development of new and innovative technologies.

We continuously seek out for improving our organization and products with **new and innovative solutions,** being critical factors to guarantee our's and customer's business success.







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