

# Thermal Products





*Love your neighbour*  
*Love your country*  
*Love your work*

Kiyoshi Ichimura formulated the Ricoh Group's Founding Principles in 1946. They inform about how we do business, encouraging us to constantly improve and contribute to the well-being of all stakeholders, including our families, customers, and society in general.

**MISSION STATEMENT**

At Ricoh, we are committed in providing excellence to improve the quality of living.

**VISION STATEMENT**

To be the most trusted brand with irresistible appeal in the global market.

**VALUES STATEMENT**

To be one global company, we must care about people, our business, our society, and our planet. We must dedicate our winning spirit, innovation and teamwork to sharpen our customer-centric focus, and we also must commit to the highest standards of ethics and integrity.



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**Ricoh Electronics Inc.**  
 Location: Atlanta  
 Trading area: South & North America
- 
**Ricoh Industrie France S.A.S.**  
 Location: Wettolsheim  
 Trading area: EMEA, Russia
- 
**RTM-AP Ltd.**  
 Location: Mumbai  
 Trading area: India
- 
**PT. Ricoh Thermal Media East Asia Pacific**  
 Location: Jawa Barat  
 Trading area: Asia Pacific, Oceania
- 
**Ricoh Thermal Media Co. Ltd.**  
 Location: Wuxi, Beijing, Kuanzhou, Shanghai  
 Trading area: China
- 
**Ricoh Company Ltd.**  
 Location: Numazu + Fukui  
 Trading area: Japan



- Since 1987
- More than 1 000 employees
- Based in Wettolsheim - France
- Thermal paper manufacturing
- Thermal transfer ribbon slitting

**HISTORY**

Historically known as a fax-machine manufacturer, the company has diversified its activities by developing various key products for the market: toner, thermal media and more recently recycling of digital printers.

**PRODUCT RANGE**

Ricoh Industrie France provides a wide range of:

- Top coated thermal papers/films with both sides protection for demanding critical applications.
- Thermal transfer ribbons resistant to the hardest environmental conditions.

**PROCESS**

Ricoh Industrie France is recognised as the technological leader on the market thanks to its know-how and its up-to-date coating and slitting technologies.

The Research & Development team implements all the skills of its chemists and paper specialists to make sure that Ricoh's developments are at the forefront of evolutions.

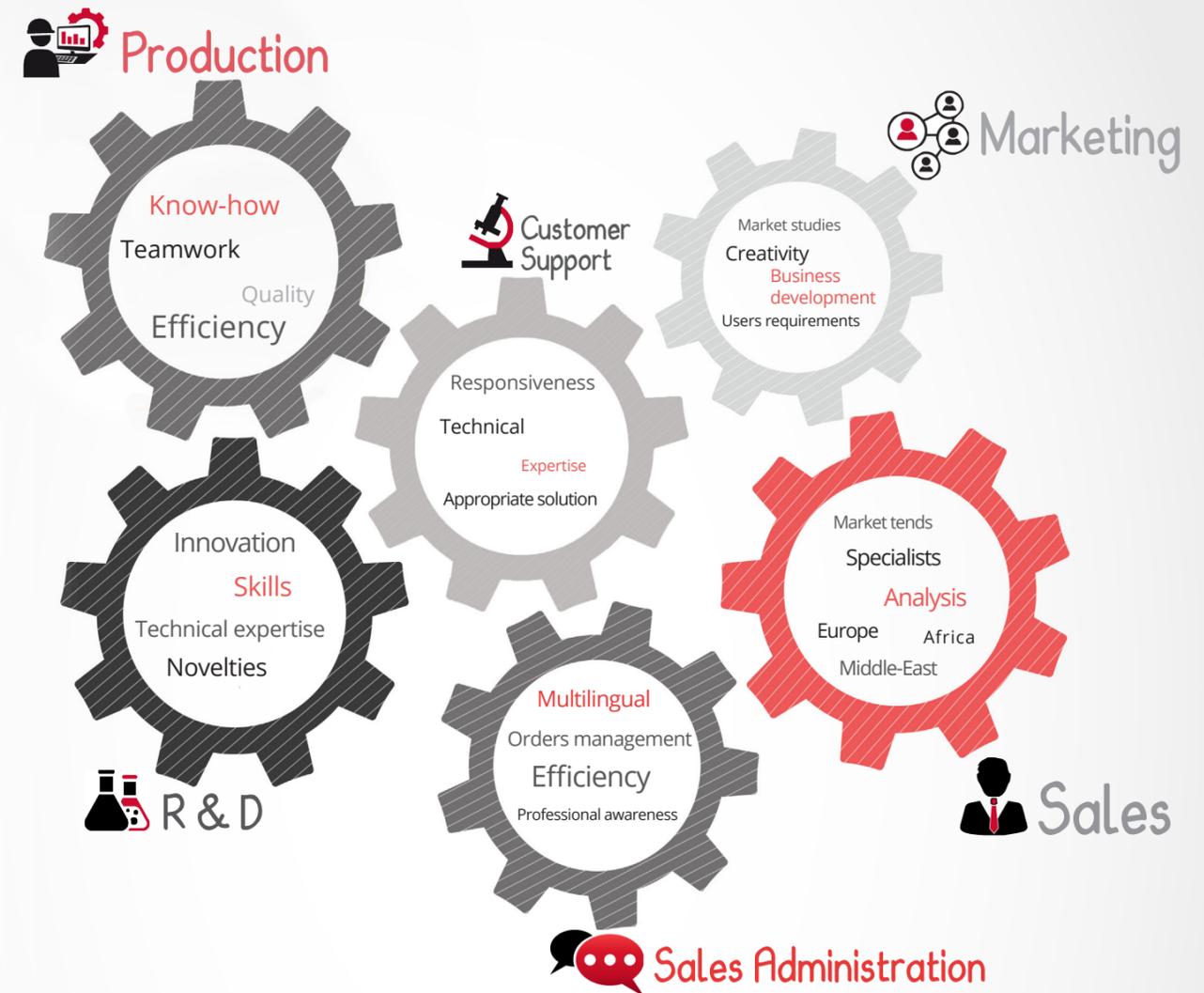


Ricoh thermal business unit in France

**BIODIVERSITY AND ECOLOGY**

Here at Ricoh Industrie France, preservation of our environment is much more than just a conduct line:

- Ricoh Industrie France is certified ISO 50001 since 2013.
- Our plant environment is based on non built grounds renaturation and on flower meadows all around the factory. This ecosystem allow us to welcome each year more insects, such as bees or dragonflies, but also many species of birds.
- We are acting to reduce our greenhouse gas emissions from our industrial processes and to recycle our products as much as possible. As an example, we have found a 2<sup>nd</sup> life for one of our products thanks to the materials' recovery: thermal papers' offcuts became carton pieces used to stiff handbags.



HERE AT RICOH INDUSTRIE FRANCE, CUSTOMER SATISFACTION IS AT **THE HEART OF OUR CONCERNS.**

## MANUFACTURING STAGES

Ricoh Industrie France has achieved its technological expertise and leadership through an exclusive thermal paper production know-how:

1. Baths preparation.
2. Coating of the different chemical layers on the base paper/ film to give it its thermo-sensitive properties.
3. Calendaring of the paper surface.
4. Slitting of the mother reels into several width & lengths according to markets and customers needs.
5. Packaging & shipment of the reels/jumbos to our customers.



Standard production unit: 2 m x 18 km



## THERMAL PAPER STRUCTURE

### FRONT PROTECTION

(Top Coat)

- Prevents any image fading against different types of aggressions
- Ensures a good matching with the printer and preserves the TPH lifetime.

### THERMAL COAT

- Turns to black when heated under the thermal printhead.
- Determines the following properties: dynamic and static sensitivity, image density and preservation and background density.

### PRIMER

- Improves the smoothness of the surface.
- Optimizes thermal revelation by acting as an insulation and improves image density and uniformity.
- Facilitates the anchorage of other layers.

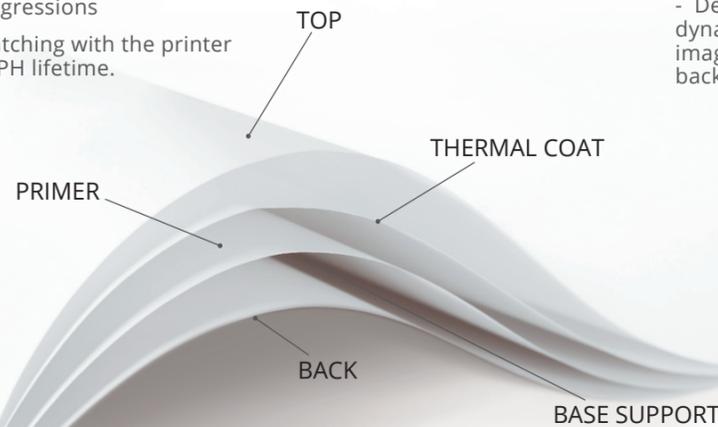
### BASE SUPPORT

- Characterizes the thickness and the weight of the support.
- Gives mechanical properties to the thermal paper/film (tensile and tear strength) and determines the uniformity of the thermal image.

### BACK PROTECTION

(Back Coat)

- Ensures an excellent protection level against the effects of different substances such as alcohol, oil, plasticisers, etc.
- Prevents also the paper from curling and enables the use of solvents, inks and adhesives.



Thermal paper is part of our daily life.



Pre-packed food



Logistic



Bank statements



Lottery & Gambling



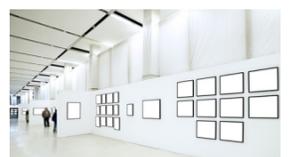
Parking



Train, plane, subway



Concert, Cinema...



Museum

**MANUFACTURING STAGES**

Ricoh Industrie France implements all its skills to slit thermal transfer ribbons jumbos produced by our mother company in Japan.

Our experienced staff is in charge of slitting these jumbo rolls into lengths and sizes that fit markets, customers and printers requirements.

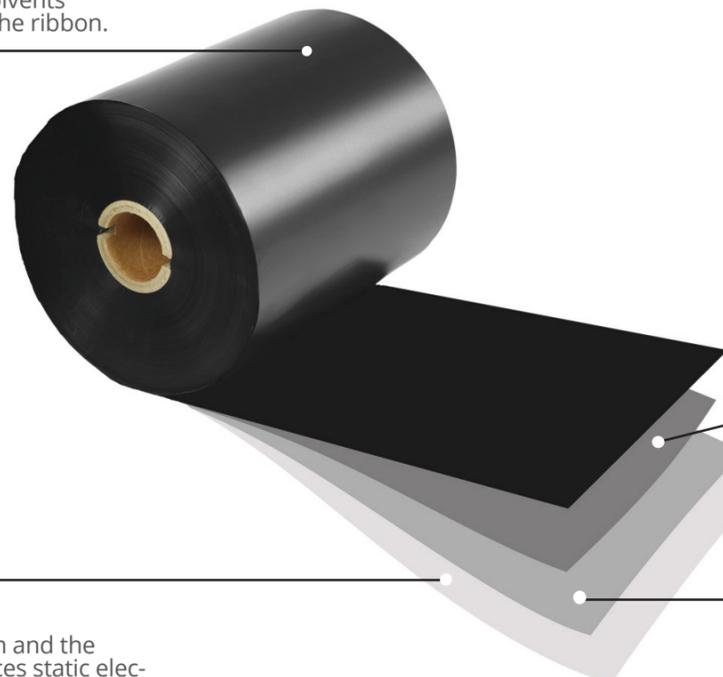
Ricoh proposes high performance thermal transfer ribbons. Our specific coating method provides them unique features.



**THERMAL TRANSFER RIBBON STRUCTURE**

**INK**

Made of wax, wax/resin, or resin, this layer is transferred to the receiving material during the printing, generating the image. Its composition determines the heat, abrasion and solvents resistance properties of the ribbon.



**RELEASE**

It helps the ink to be removed from the base film even at low temperature.

**BACK LAYER**

It protects the base PET film and the thermal print head, it reduces static electricity issues and improves ribbon way trough the printer.

**BASE PET FILM**

The base film is used to coat the ink and the back layer. It allows the heat transfer from the thermal head to the ink.

Thermal transfer ribbons are used in most industries.



Automotive



Drums



Electronics



Direct coding



Health analysis



Patient identification



Cloth care labels



Tags



What would be your ideal label?

Fill out our questionnaire!

[www.ricoh-thermal.com/en/label-of-tomorrow](http://www.ricoh-thermal.com/en/label-of-tomorrow)

## CHECKLIST

Product Lifetime

Barcodes

Water resistance

UV resistance

Your criteria

[www.ricoh-thermal.com](http://www.ricoh-thermal.com)

- Thermal paper requests:
- Thermal transfer ribbon requests:

[sales.dt@ricoh-industrie.fr](mailto:sales.dt@ricoh-industrie.fr)

[sales.ttr@ricoh-industrie.fr](mailto:sales.ttr@ricoh-industrie.fr)

### Legal notices:

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