



# **RT Rai-Tillieres**

*Producer of Filtration Belts, Dandy Rolls and Conveyor Belts*

## **Producer of Filtration Belts, Dandy Rolls and Conveyor Belts**

**Filtration, Dewatering, Drying  
Forming, Patterning & Marking**



## OUR CORPORATE STATEMENT

European leader in the field of "filtration & separation" technologies, resolutely turned to overseas challenges, Rai-Tillieres aims at growing its presence on an international level thanks to the distinction of its products range and the skills of its commercial network.

ISO 9001 certified, our mission is to manufacture and offer to our customers a panel of technical fabrics adapted to their requirements, to propose an expert and responsive after-sales service, to continuously advise on innovating solutions.



## OUR KNOW-HOW

**> In order to faultlessly serve its customers, Rai-Tillieres relies on an efficient industrial resource:**

- **Computerized weaving process**

*Annual maximal weaving capacity :*

*from 250 000 sq. meters up to 500 000 sq. meters*

*Heavy looms from 4m up to 13m wide*

- **Controlled heat-setting process**

*Capacity : width (10m) – length (160m)*

*Process whole traceability*

- **Neat finishings**

*Final cut accurately matching the width required*

*Belt seams : clipper – pin seam – woven*

*Glued edges*

*Guiding profiles*

- **Laboratory tests**

*Air permeability measurement*

*Mechanical resistance measurement*

*Electron microscope*





## OUR SERVICES



**> If needed, Rai-Tillieres assures its customers to implement an expert and responsive after-sales service on site (belt setting, repairing, audit).**

- 48 hours delivery time (domestic market)
- Assembly on site
- Survey or audit
- After-sales follow-up



## OUR HISTORY



**> 100 years of experience.**

**1898** : The « Compagnie Générale d'Electricité » establishes the company « Établissements métallurgiques de Rai-Tillieres ».

**1906** : Creation of the first weaving division.

**1925** : Creation of the dandy rolls division.

**1970-1980** : Beginning of forming belts in Polyester.

**1980** : A. Kufferath (Düren – Germany) purchases Rai-Tillieres.

**1997** : Rai-Tillieres initiates its first overseas business (South Africa and USA).

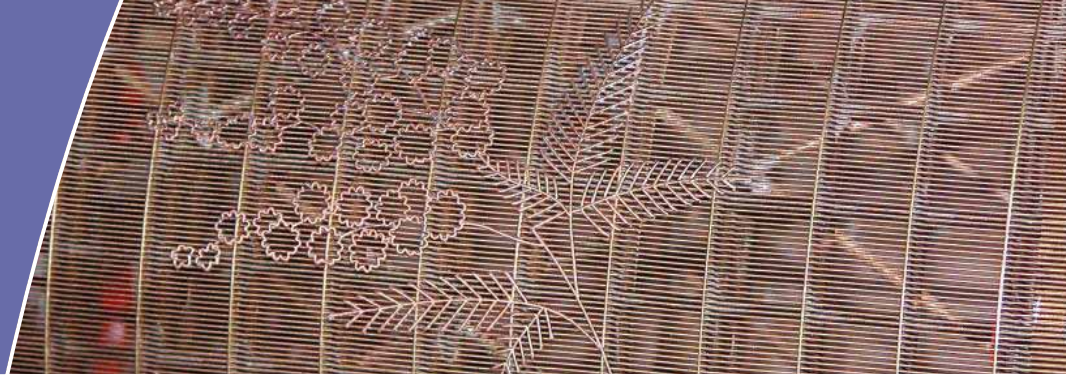
**2008** : Rai-Tillieres is ISO 9001 certified.



**2009** : A. Kufferath sells the company.

Rai-Tillieres becomes an independant corporation.





## PAPER MAKING BELTS AND WOVE DANDY ROLLS

**> This is the historical core business of Rai-Tillieres.**

For more than 100 years, Rai-Tillieres has been producing wove and marking dandy rolls as well as a wide range of woven synthetic or metallic filtration belts for the paper industry, in France and overseas.



**> Our R&D department can study and customize the marking according to your specific needs.**

### • Filters and screens:

- Plastic and metallic belts (from 80 to 2000  $\mu$ ) and filters of any size and form
- drums (trommel, ...)
- vibrating screens
- waste retainers

### • Filtration belts:

- Belts for belt filter presses
- Belts for gravity tables
- Covers for disc filters
- Shrinkable jackets
- Washer belts
- Antistatic belts for cutters
- Conveyor belts
- Screen belts

### • Dandy rolls and covers:

- wove dandy rolls
- marking dandy rolls
- cylinder moulds
- equipment, spare parts
- stainless steel covers (316 L) with diagonal gold seam



## NON-WOVEN PROCESS BELTS CARDING, AIRLAID, SPUNBONDING/MELTBLOWN, WETLAID

For the non-woven manufacturing process, we offer plastic and metallic belts and conveyor belts for each step from web forming to bonding.

Our fabrics are made from various materials:

Polyester, polyamide, conductive yarns, PPS, stainless steel and bronze.

- Weaving: up to 6m wide.
- Aperture: from 200 à 3000  $\mu$ m.
- Air permeability: from 150 to 1600 CFM.
- Seams: endless woven or non marking pin seam.



*Our references : Georgia Pacific - Ahlstrom - Arjo Wiggins - Andritz Perfojet*



## > Our range of fabrics for the non-woven process includes:

### • Web bonding

#### - Thermal bonding:

Metal wire cloth, made endless by means of a soldered gold seam. These fabrics can withstand temperatures up to 350° Celsius - 662 degree Fahrenheit - and are very durable.

#### - Spunlace/ Hydroentanglement:

For this process we offer our customers different fine to very fine, single layer polyester cloths, endless woven. We also offer very open mesh to dry the product, often using guiding profiles on the edges of the belt.

### • Web formation :

We offer different wire cloths with an adapted air permeability level, a suitable support of fibres and eventually conductive properties. Particularly responding to the needs of web formation, the design of our wires provides web stability, good lay down of fibres and optimal removal of the nonwoven.

### • Transfer & Conveyor Belts

Synthetic fabrics.



## PROCESS FILTRATION BELTS AND BELT PRESS FILTERS

### FOOD INDUSTRY - WOOD - CHEMISTRY - PHARMACY

Since 2008 Rai-Tillieres has been certified ISO 9001 and focuses on consistently producing and improving its range of high-quality fabrics for conveyor belts in deep freezing or ovens, belt press filters, dewatering process and dryers.

## > We can supply, set and repair:

### • Conveyor Belts (synthetic and metallic)

#### - Filtration / draining:

Draining of cheese, vegetables, feathers in slaughterhouse, etc...

Gravity tables in waste water treatment plants

#### - Drying / suction:

Dehydration of vegetables

Drying of alfalfa, beets, ...

Belts for ovens or products coming out of the oven

### • Squeezing belts

#### - For the extraction of liquid by squeezing:

Squeezing of fruits, vegetables, ...

Belt filter presses in waste water treatment plants

### • Belts for various filters

- Cylindrical, rectangular filters

- Butter churns

- Vibrating and maturing screens



Our references : Lactalis – Tereos – Roquette – APM Deshy



## ENVIRONMENT AND WATER FILTRATION

In 30 years, Rai-Tillieres has become the leader in supplying dewatering belts for filter belt presses and gravity tables in sewage treatment plants, municipalities and industries.

RT Filter belts are available in various high-quality fabrics, with various Weave Patterns, Apertures from 120 to 4 000  $\mu\text{m}$ , Dimensions up to 6.4m and Seams :

- Clipper seam (metallic hooks)
- Woven seam
- Added spiral
- Pin seam

### > *RT Range of Dewatering and Drying Belts includes:*

#### • **Belts for gravity tables:**

Polyester belts with special pattern to obtain maximum drainage with high resistance to abrasion. Several apertures.

#### • **Belts for belt filter presses:**

Herringbone weave belts in polyester or polyester/polyamide or 100% polyamide.

Various patterns and apertures.

Excellent stability and high resistance to abrasion.

#### • **Belts for sludge dryers:**

Herringbone weave belts in polyester or PPS.

High resistance to temperature and hydrolysis.

### > *RT Services in Europe*

- **Urgent manufacture within 48 H (for clipper seam belts)**
- **Intervention on site (setting up, repair)**
- **Fitting of any filters**
- **Design department (development and improvement)**



*Our references :*

*Our customers include municipalities, water treatment companies like Veolia - Degremont - Suez - Vinci - Andritz as well as various industries.*



## MINING & REFINING

After the extracting operation (from depth or open-cast mines), the mineral processing consists in the physico-chemical transformation of the ore, in order to pull out only worthy metals.

By the word of "refining" is included the whole purification process (leaching, impurities elimination, treatment of residual mud,...).

And that flowchart requires specific liquid-solid separation technologies: **the wet filtration through synthetic fabrics.**



> **Filter cloths designed for vacuum belt filters, linear screens, pan rotary filters**

**Synthetic cloths:** Polyester, Polyamide, Polyphenylene sulfide.

**Metallic cloths:** Stainless steel.

**Different patterns:** Plain weave, Twill weave, Herringbone weave.

**Different mesh openings:** from 120 to 4000 µm.

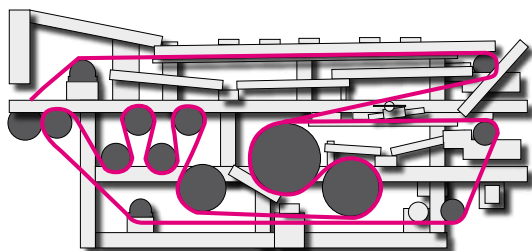
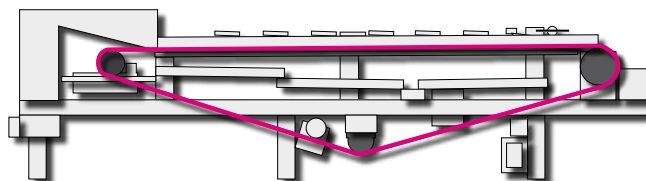
**Widths** up to 6.5m.

Our filter belts are custom-cut and assembled.

The type of junction used is adapted to the industrial process and the kind of filter device.

We get involved in the primary mining industries such as:

- Coal
- Phosphate
- Gold – Silver – Platinum
- Copper – Nickel – Zinc



*Our references : Rio Tinto - BHP Billiton - Vale - Anglo Gold - Anglo Platinum*



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ISO 9001

BUREAU VERITAS  
Certification

