

# **IMPETUS** FACTORY TOUR

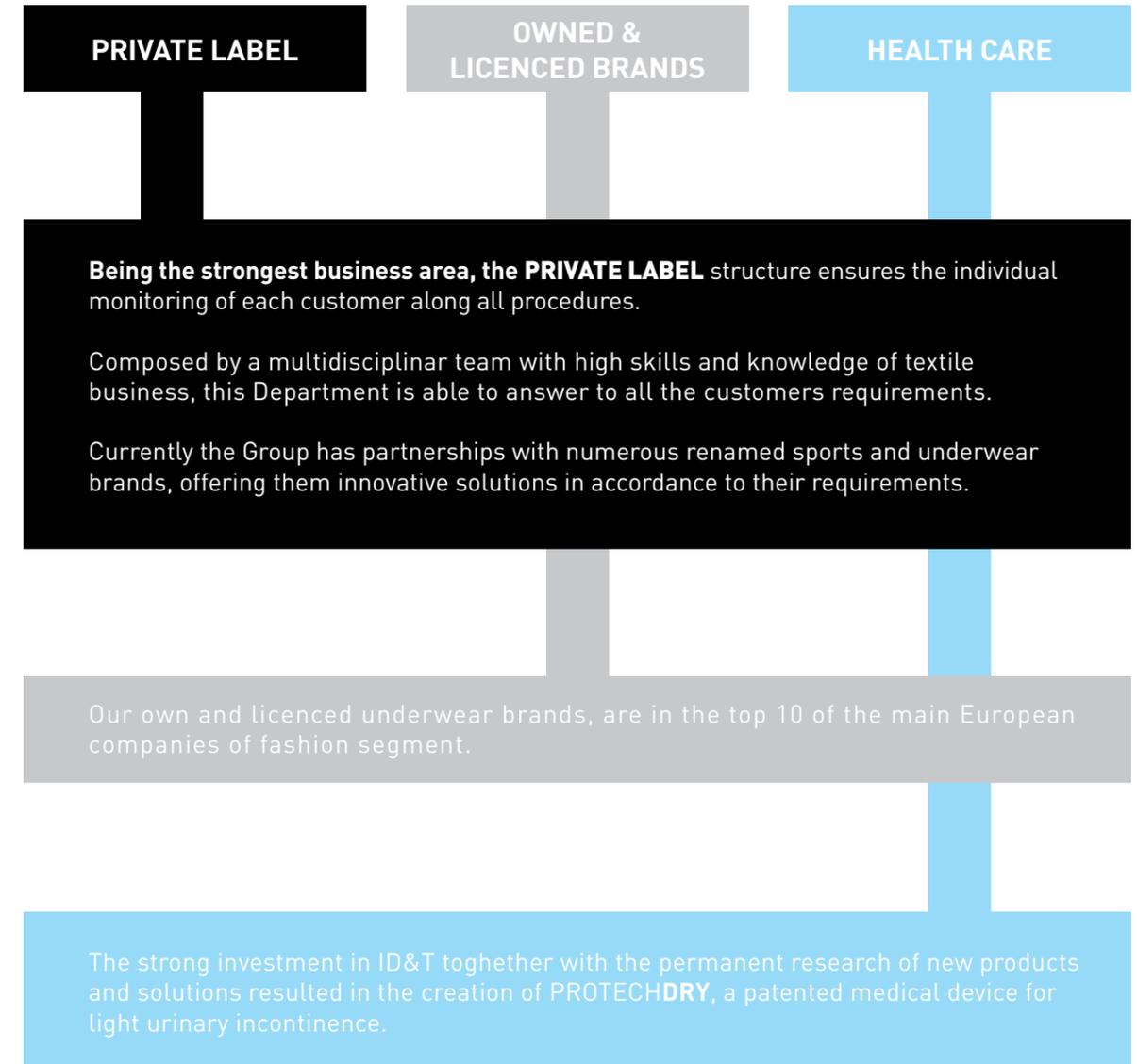


# INTRO



**IMPETUS Group** started its activity in the textile sector in **1973**. Nowadays, with several companies and approximately 700 employees, the group reaches an annual production of 15,000,000 articles. Presenting a completely vertical structure, the Group is specialized in the production of Cut & Sew and seamless articles, providing its customers an excellent service that covers the development, IDT, production and shipping. The whole production is exported to markets such as Europe, Canada, United States of America, Australia, China, Mexico and Japan.

The Group's commercial structure is divided into 3 business areas:



## CUT & SEW

### STYLING

This is the section that brings together the inspiration and creative sense of the Fashion Designers with the technical skills of Product Specialists, to create new products/collections that have the renowned IMPETUS Quality. The starting point is the gathering of trends, visits to trade shows, sales reports, etc. From there, the "Collection" is started with the sketching of ideas to be translated into proposals for articles of clothing, from which the best will be selected for the Collection, along with the materials and accessories that will form the collection.



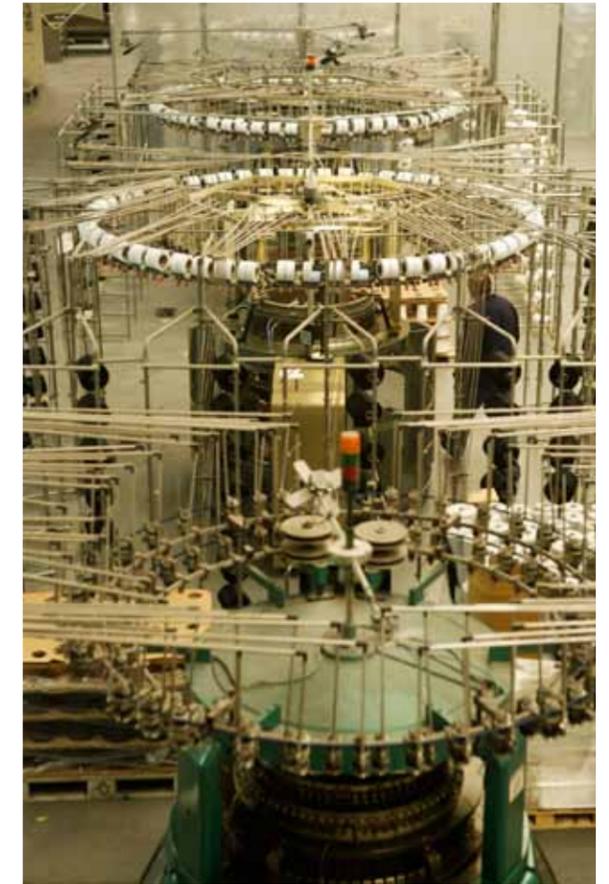
### MODELLING

Once the new products are designed, they have to be planned out and assembled. In the modelling, the patterns are studied and designed for the assembly of the new products, always having in mind all the materials and accessories found in each article. Here the different puzzles (3D) are designed, along with the corresponding assembly instructions for their production, always in close collaboration with the technicians from the manufacturing department.

### KNITTING

It is here that the knit fabrics are produced that will later be used in the IMPETUS articles.

This production is only possible by the use of yarns of the highest quality and the best human and technological resources. The knitted fabrics produced are inspected before being sent to the textile finalisation process.



### WEAVING WITH ELASTICS

The elastics used in Impetus® products – inner and outer wear are made in our own plants.

Just like the knits, by having this production unit, we are assured of having an enormous amount of general know-how regarding the products and a guarantee of innovation and improved performance of our products.

## CUTTING (AUTOMATIC)

Following the textile finishing process, the knitted fabrics are spread out and cut in an integrated process of preparation, laying out and cutting that is fully automated – CAD-CAM Technology. In order for this automated process to be possible, all the knitted fabrics are planned out in advance in the Planning Office by specialised technicians.



## TEXTILE FINISHING

In Textile Finishing - Dyeing, Printing and Finishes, our products are given the desired physical and chemical characteristics, from the colour to the feel and the very elasticity of the article. In this department, we are supplied with the most modern laboratory and production equipment, which in conjunction with our skilled human resources allow us to exceed the expectations of our customers. Our concern for the environment is a dominant feature in this sector.

## PREPARATION FOR SEWING

Before the articles are sent to the assembly line - Sewing, they go through various operations of preparation for sewing, according to pre-defined specifications. These operations include "Sewing Pockets", "Printing Cloths", "Embroidery", "Gluing Buckram", "Application of Transfers", "Attaching labels", etc.

Before being sent to Sewing, and after these operations have been done, the accessories required for the assembly of the different articles are gathered.

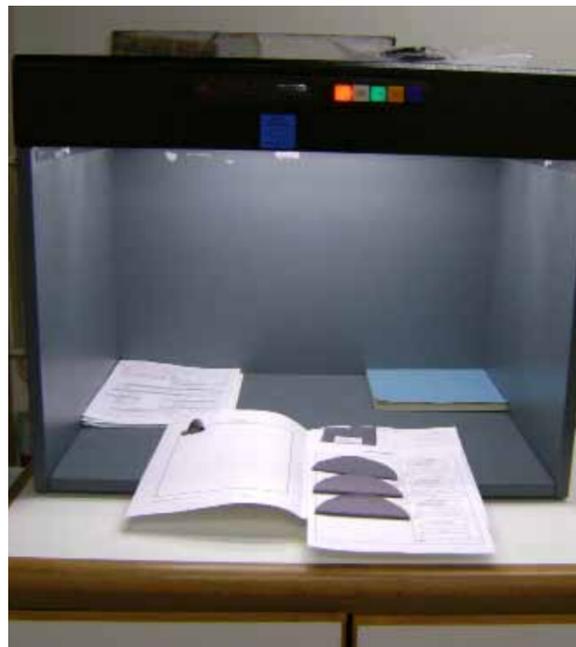


## SEWING

Sewing is the sector where all the prepared puzzle pieces are put together (Impetus® articles). In this department, around 150 employees work together in harmony every day. With the appropriate technological resources made available to them, they turn the initial dreams into a genuine reality. To guarantee the Impetus® seal of quality, all the manufactured articles are subjected to a detailed inspection.

## PACKAGING

This is the last phase of production, as the finished products are pressed and properly packaged.



## LABORATORIES FOR QUALITY CONTROL AND GUARANTEE

In order for us to guarantee the maximum quality of our articles, from the moment the yarn is received to the sewing of the articles, we test and check all the critical qualitative characteristics.

All the yarn purchased, and the knits and elastics produced are duly tested for all their various characteristics to guarantee the quality of these sub-products that will be incorporated later in the other articles. Because they are the main components of the majority of the articles, the knits, elastics and accessories, after they are "finished", are subjected to the strictest physical and chemical quality tests, in our own laboratories or in specialised external laboratories.

Besides all the quality tests that are carried out, our articles are tested and certified according to Oeko-Tex® Standard 100, which attests to the fact that our products do not contain any harmful substances at levels considered dangerous for human health.

## SEAMLESS



These articles differ from the conventional ones, as they are defined already in the initial process of seamless knitting. This innovation is only possible through the use of seamless looms, which do not produce rolls of knitted fabric as in the traditional knitting process, but rather small knitted tubes that already have the measurements and the majority of the shapes defined for each article in specific software.



## SEAMLESS STYLING AND MODELLING

Just as in the Articles with Seams, it is here that the Fashion Designers are inspired, design and develop, in conjunction with the Product Technicians, the new Impetus® seamless articles/collections.

After the products are defined, the articles are designed, and their characteristics and corresponding forms are entered into specific and integrated software, which communicates directly with the looms and transforms the designs into knitted tubes.

## SEAMLESS KNITTING

It is in this department that by using the highest quality yarns and the best human and technological resources, knitted tubes are produced that will become the Impetus® seamless articles. The articles produced are always the result of prior testing carried out by the departments of Styling/Modelling and New Product Technical Development.



## SEAMLESS SEWING

After being thermoset, the knitted tubes go to the sewing department, and if any cutting has to be done on the article (e.g., "retros and camisoles"), they go to the cutting machine; otherwise they go directly to sewing (ex. "briefs"). As we are talking about seamless articles, there are few seams used in the assembly process; in the case of briefs, they are only closed in the reinforced area and the planned accessories are applied. In most of the seamless articles, some small adjustments must be made to the articles until we get the final article, but the seams are few.



## PACKAGING

As is the case with the production of traditional articles (with seams), the Impetus® seamless articles, once they are assembled, go to the last step in production, packaging. In the packaging department, the articles are pressed and packaged in accordance with the specifications for each article.



## LABORATORIES FOR QUALITY CONTROL AND GUARANTEE (SEAMLESS)

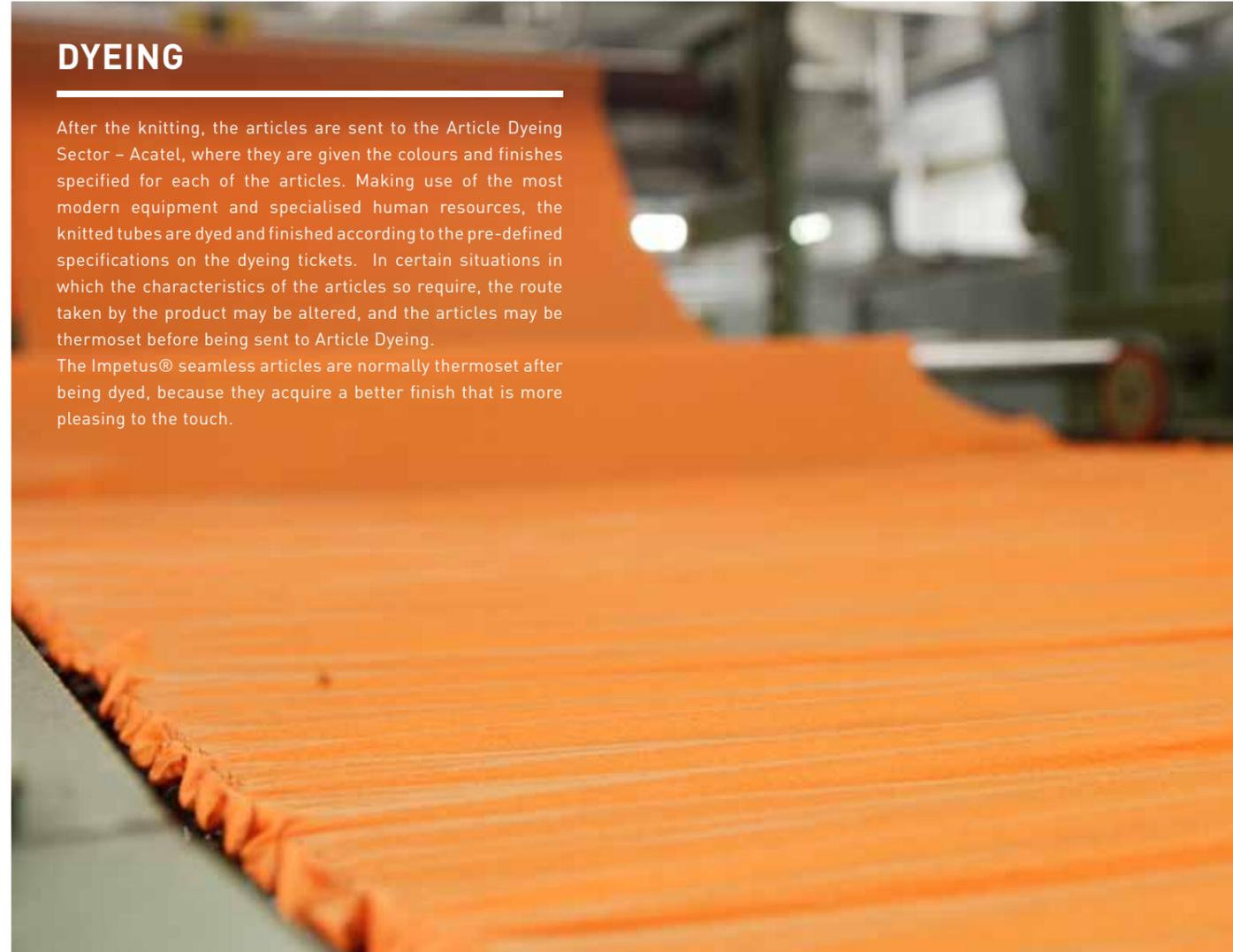
From the reception of the yarn to the shipping of the products, the articles, in all their different components, have their chemical and physical characteristics controlled and guaranteed. Appropriate tests are made on the yarns to assure us of the desired quality of the knitted tubes on the loom. The knitted tubes are duly tested at the start of each production cycle as a guarantee of their reproducibility. The physical characteristics of the knitted tubes are duly tested (measurements, weight, shrinkage, elasticity, resistance, recovery, etc.). Our seamless Impetus® products are also tested and certified according to Oeko-Tex® Standard 100, which attests to the fact that our products do not contain any harmful substances at levels considered dangerous for human health.

## DYEHOUSE

### DYEING

After the knitting, the articles are sent to the Article Dyeing Sector – Acatel, where they are given the colours and finishes specified for each of the articles. Making use of the most modern equipment and specialised human resources, the knitted tubes are dyed and finished according to the pre-defined specifications on the dyeing tickets. In certain situations in which the characteristics of the articles so require, the route taken by the product may be altered, and the articles may be thermoset before being sent to Article Dyeing.

The Impetus® seamless articles are normally thermoset after being dyed, because they acquire a better finish that is more pleasing to the touch.



### THERMOSETTING

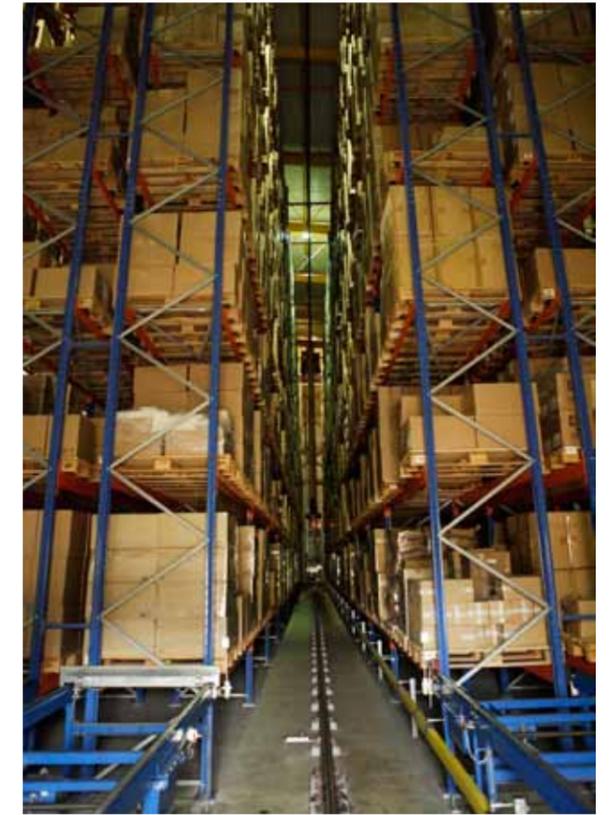
After passing through the Dyeing process, most of the articles go through a process of thermosetting. This process can be carried out in infrared or steam thermosetting machines, where the articles are given a greater dimensional stability and their physical characteristics are improved.

## OTHER IMPETUS SECTORS AND SERVICES

### AUTOMATED WAREHOUSES FOR FINISHED PRODUCTS

Here the stocks of duly packaged articles are stored to quickly meet the demands of the market.

We are thus able to easily guarantee through an advanced logistics system that the first products to enter the warehouse will be the first to leave it, with inherent gains in quality, cost, and better customer service - FIFO (first in, first out).



### PICKING WAREHOUSES FOR CUSTOMERS

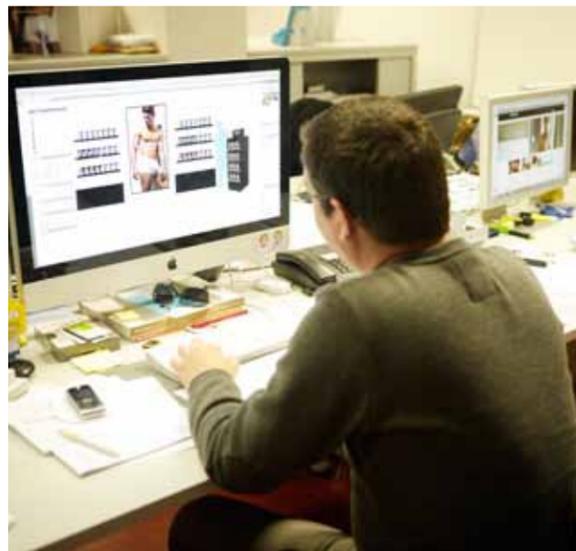
Picking means to collect or gather something, and in the case of Impetus, the collecting of articles of inner or outerwear. At Impetus, although we all refer to this warehouse or process as "Picking", in reality what we have in the warehouse is a process of Pick and Pack, in other words, Packaging, because at Impetus, the one who separates the articles (who does the picking), also packages them for the final customer (packs). At the picking warehouse, the articles are stored in blue or grey plastic containers placed on shelves that are organised by corridors, levels and heights. Each one of the locations of the shelves is identified with a unique bar code. The entire process of picking, packaging and shipping of orders is carried out using a small portable computer (PDT).

When a customer places an order, an employee selects the order on the computer screen and is given the information about the location on the shelves where he should start to pick up the articles.



## RESEARCH AND TECHNOLOGICAL DEVELOPMENT OFFICE

We consider innovation and continuing improvement in the performance of our products to be strategic and essential factors for the satisfaction of our customers and the success of our organisation. Thus, at the close of 2006, the Research and Technological Development Office (R&TD) came into being for the precise purpose of filling this gap, being endowed with human and technological resources exclusively dedicated to R&TD.



## MARKETING AND COMMUNICATION

The Department of Marketing and Communication determines what form of communication is most appropriate for reaching a target audience, defining the strategy that, using a wide variety of means of dissemination, will produce a positive impact, make the product widely known and bring a return. This department controls the preparation of the product image, from packaging that is individualised for each product line, with catalogues and support material for the point of sale – posters and display units – to advertising, external relations – mass media –, sponsorship programmes and the organisation of events.

## OUR ENGAGEMENTS



## **IMPETUS** FACTORY TOUR

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Developed by IMPETUS Marketing Team ©July, 21<sup>st</sup> 2014