FUNDACIÓN PRODINTEC

FÁBRICA DE FUTURO

Activity Report


FUNDACIÓN
PRODINTEC
FÁBRICA DE FUTURO

EDITED BY:

FUNDACIÓN PRODINTEC

FÁBRICA DE FUTURO

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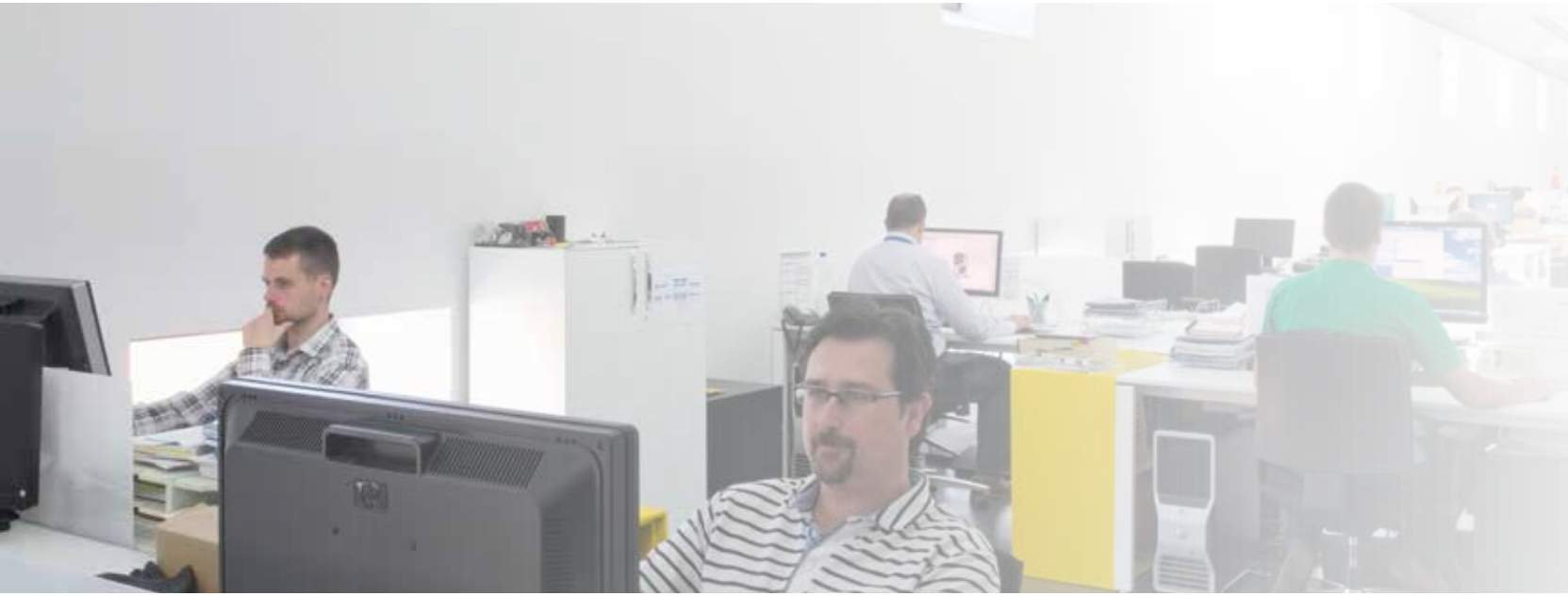
2013 Activity Report



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LETTER FROM THE CHAIRMAN

Ignacio López Aranguren
CHAIRMAN OF THE PRODINTEC FOUNDATION

Once again this year, we are pleased to share the Annual Activity Report of the PRODINTEC Foundation.

The presentation of the Report is a good time to reflect and assess on the progress made the previous year and reconsider future actions. The Foundation has now been running for nine years and it is fully consolidated in the Asturian society. 2013 has been an ongoing exercise to adapt to exceptional circumstances that had previously not been experienced; as is often said, "we have had to change everything to ensure that there are no changes in what matters", to be able to maintain the foundational values that one day inspired the creation of this project.

And, precisely the motor that has created this change has been something inherent in the DNA of PRODINTEC: creativity, ingenuity, innovation… Words that perhaps have been used too much lately, but without which no company will be able to survive in the coming decades regardless of what their activity is.

> FINANCIAL DISCIPLINE TOGETHER WITH THE MANAGEMENT OF EACH ONE OF THE BUSINESS LINES IN AGREEMENT WITH THE MARKET CONDITIONS, WILL HELP US LAY THE BASES FOR PRODINTEC TO BOOST ITS GROWTH FROM 2015 ONWARDS

Words which are void of meaning, if we do not associate them with the continuous effort of more than 60 people who believe in the project and commit to their work.

However, far from feeling that we have passed the test, we are aware that everything remains to be done, but the creation of a new Strategic Plan, drawn up with realistic criteria and achievable objectives, shows our commitment to our trustees, clients and employees. We are responsible for offering them the best professional development and the best service. Our roadmap will enable us to reaffirm our position even though the economic environment is still complicated.

Financial discipline together with the management of each one of the business lines in agreement with the market conditions, will help us lay the bases for PRODINTEC to boost its growth from 2015 onwards, when, the economy is foreseen to begin its upward trend.

Due to my passion and commitment to PRODINTEC, I could make an extensive and detailed presentation of all our activities, but, however, I prefer to invite you to discover them for yourselves over our website, diving and delving into those areas that interest you the most. I sincerely hope that you will enjoy surfing just as much as I have done.

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INTRODUCTION BY THE MANAGING DIRECTOR

Íñigo Felgueroso Fernández-San Julián
MANAGING DIRECTOR OF THE PRODINTEC FOUNDATION

If there is one positive conclusion that we can draw from the deep crisis experienced over the last few years, that is the need to give our full support to industry, innovation and technology. As of today, it seems that this conviction has permeated all fields of society deeply, although it should never have been lost.

This year – 2013 – has represented the end of a cycle in many senses, and the start of another.

On the one hand, the 2014-2020 period begins with the launch of the new European R&D programme Horizon 2020. This new programme commits to innovation and the importance, in Europe, of being able to transfer know-how to the market, crossing the so-called "valley of death". To this end, a series of enabling technologies have been defined, which must be key to achieve this ambitious objective. The starting point for PRODINTEC for this new period is very encouraging, and this is not the result of pure chance, as, over the last few years, we have carried out the necessary preparation and capacity-building to reach this moment in the best possible conditions. The strategic commitment maintained in time over these few years, consolidated in the development of advanced technologies in the field of manufacturing, relational capital and a team of professionals with a strong European vocation, must help us to tackle this period with renewed

> THIS NEW PROGRAMME COMMITS TO INNOVATION AND THE IMPORTANCE, IN EUROPE, OF BEING ABLE TO TRANSFER KNOW-HOW TO THE MARKET

enthusiasm. It is in our hands, now, to make the most of this decisive commitment to continue in the elite of innovation and technology in Europe

In line with the new European R&D programme Horizon 2020 and covering the same timeline, are the regional and national strategic R&D plans (new Science and Technology Plan of the Principality of Asturias), as well as the Smart Specialisation Strategy of the Regions.

2013 also coincides with the end our previous Strategic Plan and the need to establish a new one for this new cycle. That is why, throughout the whole of 2013, we have worked intensely to draw up a new Strategic Plan, which was presented to the Board of Trustees of the Foundation at the end of the year. And rightly so, this new Strategic Plan has taken the new R&D policies and plans launched on a European, national and regional level, very much into consideration. This year, too, progress has been made in the Strategic Alliance established in 2012 with the ITMA Foundation, to the extent that the new Strategic Plans of both Technology Centres have been developed in parallel and in a coordinated manner. The capacities of both plans have covered the Key Enabling Technologies (KETs) defined by Europe in its new Horizon 2020 programme. Thus, the combined organisational structure of both Foundations covers the fields of Advanced Materials, Nanotechnology, Photonics, Electronics, Industrial Biotechnology and Advanced Manufacturing, gaining critical mass and being able to thus offer industrial companies a broader working field that would have been impossible individually.

On an operational level and despite continuing to be entrenched in hard times, the activity level has been maintained in terms of generating R&D projects with industrial companies as well as in terms of the number of technological services. Likewise, the Centre has successfully ventured into new European competitive calls, demonstrating great potential for generating ideas as well as mobilising companies and public-private resources in R&D.

The majority of the construction work on the new R&D test centre for the vertical transport sector has been executed this year. This facility is singular due to its dimensions and with it, the Foundation will to be able to offer companies of the sector the possibility of improving their products, not just due to the tests that they will be able to conduct in the actual tower, but due to all the other additional technological capacities offered by the Centre.

Finally, I wish to thank the team of professionals that make up PRODINTEC for their effort, dedication and involvement in every day activity, making it possible for us to continue advancing and contributing, insofar as our possibilities allows us, to construct a better society. We also wish to thank the Trustees of the Foundation for their total support over the years and also our clients for continuing to place their trust in the Centre.

We say goodbye to 2013 and welcome 2014 with the new Strategic Plan, renewing our enthusiasm in the project, which is PRODINTEC, which will celebrate its tenth anniversary in the new year.

THE FOUNDATION

WHO WE ARE

The PRODINTEC Foundation is a private non-profit entity created in 2004 on the initiative of a group of firms in the region and the Regional Government and forms part of the network of Technology Centres of the Principality of Asturias.

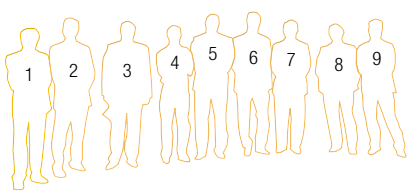
As the Technology Centre for Industrial Design and Production, our mission is "to foster the competitiveness of industrial firms by applying technological advances both to their products and to their manufacturing and management processes".

We obtained AENOR certification in 2005 in accordance with the UNE-EN ISO 9001:2000 standard (quality management systems) and the UNE 166002 standard (R&D&I management system), being the first technology system in Spain to receive this integrated certification. Furthermore, PRODINTEC Foundation was registered as an Innovation and Technology Centre (no. 99) by the Spanish Ministry of Industry on 27th March 2007.

Our slogan, *PRODINTEC Foundation Factory of Future*, faithfully mirrors the course we have followed over the last few years as well as our clear commitment to the future, fully in line with European trends in this field, as reflected in our Strategic Plan.

GOVERNING BODIES

The Board of Trustees guarantees that the Foundation fulfils the aims and actions laid out in its Statutes.



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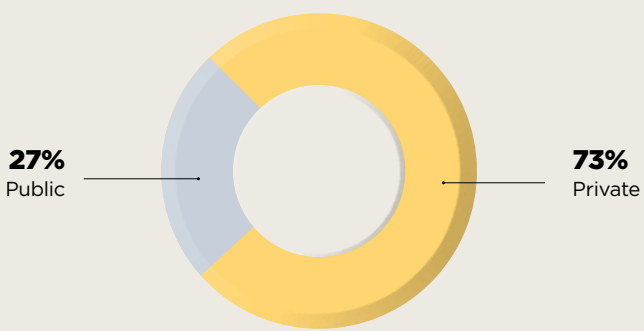
Breakdown of the Board of Trustees



Public-/private-sector participation on the Foundation's Board of Trustees

Human resources

As of 31st December 2012, there were 58 people working at PRODINTEC, between staff and interns from the University of Oviedo. We have also collaborated with the trainee practice scheme of the Gijón Educational Center no. 1, Industrial and Services Sector Vocational Training Integrated Centre and Revillagigedo Vocational Training Centre.

This figure represents the equivalent of 56.79 full-time employees throughout the year, including interns, who suppose 3% of the total.

Breakdown of staff

Staff characteristics as of 31st December 2013

QUALIFICATIONS	MEN		WOMEN		TOTAL
	nº	%	nº	%	
PhDs	3	8%	4	22%	7
5-year Degree Holders	19	48%	5	28%	24
3-year Degree Holders	11	28%	4	22%	15
Vocational Training	6	15%	4	22%	10
Bacclaureate or equivalent	1	3%	1	6%	2
Total	**40**	**100%**	**18**	**100%**	**58**
		69%		31%	100%
AVERAGE AGE		33.1		34.6	33.85

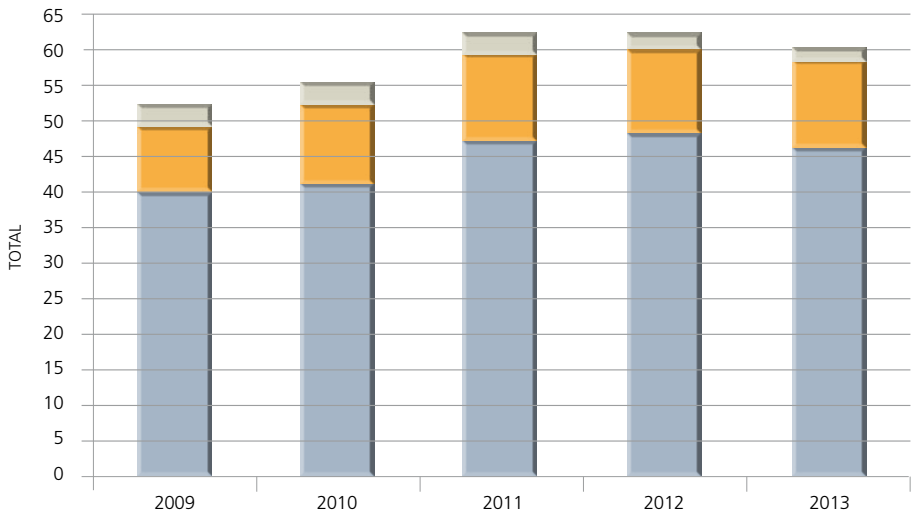
Changes in staff qualification standards over time

DEGREE HOLDERS

NON-DEGREE HOLDERS

INTERNS

Figures correspond to 31st December each year



Staff opinions

ÁNGEL DOBLADO

External Relations Area

What does PRODINTEC mean to you?

I have always compared PRODINTEC with a small melting pot, where engineers and scientists from different branches and specialities get together to create and give life to different prototypes and R&D&I projects. Here, companies, self-employed and inventors come to look for support, for a complement to their capacities, where they can develop their ideas and dreams. I am delighted to form part of it.

How would you describe your everyday work at PRODINTEC?

I suppose that from the start I have been a bit special here. I was the first person to work outside Gijon, in Madrid. With my colleagues supporting me from a distance, we began to create the "PRODINTEC universe", as I call it, outside Asturias. We opened an office at the Science Park in Madrid and following that, by continuously visiting companies and self-employed, we have gradually made a name for ourselves. Today, three years after I entered the company, my daily work consists in making sure that the companies, who are now customers, are satisfied with us and with our work, as well as in trying to extend the future network of customers by visiting and attending events and forums.

What would you highlight about your work at the centre?

Undoubtedly, and due to my past as a young entrepreneur, what stands out the most from my work here in PRODINTEC is the possibility of being able to provide SMEs and micro-enterprises with cutting-edge technology with which they can execute their development projects, in order to compete at the highest level on the global market today. We must not forget that access to such fashionable technologies as 3D printing, which for us forms part of our daily work, is still difficult and costly for the majority of the Spanish business fabric, which is mainly comprised of micro-enterprises and self employed. If it were not for centres such as ours, this access would be practically impossible for them, due to the high costs that they still represent.

Of all the projects that you have participated in, which is your favourite?

Well, this is a little like asking who you love the most, mummy or daddy. As a good "child" I have to say both. Well, the same occurs with projects and services that I have taken part in. I always try to make that project that I am currently working on the most important for me and my colleagues. But if I had to choose, I would say that undoubtedly my favourites are the ones where I have to deal with the entrepreneur, with the inventor, with the person who is really the soul of that idea. Undoubtedly, it is those brave people who, in these difficult years, with effort and persistence, have kept our failing industry afloat. And the fact that I can help them, even just a little bit, is what satisfies me the most.

YOANA LASTRA

IT Department

What does PRODINTEC mean to you?

It was my first opportunity to "properly" begin my working life. To begin with, I did not really know what PRODINTEC was, and what a foundation was. Today, almost 8 years after joining the organisation – PRODINTEC - and its team of people, they have become part of me. I believe that our motto of Factory for the Future represents our values and what PRODINTEC represents for society.

How would you describe your everyday work at PRODINTEC?

As a member of the Information Systems department I am responsible for managing the "brain" of PRODINTEC. With the development of new technologies, management and information systems have become essential for organisations, and even more so in a technology centre such as ours. All the projects that we offer companies have an ICT component so in my department there is no time to relax, although we try to find it to set ourselves new challenges that will help us improve and offer our customers, which, in this case, are the rest of my colleagues, a better service.

For the past four years I have also been responsible for Occupational Risk Prevention at PRODINTEC.

What would you highlight about your work at the centre?

Every workday represents a new challenge for me. My work mainly consists in keeping the systems in perfect conditions and giving my colleagues support. Needs vary a great deal from one project to another and this means that we have to look for new tools and methodologies that will help us get the job done.

What do you like best about working at PRODINTEC?

We have a multidisciplinary team, made up of young people, who are committed, who are willing to learn, who believe in what they are doing, and who, every day, try to find the right solutions to the different problems that society poses.

> "WE HAVE A MULTIDISCIPLINARY TEAM, MADE UP OF YOUNG PEOPLE, WHO ARE COMMITTED, WHO ARE WILLING TO LEARN, WHO BELIEVE IN WHAT THEY ARE DOING

LUIS PÉREZ

Process Engineering Department

What does PRODINTEC mean to you?

PRODINTEC is a technology centre that allows companies, and not just those from Asturias, to research, develop and innovate. We go to companies to propose new ideas, changes in current processes or products, quality control, in order to improve their productivity and competitiveness. Companies also come to us for us to help them produce new products or solve certain problems. Daily contact enables us to know their needs and the market needs.

How would you describe your everyday work at PRODINTEC?

In my group, we work on artificial vision systems, collaborative robotics, industrial software, control and process optimisation. Our daily work is very intense, as we work on several projects at the same time, whilst carrying out new proposals. The topics we address are very extensive, so every day we learn something new, and technical difficulties continuously appear that we have to solve.

What would you highlight about your work at the centre?

I would highlight the opportunity of working with new technologies. In some cases, we are participating in the development of the first applications of latest technologies or we may have even created that technology. We are working on European projects with the main robotics and aeronautical companies, for instance.

Of all the projects that you have participated in, which is your favourite?

There are always some projects that you like more than others due to the theme, the customer or the technology, and there are also others that you like less. As a technician, after spending hours and hours working on a development, when the result is finally delivered and the customer begins to use it or sell it, that project is the favourite at that time.

> WE ARE PARTICIPATING IN THE DEVELOPMENT OF THE FIRST APPLICATIONS OF LATEST TECHNOLOGIES

Facilities

PRODINTEC headquarters are situated in the INTRA area of expansion of Gijón Science and Technology Park. These facilities, officially inaugurated in November 2013, are the result of the work of rehabilitation of the former tobacco drying facility at the Universidad Laboral, thanks to a collaboration agreement between the European Union through ERDF, the Spanish Ministry of Science and Innovation and the Government of the Principality of Asturias.

These modern facilities, highly focused on improving the competitiveness of the manufacturing industry through technological innovation, boast the latest industrial innovation technologies for manufacturing products and processes and are located in a truly representative building of the valuable industrial heritage of both Gijón and Asturias, as is the Universidad Laboral's old tobacco drying facility.

A series of criteria has been taken into account in its refurbishing (reduction of emissions and gases, air quality, energy savings by means of a novel geothermal system, minimisation of light and sound pollution, reduction in water consumption, etc.) ultimately aimed at making PRODINTEC's facilities an example of a "factory of future" in this respect also: optimized, efficient, clean and with a low environmental impact.

These facilities occupy a parcel of about 1,600 sq m, with a usable area of almost 5,000 sq m, distributed in:

- Laboratories equipped with cutting-edge industrial design and advanced manufacturing process technologies.
- Technical office area
- Communications network
- Meetings, training and conference rooms
- Staff canteen/dining room
- A space reserved for housing spin-offs, i.e. innovating companies that have arisen from R&D activities and projects developed in collaboration with PRODINTEC.

As in previous years, we continue to be committed to and to invest in new technologies (equipment, software, etc.) that are relevant for the industrial sector, which then come to form part of the capabilities of our centre.

PRODINTEC has also an Electromagnetic Compatibility Laboratory (CEMLab), shared with the University of Oviedo, which is located on the campus of Viesques (Gijon-Spain), and an R&D Centre for vertical transportation, located also in Gijon, at Poligono Industrial de Porceyo.

Moreover, PRODINTEC has an office in Madrid, established in 2011, and located in Madrid Science and Technology Park.

Corporate social responsability

LABOUR SCOPE

Social benefits and reconciliation measures

At PRODINTEC, we continue to strive to develop measures that adapt to our employees' needs: flexible schedules, shorter working hours, subsidised catering services, in-situ language training, health insurance as a way of generating loyalty, etc.

Furthermore, in 2013, PRODINTEC has taken part in the creation of the "2013 Directory of Gijon businesses that support equality" of Gijon City Council. Its collaboration in municipal employment, training and economic promotion programmes, organised by the Council, has also been acknowleged.

Career development and safety

Training is an on-going priority at PRODINTEC. We have developed both a Performance Evaluation tool and a Career Plan that allows us, in agreement with our employees, to identify and meet training needs in a personalised way. At the same time as fostering the personal and professional development of our employees, this measure makes our organisation much more competent.

It is complemented by specific training in the field of Occupational Health and Safety so as to ensure that all of PRODINTEC's employees are optimally trained to carry out their work.

Performance evaluations allow us to measure the efforts we are carrying out in the field of instruction and training first-hand. All of PRODINTEC's staff carries out this evaluation on an annual basis (with a mid-year follow-up meeting) via a personal interview which, in addition to measuring personal and professional performance, allows us to come to an agreement regarding goals and to obtain feedback.

SOCIAL SCOPE

As is now traditional, during 2013 PRODINTEC collaborated with different entities in the dissemination of innovative culture via visits to our facilities or informative talks. These were aimed at groups of students of primary and secondary education, vocational training and university, as well as at groups of adults from the University of Oviedo's Mature Students Programme.

In addition, PRODINTEC sponsored the following events in 2013:

- 7th Patents and Utility Models Contest organized by CEEI Asturias.
- 4th Mile Knowledge Race organized by Gijón Science and Technology Park.
- 5th International Conference of Ergonomics and Psychosociology Conference organized by PREVERAS (Asturian Ergonomics Association), SIA (Italian Ergonomics Association), AEE (Spanish Ergonomics Association) and IEA (International Ergonomics Association).

Furthermore, the workers of PRODINTEC Foundation have collaborated, from the actual entity, with different charity causes and institutions throughout 2013, noteworthy of which are the following:

- Food collection campaign in favour of the Food Bank of Asturias (337.5 Kg).
- Mobile phone collection in favour of the Spanish association of patients with mitochondrial pathology.
- Collection in favour of the "Todos con Elena" (Everyone with Elena) platform to finance clinical trials to cure the Sanfilippo syndrome type B.

ENVIRONMENTAL SCOPE

Continuing with the waste reduction and management policy, and together with the already existing measures to recycle paper, board, containers and glass in the offices, throughout 2013, PRODINTEC has improved the spaces and procedures aimed at managing and classifying waste from the laboratories, making them user-friendly, as well as facilitating their subsequent management with own means, or, in the case of hazardous waste, through authorised agents.

Moreover, the continuous improvement process has been sustained, aimed at reducing the energy cost, optimising lighting and HVAC in our facilities.

4

OUR ACTIVITY

Organisational structure

PRODINTEC's organisational structure, as set out in the Strategic Plan 2011-2013, responds to the need to adapt to the organisation's growth (in terms of both staff and volume of projects and services undertaken) and to prepare it to continue to maintain the high levels of efficiency within the organisation.

PRODINTEC is now accordingly structured in four major areas:

EXTERNAL RELATIONS AREA

Centralises PRODINTEC's interaction with the market (searching for new business opportunities of national and international scope, identifying industrial needs, dealing with new clients...). This area also works in the drawing-up and development of R&D&I projects, mainly at an international level, in collaboration with industrial companies.

ADMINISTRATIVE-FINANCIAL AREA

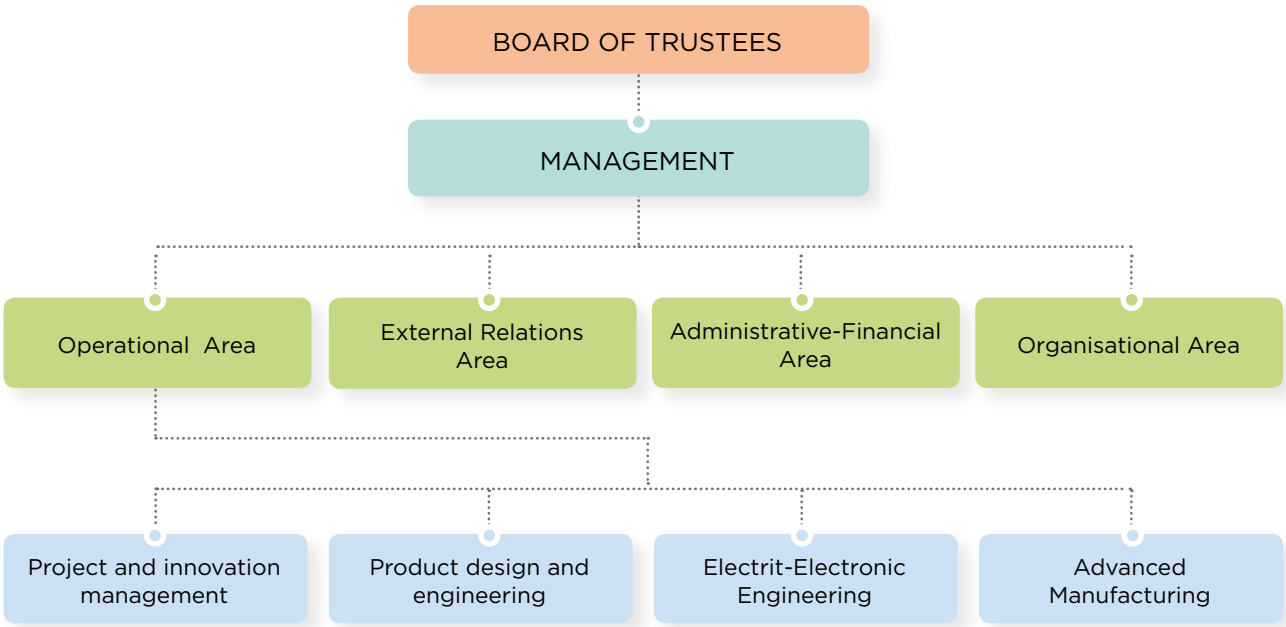
Is the economic and financial control of PRODINTEC, working —in coordination with the General Manager— on short-, medium- and long-term investment strategies. These undertakings are complemented by others related to the Foundation's legal and fiscal management.

ORGANIZATIONAL AREA

Is the one in charge of supporting all the other areas at PRODINTEC. Specifically, it is responsible for running the internal quality, R&D&I management system, the management and maintenance of information systems, the telecommunications network, access management, compliance with work safety and industrial hygiene protocols, and the management of human resources

OPERATIONAL AREA

Constitutes PRODINTEC's technological "muscle". It is composed of technicians who are specialists in different technologies and their applications in industrial sectors


BOARD OF TRUSTEES
MANAGEMENT
Operational Area
External Relations Area
Administrative-Financial Area
Organisational Area
Project and innovation management
Product design and engineering
Electrit-Electronic Engineering
Advanced Manufacturing

PRODINTEC focuses its activities on four main action lines:

1. PROJECT AND INNOVATION MANAGEMENT

PRODINTEC places the following tool and services at the disposal of companies that require systematic management of their innovation processes.

R&D&I Project Management

The project management methodology developed in-house by PRODINTEC enables the execution, monitoring and control of R&D&I projects with a guarantee of success, while at the same time allowing the user to know the value obtained through these projects.

Based on this methodology and in conjunction with Futuver Consulting, we have developed IDinet®, an intuitive software tool to manage not only projects, but all the activities of an R&D and Innovation department. IDinet® facilitates the design, implementation and maintenance of an R&D&I management system in line with the series of standards UNE 166000.

Technology protection

At PRODINTEC, we help companies right from even before they start designing a new product by conducting prior state-of-the-art studies to ensure that there is no existing product with the same features that has been patented earlier, but has not yet come onto the market. We also provide support in all the steps prior to the application for an industrial property title (patent, utility model, industrial design, etc.), whilst ensuring confidentiality and neutrality at all times, as in all the work we carry out.

Technology surveillance and forecasting

The goal we pursue at PRODINTEC with respect to technology surveillance and foresight is to turn information into innovation, i.e. to help companies transform the information they collect into ideas to improve their organisation, making it more competitive, more capable and better positioned with respect to its competitors.

PRODINTEC has developed an in-house methodology for systematizing strategic monitoring processes (the CENTINELA methodology), applicable to any organisation. Employing this methodology, we help companies define their surveillance strategy (what, where, how and when to carry out surveillance) or conduct made-to-order studies on a particular technology of interest. Furthermore, PRODINTEC can also carry out an analysis of technology surveillance studies and incorporate them in the company's Strategic Plan.

Internationalisation of R&D&I

At PRODINTEC, we offer companies our experience in participating in support programmes for cooperating with foreign entities in R&D&I activities (e+ International Technological Cooperation Programmes, Framework Programmes, Interreg, Manunet, etc.), resulting in a reduction in the risks and costs associated with such initiatives, apart from the perspective we have acquired as a result of taking part in a large number of Spanish and European Technology Platforms – in many cases as members of the Steering Committee.

2. PRODUCT DESIGN AND ENGINEERING

At PRODINTEC all the product design stages are addressed:

Strategic definition

The product to be developed is designed taking into account the needs to be satisfied, the profiles of the users and purchasers targeted, as well as the advantages offered with regard to other market products. The main environmental aspects of the product are analysed. This analysis will be maintained throughout the product's life span.

Concept design

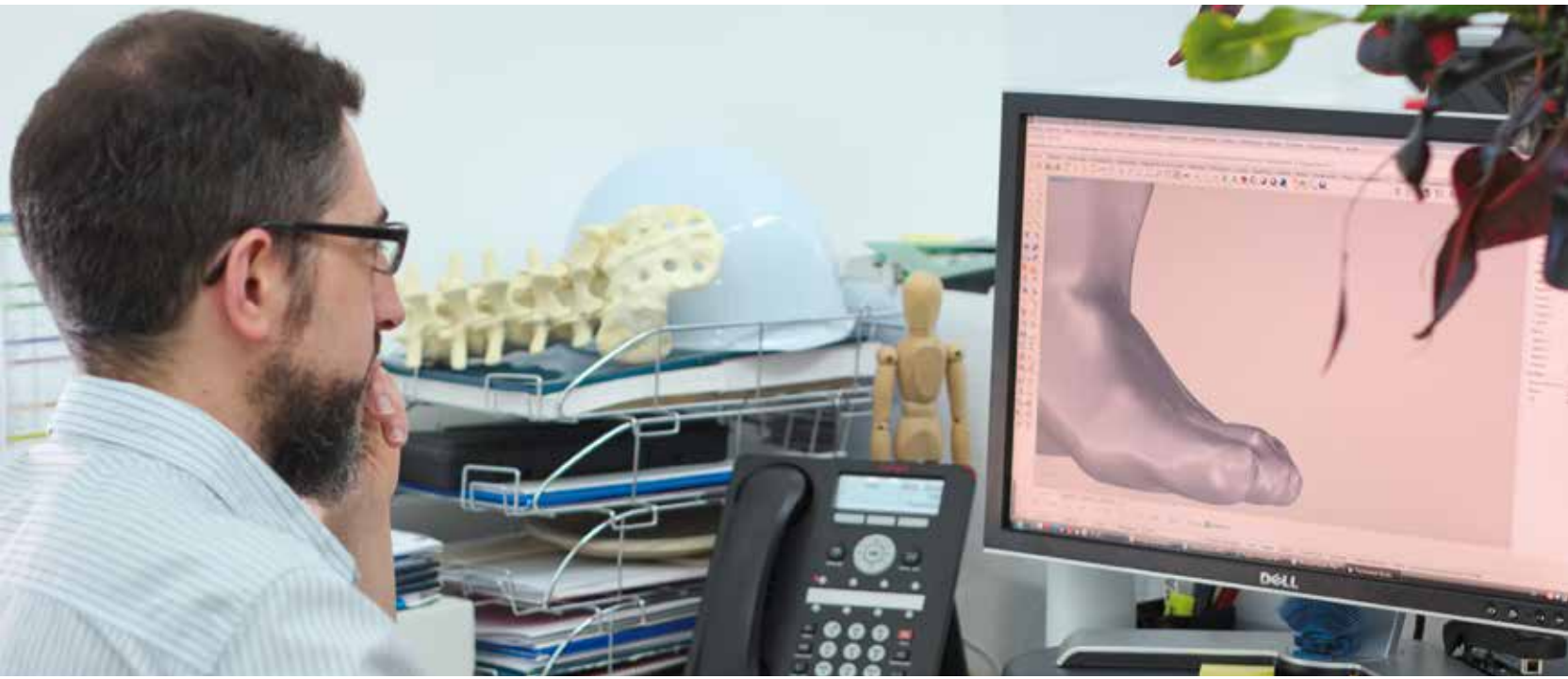
This is an analytical and highly creative phase to generate different product concepts on the basis of all the information gathered in the previous stage. The most appropriate option is chosen in terms of limitation and objectives set.

Detailed design

On the basis of the concept alternative chosen, we identify the technical specifications to manufacture the product (technical report, assembly drawings, cutting planes, elevations, floor layouts and sections in different scales…).

Technical and engineering office of the product

The product is validated either through calculations and simulations to reproduce situations that are difficult to test in a physical way, or through physical pieces (with the help of the manufacturing technologies available at our workshop) to obtain a technical solution previously adjusted and contrasted.



Industrialization

Before the series production phase, we define the activities needed to manufacture the product, adapting and optimizing the production means.

We can fully assume the execution of these tasks or support companies on an ad-hoc basis in the stages where they consider it necessary, always taking into consideration aspects such as the form, aesthetics, material, safety factors, manufacturability, cost, mechanical strength, durability or usability of the product, which must be analysed on the basis of its particularities (target market, industry sector, business and so on).

At PRODINTEC, we consider industrial design to be crucial for the successful development of new products, which is why we also analyse the integration of industrial design in the organisational chart of companies and propose actions to be taken to improve this integration.

To achieve this goal, we possess several methodologies – many of which have been developed in-house – that can be integrated in the development of new products resulting from design philosophies like Green Design, Affective Design, Design for All, Design for the Elderly or Design for Manufacture and Assembly.

3. PROCESS ENGINEERING

At PRODINTEC we are experts in helping other companies improve their productivity by applying innovative tools, technologies and solutions:

Improvement of production processes

PRODINTEC has developed its own diagnostic tool for the productive system of a company: GAP (the Spanish acronym for Advanced Production Management). This tool, combined with the carrying out of a Value Stream Mapping (VSM), enables a clear definition of the initial situation of the production system (defined as the set of organisational processes of the company ranging from when the customer places an order until it is delivered and the systematic procedures reflecting the situation of the factory at all times), objective measurement of current productivity, quantification of any possible improvement, the proposing of solutions (based on techniques and tools such as Lean Production, TOCs, 6 sigma , TPM, SMED, JIT, etc.) and the evaluation of the result after its implementation.

Plant reengineering

This consists in the design of new plant layouts or in the redesigning of existing layouts aimed at defining an optimal configuration that allows the elimination of a great deal of wastage (operations that do not contribute added value) associated with overproduction, downtimes, transport, processing, stock, movements, defects, etc.

Simulation of industrial processes

This analysis and complex system design tool can simulate the behaviour of a system under different circumstances and analyse potential changes and their consequences before carrying them out.

Simulation helps the user make informed decisions comparing different alternatives and reducing wastage before the start-up of the production line.

Workstation design

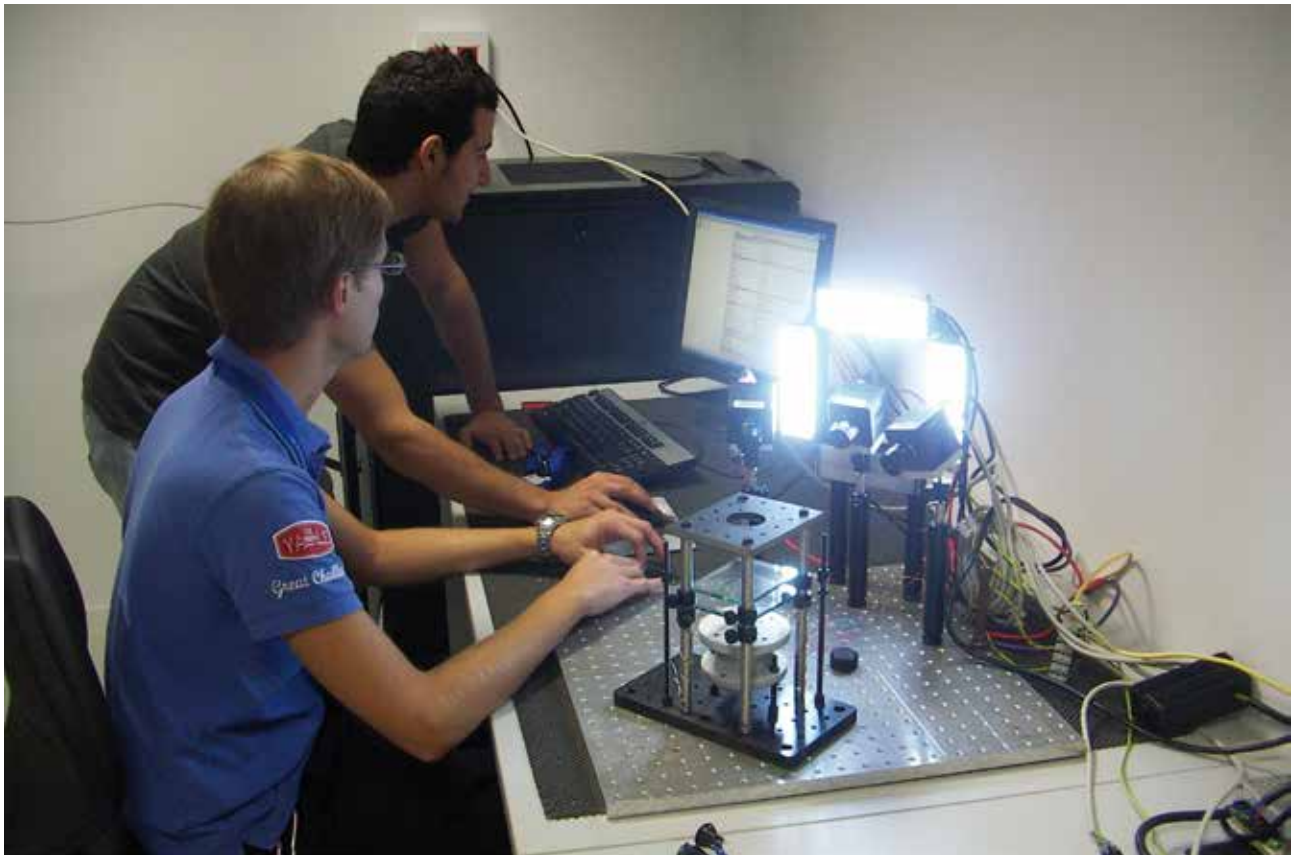
The simulation of workstations allows a detailed analysis of any job, optimising parameters such as distances and the location of resources and validating the set-up from the point of view of ergonomics.

We use this tool at PRODINTEC to analyse and validate new processes without having to resort to pilot workstations, demonstrating the operation of a manual process or workstation, training workers or reducing costs and times (time to market and time to volume).

Automation of industrial processes

Automation of industrial processes enables companies to optimize resources, add value to their facilities, improve productivity, reduce costs and, in short, obtain returns on their manufacturing processes.

At PRODINTEC, we assume the complete or partial automation of industrial processes via the integration



of actuators, sensors, PLCs, communication systems, robotics, artificial vision, etc., as well as the development of customised applications for instrumentation, control and measurement (man-machine interfaces in a graphic environment, data acquisition, process control, etc.).

Optical 3D inspection system

Productivity and quality are closely linked. Therefore, at PRODINTEC we possess the necessary technology base and experience to enable us to take on any challenge related to artificial vision within a broad range of applications with a guarantee of success: dimensional inspection, completeness testing, assembly verification, identification, traceability, etc.

We are able assume the entire implantation project, from the initial moment of decision making to the final stage of installation and commissioning, including the intermediate stages of detailed definition of the system in question, while always adapting to the particular requirements of customers and their production processes.

Dimensional metrology

Measuring is necessary to improve. At PRODINTEC, we are experts in defining and developing R&D solutions based on industrial metrology, custom-made to the needs of companies.

To do so, we have specialised staff and cutting-edge equipment that enable us to tackle a broad range of subjects related to industrial metrology with a guarantee of success.

CEM LAB: Electromagnetic compatibility laboratory

Electromagnetic compatibility (EMC) is the branch of technology that studies the capacity of any device to work correctly in its environment without causing disturbances in other devices or being affected by the emissions of such devices.

PRODINTEC provides counselling to companies on the legislation framework in force in terms of electromagnetic compatibility and CE marking, as well as on the design of electrical and electronic products, focusing on the final compliance of the norms. We also have a fully equipped laboratory (shared with the University of Oviedo) to carry out compatibility tests.

Maintenance support technologies

Within the field of industrial maintenance, it is crucial to move on from traditional corrective repair (repairing when something breaks down) to preventive and even predictive maintenance.

At PRODINTEC, we have two maintenance support technologies that, moreover, do not require production line stoppages: thermography, which allows differences in temperature on the surface of different points or objects to be seen, and high-speed filming, a very useful tool for detecting (often random) mechanical failures produced in mechanisms in high-speed movement (labelling machines, mechanical and pneumatics handling systems, lubrication streams, mist mixtures, etc.).

4. ADVANCED MANUFACTURING TECHNOLOGIES

At PRODINTEC, we are experts in the following manufacturing technologies:

CAD/CAM systems

CAD/CAM programs facilitate the development of advanced machining tasks, shortening the time needed to present a quote, programming complex paths and enabling the simulation of all the movements of tools and the machine in order to avoid collisions and minimize breakdowns and costs.

At PRODINTEC, we are experts in the use of a wide variety of CAD/CAM systems, which allows us to offer personalised solutions, advise our customers on optimum machining paths (adapted to any geometry) and set-ups, and, in short, help our customers get the most out of their CAM systems.

Milling

The process of milling involves applying cutting and shear stresses by means of a tool acting on the raw material to obtain the end piece.

At PRODINTEC, we have a fully equipped robotic cell for automated manufacturing via the machining of large parts (measuring up to several metres), with accuracies of tenths of a millimetre and in materials such as resin, wood, expanded polystyrene, etc.

The robot's great flexibility of movement allows us to produce complex-shaped parts (which would be impossible to obtain using other fabrication techniques) with relative ease and with a lower investment compared to a traditional milling machine.

We also have a high-speed 5-axis milling machine that allows us to produce very high precision parts with complex geometries in any material: up to HRC 65 steels, stainless steels, aluminium, copper, bronze, brass, molybdenum, super alloys, plastics, resins, ceramic materials, wood. etc.

Additive manufacturing

Additive manufacturing consists in the manufacture of parts from a 3D model without the need for moulds or tooling of any kind by means of the depositing of layers of powdered material and its subsequent consolidation, which may be performed by laser sintering, ultraviolet light curing or the addition of a binder, depending on the technology employed.

At PRODINTEC, we have additive manufacturing technologies to produce parts in a wide variety of materials: metals (stainless steel, tool steel, chrome-cobalt, etc.), polyamide (pure and filled with aluminium), resins (with varying degrees of springiness), ceramics, etc. In addition, our technicians are experts in redesigning parts to maximize the potential of this technology and thus achieve improved performance.

The advantages of this technology include the ability to reproduce any geometry imaginable, providing an immediate response to changing market needs and

meeting the increasing consumer demand for differentiation and customization of products.

Additive manufacturing is particularly popular in the fields of medicine (manufacture of medical implants, customised orthopaedic products and surgical tools, and surgical planning and scheduling), moulds and dies (manufacture of parts with internal cooling channels, inserts or hybrid moulds), aerospace and automotive (manufacturing of parts with lightweight structures or internal channels subject to frequent design changes), architecture and topography (model making) and education (model making).

Microtechnologies

At PRODINTEC, we are specialists in two complementary microtechnologies: micromachining and microinjection.

Just like machining, the process of micromachining involves applying cutting and shear stresses by means of a milling tool acting on the raw material to obtain the end piece. The difference is that this technology works with accuracies in the micron range.

We work with all kinds of materials such as HRC 65 hardness steel, stainless steel, ceramics ("green", pre-sintered and sintered), glass, plastics, wood, resins, copper, graphite, etc.

Microinjection technology, on the other hand, allows the injection of high precision microparts in thermoplastics, metals and ceramic materials using micromoulds. These are obtained by combining the available technologies at PRODINTEC, such as additive manufacturing and micromachining, thus allowing us to manufacture high performance moulds, minimizing the time and cost of each injected piece while improving its quality.

The moulded parts can have a maximum volume of 1.1 cm3 and contain geometries in the micron range. These technologies have applications in a wide variety of fields: biomedicine, watchmaking, automotive, electronics, telecommunications, optics, consumer goods, electromechanical systems, etc.

Incremental sheet metal forming

Incremental sheet metal forming is an automated process which consists in forming a metal sheet by applying localized deformations using a free-moving spherical tool, without the need to invest in stamping or embossing tools.

PRODINTEC's robotic cell is equipped to work with this technology, allowing us to carry out the entire process of obtaining a part, from the CAD file to manufacturing (with and without a die) in steel and aluminium up to 3 mm thick with a tolerance of up to 0.5% of the nominal size.

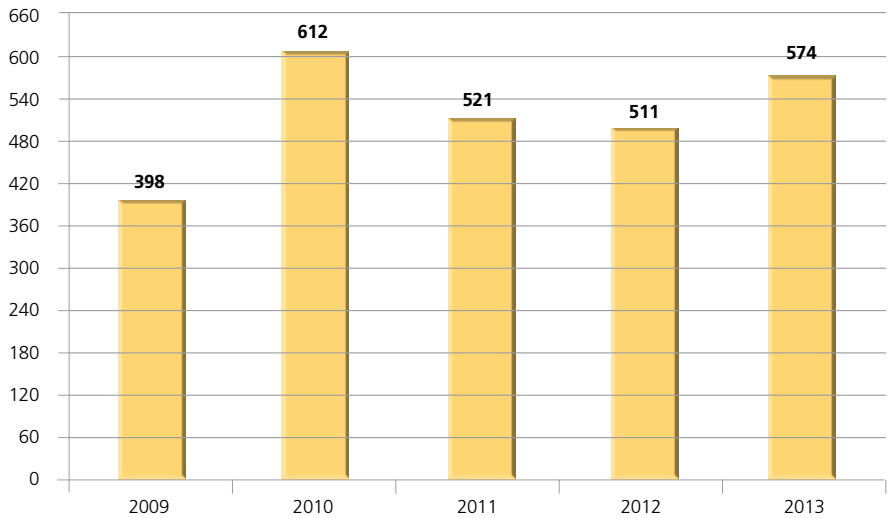
Industrial robotics

At PRODINTEC, we are working on the use of industrial robotics and novel applications with a high degree of complexity employing the powerful applications we possess, both for programming using specific CAM software and for simulating facilities. This means we are able to deliver the development and automation of any process in which the use of robotics is crucial.

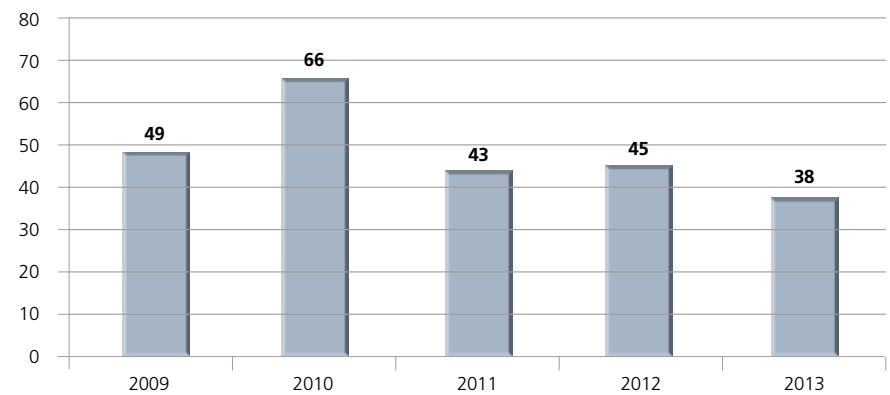
In addition, our robotic cell, although initially focused on manufacturing by means of machining and incremental sheet metal forming, is highly flexible, thus enabling its use as a pilot plant for process validation.

R&D&I Projects and Technology Services

Number of technology services provided during each year

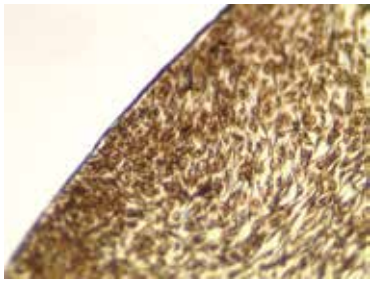


Number of R&D&I projects provided during each year



Relevant projects

SYLCOR



Summary: Development of artificial corneas for use in human pathology, by means of advanced therapy techniques, such as tissue engineering, as well as secondary products that help in the preservation, growth, regeneration, preparation and personalisation of cornea replacements.

Consortium: Fernández-Vega Eye Institute (Asturias-coordinator), MBA (Asturias), University of Oviedo (Asturias), Murcia Institute of Agri-Food Research and Development IMIDA (Murcia) and PRODINTEC Foundation (Asturias).

Funding programme: INNPACTO – Spanish Ministry of Economy and Competitiveness (grant agreement no. IPT-2012-1029-010000).

Budget: 1.91 M€.

Duration: August 2012 – December 2015

CALIX

New generation of calibrators for optimised profile extrusion

Summary: Development of new technologies based on additive manufacturing (3D printing) in order to obtain calibrators with cooling channels and internal conduits to optimise the hot plastic profile production process by extrusion.

Consortium: IMVOLCA (Cataluña – coordinator), Extruplesa (Aragón) and PRODINTEC Foundation (Asturias).

Funding programme: INNPACTO – Spanish Ministry of Economy and Competitiveness (grant agreement no. IPT-2012-1051-020000).

Budget: 0.36 M€.

Duration: September 2012 – August 2014.

VALERI

Validation of Advanced European Robotics in Industrial Manufacturing Operations

Summary: Development of a new mobile and autonomous movement robot to help workers in the assembly of aerospace components, working hand in hand with them at the production plant and with high safety standards.

Consortium: Fraunhofer IFF (Germany-coordinator), Airbus Military (Spain), FACC (Austria), IDP Systems and Applications (Spain), KUKA Laboratories (Spain), Profactor (Austria) and PRODINTEC Foundation (Spain).

Funding programme: Seventh Framework Programme – European Commission (grant agreement no. 314774).

Budget: 5.6 M€

Duration: November 2012 – October 2015.

CAPP4SME

Collaborative and Adaptive Process Planning for Sustainable Manufacturing Environments

Summary: Development of an innovative knowledge-based Computer Aided Process Planning (CAPP) in order to minimise cost and improve adaptability, responsiveness, robustness, and sustainability of manufacturing processes. Development of an industry-relevant demonstrator for results validation using real-world cases from SMEs.

Consortium: KTH Royal Institute of Technology (Sweden-coordinator), Coventry University (UK), University of Patras (Greece), Cranfield University (UK), Sandvik Coromant (Sweden), Incontec (Germany), Formtec (Germany), Asturfeito (Spain), Cameco Sandviken (Sweden), Powerkut (UK) and PRODINTEC Foundation (Spain).

Funding programme: Seventh Framework Programme - European Commission (grant agreement no. 314024).

Budget: 4.97 M€

Duration: January 2013 – December 2015.

VALUE4NANO

Industrial valorization of strategic value chains for nano-enabled products

Summary: Development of an Implementation Roadmap of four market-driven value chains in order to develop successfully and sustainable nano-enabled products. The Roadmap will include business modelling and planning for a set of pilot lines and will involve strategic industry and other stakeholders.

Consortium: D'Appolonia S.p.A. (Italy – coordinator), NANOfutures a.s.b.l. (Belgium) and PRODINTEC Foundation (Spain).

Funding programme: Seventh Framework Programme - European Commission (grant agreement no. 608684).

Budget: 1.03 M€.

Duration: September 2013 – August 2015.

INTERACT

INnovaTive Enzymes and polyionic-liquids based membRAnes as CO_2 Capture Technology

Summary: Development of the technological basis for advanced CO_2 separation both for large scale operation as well as for smaller emission sources by combining new materials for CO_2 capture i.e. membranes, highly efficient nanomaterials and biological absorbents with innovative technologies.

Consortium: Technical University of Dortmund - Laboratory of Fluid Separations (Germany – coordinator), Technical University of Dortmund - European Project Office (Germany), Technical University of Denmark - Center of Process Engineering and Technology (Denmark), Technical University of Denmark - Center for Energy and Resource Engineering (Denmark), IK4-CIDETEC Research Alliance (Spain), Solvionic AS (France), Institute of Chemical Engineering of the Polish Academy of Sciences (Poland), SINTEF Foundation - Department of Energy Conversion and Materials (Norway), Catholic University of Leuven - Centre for Surface Chemistry and Catalysis (Belgium), SUPREN GmbH (Germany), Novozymes North America Inc. (USA) and PRODINTEC Foundation (Spain).

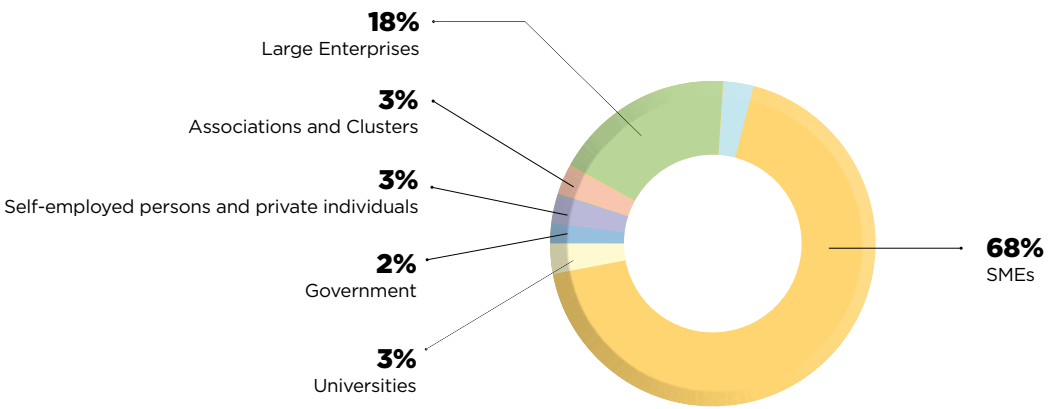
Funding programme: Seventh Framework Programme - European Commission (grant agreement no. 608535).

Budget: 6.2 M€

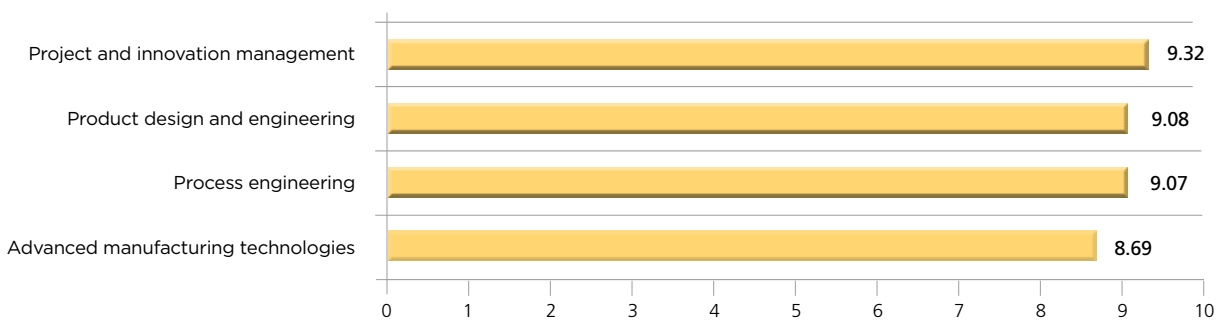
Duration: September 2013 – February 2017.

Client Portfolio

Client portfolio in 2013 by type of client



Levels of client satisfaction



Our clients' opinions

ORTOALRESA

What is Ortoalresa?

Ortoalresa is a manufacturer of laboratory equipment specialised in centrifugal equipment. The origins of Ortoalresa date back to 1949, and, although the company has undergone an in-depth transformation, its philosophy remains the same, that is, to offer novel solutions in the field of centrifugation. In this sense, innovation is crucial and guides every action carried out. This attitude has taken Ortoalresa to a position as world leaders in the manufacture of lines such as equipment for oil and its accessories, where priority is given to the safety of equipment in high risk environments.

What kind of projects do you implement with PRODINTEC?

We are currently working on the identification of needs and improvements of the suspension system of a laboratory centrifuge, whose objective is to reduce noise and vibration transmitted to the table where the equipment is installed.

This study addresses the assessment of the current system, the execution of a mechanical study in order to be able to parameterise the design of the system and give advice on whether the system used is the most adequate for this application. Ideas will also be provided to redesign the suspension system, in order to reduce the noise produced and the transmission of vibration to the table where the equipment is installed.

What does working with a technology centre like PRODINTEC bring to you?

Resources and knowledge that our company, an SME, cannot have due to lack of financial resources. Resources, because their technical and human means are comparable with those of large engineering development companies, and knowledge, due to their highly qualified personnel with experience in the mechanical engineering fields. These characteristics, which, for an SME such as ours, are very difficult to incorporate into its structure, are necessary to provide the products we manufacture with an added value.

What would you highlight about what PRODINTEC does for Ortoalresa?

The eagerness to understand our problems and try to provide solutions from different viewpoints that are very different to ours. An innovative vision, with a professional perspective and detached from the solutions already provided by us.

MICRUX TECHNOLOGIES

What is MicruX Technologies?

MicruX Technologies is an innovative technology-based company engaged in the design, development and production of miniaturised and portable analytical devices, based on Lab-on-a-Chip (LOC) technologies for research and teaching activities in the field of microfluidics and electrochemistry.

Lab-on-a-Chip technologies permit the miniaturisation of analytical systems, providing novel solutions for research. The MicruX product portfolio provides all the necessary tools to be able to start work with microfluidic and electrochemical systems.

What kind of projects do you implement with PRODINTEC?

MicruX has been collaborating with PRODINTEC practically from the very start. The work carried out over these five years of activity has varied a great deal, including brand and product design, as well as electronic engineering consultancy, CE marking services (equipment electromagnetic compatibility tests), R&D management consultancy services (international proposals), 5-axis machining services, manufacture of housings using additive manufacturing technologies, etc.

What does working with a technology centre like PRODINTEC bring to you?

PRODINTEC permits access to innovative and cutting-edge technologies on a global level as well as to services that do not exist in the region. It is very important for a technology-based company such as MicruX, with intensive R&D activity, to have technological partners that permit access to this type of technologies at a competitive price.

What would you highlight about what PRODINTEC does for MicruX Technologies?

The people that do this. In my opinion, the secret to carry out a good job is to always have a highly qualified team of professionals, who use their know-how and experience in the best way possible. With respect to our personal experience, I would highlight two points: on the one hand, the use of the latest manufacturing technologies to carry out R&D activities, thus generating joint know-how that has enabled us to advance towards new and innovative products. And, on the other hand, the collaboration in managing international projects, as this is currently one of its strong points. PRODINTEC has now become a benchmark in Europe in additive technologies, and it is an active member of several European platforms. This fact is undoubtedly extremely beneficial for the companies of Asturias, as it provides a gateway to access highly competitive European funds.

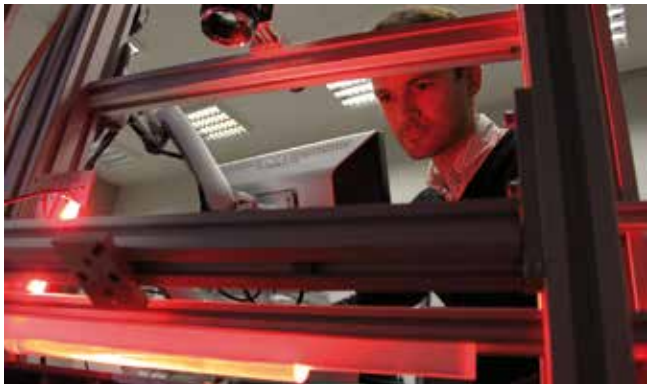
PROFACTOR

What is PROFACTOR?

Profactor is a non-profit research organisation. The main focus of our activities is research in production technologies. Our core competencies are in the fields of machine vision for industrial inspection, sensor-based adaptive robotics and functional surfaces and nanostructures. In these fields we are developing technologies with strategic partners from industry and academia with the goal of increasing the competitiveness of the European industry. Recent advances that we have made include machine learning methods for trainable inspection systems, modular robots that cooperate with humans and new inks for ink-jet printing with a specific metallic effect. Profactor has been and still is very active in European research from Framework Program 4 up to Horizon 2020. We are cooperating with partners of all over Europe and often act as coordinators in such projects.

In which fields or projects are you collaborating with PRODINTEC?

Our cooperation with PRODINTEC almost dates back to its founding in 2004. Very soon afterwards we got in touch related to additive manufacturing technologies and rapid prototyping, which is still a stronghold of PRODINTEC. This cooperation took place in a European research project aimed at predicting the aesthetic properties of visual and tactile textures through computational models. PRODINTEC became a very important partner in that project and their ability to manufacture arbitrary textures quickly and with high precision was a key contribution to the project. In the following years our cooperation shifted more towards technologies such as 3D vision for inspection of complex assemblies, where the combined competencies of PRODINTEC and Profactor proved to be a valuable asset. In the most recent project the technologies in 3D vision are used to guide mobile robot manipulators through complex tasks in the aerospace industry.



What, in your opinion, are the strengths of PRODINTEC?

In all the projects that we have done together, PRODINTEC proved to be a very reliable partner, delivering what was promised by the time it was promised. This makes cooperation an easy task and is rarely found throughout the European research community. On the technical side we have always seen a willingness to address problems in a constructive and creative fashion, that helped to achieve the project's goals.

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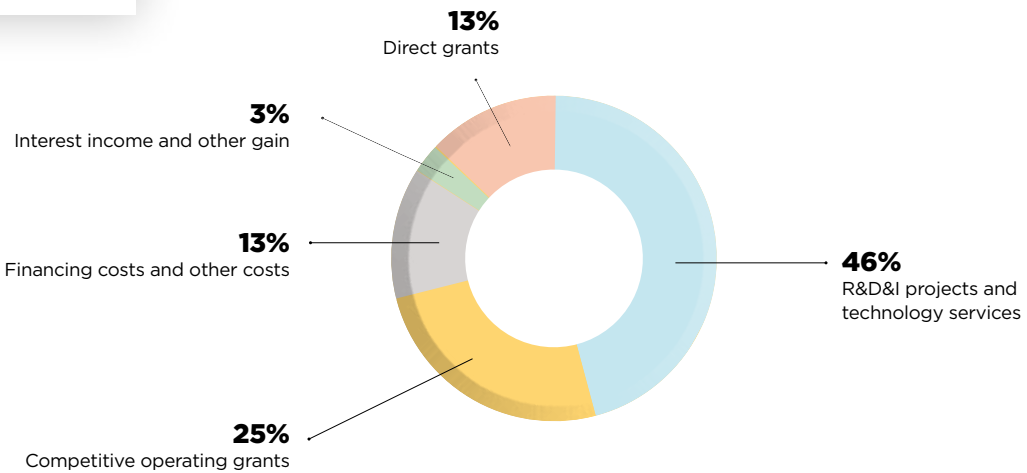
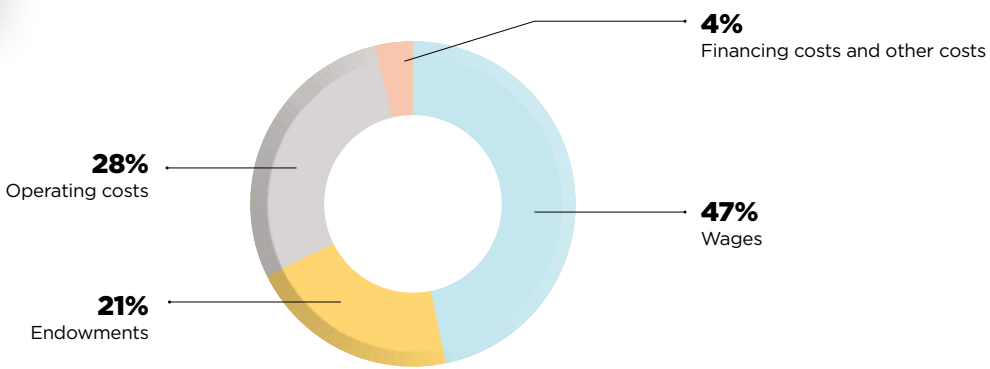
FINANCIAL REPORT

Income and expenses

Type of income 2013



Type of expense 2013



Balance sheets

Profit and loss account

CONTINUING OPERATIONS	
Turnover due to the entity's own activity	3,763,064.32
Works undertaken by the entity on its assets	63,344.90
Wages	-1,868,457.96
Other business expenses	-1,224,739.18
Fixed asset depreciation	-851,504.27
Grants, donations and bequests of capital transferred to the profit/loss of the period	0.00
Deterioration and result due to disposals of fixed asset	-589.86
One-off revenues	-8,659.25
OPERATING PROFIT	**-127.541,30**
Interest income	9,200.77
Financing costs	-9,956.00
Differences in exchange rates	-396.14
Deterioration and result due to disposals of financial instruments	-29,960.50
FINANCIAL STATEMENT	**-31,111.87**
PRE-TAX PROFIT	**-158,653.17**
SURPLUS FOR THE PERIOD	**-158,653.17**

Statement of assets and liabilities

ASSETS

NON CURRENT ASSETS	7,789,972.20
Intangible fixed assets	530,222.34
Material fixed assets	7,222,865.59
Long-term financial investment	36,884.27
CURRENT ASSETS	**6,897,245.21**
Stock	3,409.89
Trade and other receivables	5,533,208.25
Short-term investments in group and associated companies	48,354.41
Short-term accruals	5,528.38
Cash and other equivalent liquid assets	1,306,744.28
TOTAL	**14,687,217.41**

NET ASSETS AND LIABILITIES

NET ASSETS	10,543,433.57
Equity	1,412,560.77
Grants, donations and bequests received	9,130,872.80
NON CURRENT LIABILITIES	**761,739.47**
Long-term provisions	64,459.85
Long-term debt	697,279.62
CURRENT LIABILITIES	**3,382,044.37**
Short-term provisions	16,178.77
Short-term debt	1,333,591.49
Accounts payable and other payables	2,032,274.11
TOTAL	**14,687,217.41**

Audit Report

On 18th June, the entity CENTIUM AUDITORES, S.L., registered under No. S1315 at the Official Register of Auditors of Spain, certified the audit of the annual accounts corresponding to the financial year 2013 of the PRODINTEC Foundation.

CENTIUM
auditores

INFORME DE AUDITORIA DE CUENTAS ANUALES

Al Patronato de la
FUNDACIÓN PRODINTEC

1. Hemos auditado las cuentas anuales de la FUNDACIÓN PRODINTEC (en adelante la Fundación), que comprenden el balance de situación al 31 de Diciembre de 2013, la cuenta de pérdidas y ganancias y la memoria correspondientes al ejercicio anual terminado en dicha fecha. El Presidente del Patronato de la Fundación es responsable de la formulación de las cuentas anuales de la entidad, de acuerdo con el marco normativo de información financiera aplicable a la misma (que se identifica en la Nota 2.1) de la memoria adjunta) y, en particular, con los principios y criterios contables contenidos en el mismo. Nuestra responsabilidad es expresar una opinión sobre las citadas cuentas anuales en su conjunto, basada en el trabajo realizado de acuerdo con la normativa reguladora de la actividad de auditoría de cuentas vigente en España, que requiere el examen, mediante la realización de pruebas selectivas, de la evidencia justificativa de las cuentas anuales y la evaluación de si su presentación, los principios y criterios contables utilizados y las estimaciones realizadas, están de acuerdo con el marco normativo de información financiera que resulta de aplicación.

2. En nuestra opinión, las cuentas anuales del ejercicio 2013 adjuntas expresan, en todos los aspectos significativos, la imagen fiel del patrimonio y de la situación financiera de la Fundación Prodintec al 31 de Diciembre de 2013, así como de los resultados de sus operaciones y de sus flujos de efectivo correspondientes al ejercicio anual terminado en dicha fecha, de conformidad con el marco normativo de información financiera que resulta de aplicación y, en particular, con los principios y criterios contables contenidos en el mismo.

Oviedo, a 18 de junio de 2014

CENTIUM AUDITORES, S.L.

Daniel Martínez Fernández
Socio-Auditor de Cuentas

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valladolid@centiumauditores.com

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RELATIONAL CAPITAL

List of firms or bodies with we have established significant agreements or collaborations:

ANSYS	FADE FEDERACIÓN ASTURIANA DE EMPRESARIOS Asturian Federation of Businessmen FADE	Club Asturiano de la Innovación Asturian Innovation Club	ASOCIACION DE INVESTIGACION DE INDUSTRIAS CARNICAS PRINCIPADO DE ASTURIAS Asturian Meat Industry Research Association ASINCAR-AIICPA
CLUB asturiano de calidad Asturian Quality Club	bt RED Asturiana Asturian Technology-Based Companies Network	CEEI Business Innovation Centre	eos e-Manufacturing Solutions eMP e-Manufacturing Partner EOS e-Manufacturing Solutions
NANOfutures European Technology Integrating and Innovation Platform on Nanotechnology NANO*futures*	MINAM Micro- and NanoManufacturing European Technology Platform for Micro- and Nano-Manufacturing MINAM	RM PLATFORM European Technology Platform for Rapid Manufacturing AM-Platform	MANUFUTURE-EU European Technology Platform MANU*FUTURE* – EU
FEMETAL FEDERACIÓN DE EMPRESARIOS DEL METAL Y AFINES DEL PRINCIPADO DE ASTURIAS Federation of Metal and Related Product Companies in the Principality of Asturias FEMETAL	Cotec Foundation for Technological Innovation COTEC	FUNDACIÓN METAL ASTURIAS Foundation for Training, Qualification and Employment in the Metal Sector	Hogeschool West-Vlaanderen Hogeschool West-Vlaanderen

Idesa Technical Consortia

Madrid Science Park

Manufacturias Innovative Business Cluster

Spanish Association for Standardisation and Certification AENOR

Spanish Association of Foundations

Spanish Automotive Technology Platform Move2Future

Spanish Federation of Sanitary Technological Companies FENIN

Spanish Federation of Technological and Innovative Entities FEDIT

Spanish Innovation Platform on Medical and Health Technologies ITEMAS

Spanish Robotics Technology Platform HISPAROB

Spanish Technology Platform for Advanced Manufacturing MANU-KET

Spanish Technology Platform on Concentrating Solar Power SOLAR CONCENTRA

University of Oviedo

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RECORD OF EVENTS

:: JANUARY TO APRIL

13/02 Talk on "Changing ideas into products: a bridge between research and market" at Foro Transfiere 2013 held in Málaga (Spain).

20/02 Talk on "Additive manufacturing and industrial processes simulation, factory logistics and manual workstations" at the II Automotic Session, organized by La Rioja automotive cluster.

28/02 Talk on "Internacional collaboration opportunities for clusters" at REDAI IV Session organized by Manuf@cturias in Madrid (Spain).

20/03 Participation in the session "Research commercialization" during the Annual Conference of Biomedical Research Platforms organised by FENIN (Spanish Federation of Healthcare Technology Companies" in Madrid (Spain).

21/03 Talk on "Applications of 3D printing in the industrial sector" during the session "3D Printing technologies: present and future opportunities for the supply chain" held at Technological Institute of Aragón (ITA) facilities.

25/03 Visit of the Innovation Construction in Asturias cluster members to PRODINTEC facilities in Gijón (Spain).

12/04 Talk on "The fitting rooms of the future" during the Technological Breakfast organised by the University Institute of Industrial Technology of Asturias at Laboral Centro de Arte y Creación Industrial in Gijón (Spain).

16/04 Stand at Asturias Metal Sector Forum 2013 organised by Asturex and Femetal at Luis Adaro Trade Fair in Gijón (Spain).

22/04 Talk on "Design, Engineering and Optimization of a Convective (Air-Solid) Heat Exchanger Flow Equalizer Component" at EOS International Users Meeting 2013 held in Saalfelden (Austria).

25/04 Session on "Innovation&Health: sharing knowledge, innovating in health" organised by the Regional Ministry of Health of the Principality of Asturias at PRODINTEC facilities in Gijón (Spain).


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RESULTADOS EDICIÓN 2012
SEMANA EUROPEA DE LA PREVENCIÓN DE RESIDUOS

:: MAY TO AUGUST

07/05 Stand at XII Mould and Die International Fair (MOLDEXPO 2013) held at Zaragoza Trade Fair.

12/06 Talk on "Light-Rolls: research and development of modular based production units for the seamless, high-throughput manufacture of micro-structured, polymer based components and Microsystems" during the 19th Machine, Tools and Manufacturing Technologies Conference held at the San Sebastian Technology Park (Spain).

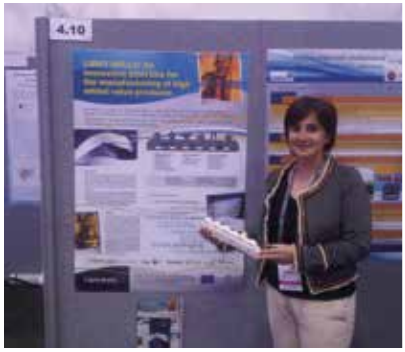
14/06 Talk on "Development of a new methodology for the diagnostic and implementation of ecodesign at companies" during the Technological Breakfast organised by the University Institute of Industrial Technology of Asturias at Gijón Science and Technology Park.

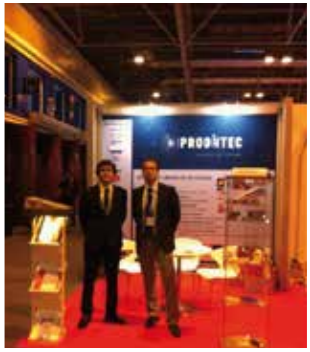
18/06 Light-Rolls shortlisted for "Best European project award" at EuroNanoForum 2013 held in Dublin (Ireland).

29/06 Participation in the roundtable about Industrial Design in Asturias during the World Industrial Design Day held at the Railway Museum in Gijón (Asturias).

04/07 Talk on "Support to SMEs located in Gijón in their participation on international projects" during the session on EAA Grants Call organized by CDTI (Centre for the Development of Industrial Technology), IDEPA (Economic Development Agency of the Principality of Asturias) and Gijón City Council at PRODINTEC facilities.

23/07 Talk on "The present of the Future Factory: real case studies of industrial products obtained by additive manufacturing" during the 1st "Mexican Workshop on Additive Manufacturing" held at Monterrey Institute of Technologie and Higher Education (Mexico).



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:: SEPTEMBER TO DECEMBER

12/09 Participation in the roundtable about competitiveness improvement in the gourmet sector within the framework of ATC4Excellence project organised by IDEPA (Economic Development Agency of the Principality of Asturias) at their facilities.

12/09 Talk on "How to boost synergies with knowledge agents to achieve new technological challenges" at the Chamber of Commerce of Madrid.

15/09 Talk on "Architecture for sequencing work based on discrete event simulation, priority rules and heuristic algorithms" at ACEDE2013 Conference held in Málaga (Spain).

18/09 Talks on "Light-Rolls: Research and Development of modular based production units for the seamless, high-throughput manufacture of micro-structured, polymer based components and Microsystems" and "EU Platform NANOfutures: a European Technology Innovation Platform Coordination Initiative on Nanotechnology" during the "Nanotechnologies, Advanced Materials and New Production Technologies – International Workshop on industrial opportunities and sinergy towards Horizon 2020" Conference organized by the University of Burgos (Spain).

19/09 Stand in 10th AJE Asturias Business Meeting held at Luis Adaro Trade Fair in Gijón (Spain).

24/09 Participation in the 18th Meeting of the High Level Group of EU members States and FP7 Associated States on Nanoscience and Nanotechnologies organized by the European Comission in Brussels (Belgium).

26/09 Visit of the Regional Minister of Health of the Principality of Asturias to PRODINTEC facilities.

01/10 Talk on "Silver Economy: innovative business opportunities based on demographic changes" during the XXII Business Meetings of Asturias" organized by IDEPA (Economic Development Agency of the Principality of Asturias) in Oviedo (Spain).

03/10 Session on "Future challenges of additive manufacturing and its implementation in European industry" organized by PRODINTEC at their facilities.

04/10 Talk on "Valorisation of R&D results: from lab to market" during the Sustainable Chemistry Master organised by the University of Oviedo.

09/10 Talk on "Development of a high-throughput roll-to-roll production platform for the micro-manufacturing and assembly of highlighting devices" during the 4M2013 Conference held in San Sebastián (Spain).

16/10 Talk on "Development of heat exchanger and feeder for electrical generation system via Stirling motor based on solar energy" during ANSYS Users National Conference held in Madrid (Spain).

23/10 Stand at Madrid Metal Sector Fair 2013.

25/10 Session on "Advanced technologies of digitize and reverse engineering" organised by PRODINTEC at Madrid Science and Technology Park.

25/11 Talk on "Additive manufacturing: a revolution for medical sector" at the "Ideas Incubator" organised by the Biomedical Research Foundation of San Carlos Clinical Hospital held at their facilities in Madrid.

03/12 Talk on "R&D European Strategy on nanosafety" during the annual session of the Nanosafety&Nanotoxicology Interplatforms Group held in Madrid.

05/12 Talk on "Basic concepts of artificial vision" in the framework of the session "Applications of artificial vision in the industrial sector" organised by the Asturian Quality Club at their facilities.

12/12 Talk on "Additive Manufacturing at the service of Artistic Heritage" in the framework of the VIII Sessions on Conservation and Restoration organized by the School of Art of the Principality of Asturias in Avilés (Spain).

19/12 Talk on "Finite element simulation of new offshore floating structures" in the framework of the session "The offshore sector: opportunities for Asturian companies" organized by Femetal at their facilities.


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