LIZARTE



Company: Lizarte

Location: Pamplona, Navarra (Spain) Type: Independent remanufacturer

In reman: Since 1973

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PRODUCTS

Lizarte has four remanufacturing product lines for steering racks, steering pumps, air conditioning compressors and diesel injection

CORE SOURCING

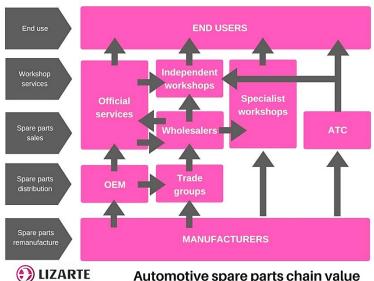
They retrieve cores mostly by:

- Surcharge model: the 80-85% of the cores are collected in this way. A deposit is charged to the customers when they buy the product, which can be recovered as long as the item is returned in good conditions so that it can be remanufactured.
- Direct order: since all the cores collected by surcharge cannot be remanufactured, they buy a small percentage of cores to core dealers, approximately the 15-20%.

BUSINESS MODEL

Lizarte has been remanufacturing automotive spares since 1973, when they became the first company in Europe to remanufacture mechanical steering racks. This first production line was extended over the years to assisted steering racks, power steering pumps, air conditioning compressors, the range diesel injection and electronic steering racks. Today they remanufacture more than 1100 models of steering racks and AC compressors, over 1000 models of steering pumps and around 700 models of diesel injection. To get to this point, they count on 85 employees and a manufacturing facility and central warehouse in Pamplona that supplies their logistic centres spread across Spain, France and Germany. The mission of Lizarte is to offer high quality solutions to cover the needs in the automotive repair Market.

VALUE CHAIN



Automotive spare parts chain value

REMANUFACTURING PROCESS









Cleaning & prepa-















An initial visual inspection is made upon the reception of the old cores. They are then stored according to reference. The old cores are stored so as to preserve its condition, thereby preventing its degradation and oxidation.





In this phase, the replacement part is totally broken down into its basic components. Any element that cannot be recovered is scrapped.



All components are cleaned by employing a variety oftechnologies, such as industrial washers and ultrasonic cleaning equipment. Once the component has been cleaned, and dependingon the type of component to be recovered, a variety of tasks must be performed, such as polishing, plating, grinding, straightening, etc., in order for the component to comply with quality standards.



The recovered components, along with the new purchased components (seals, be- (leak testing and vellows, bearings, etc.) are assembled in the various product lines according to the OEM specifications.



100% of the remanufactured products are verified unit by unit rification ofoperation) was worked. Each product line has its own specific test bench in order to provide a warranty. as if the replacement parts were new.



appearance of products reflects the care with which the inside All replacement parts must function properly. but they should also be prepared for sale.

DRIVERS

In the early 70's only transmissions were being remanufactured in the European automotive industry so they thought about other spares' remanufacture as a prospective market: having a car was starting to become common and hence, the demand of spare parts was expected to grow. Lizarte specialised in remanufacturing mechanical steering racks and then decided to expand their business because of the success of the first product line together with a growing demand due to the aging of vehicle's fleet in Spain: the older a vehicle is, the most likely is to replace broken parts by remanufactured ones.

BARRIERS AND CHALLENGES

They neither design nor manufacture any products because they are at the end of the life of a product. Therefore, the biggest challenge is to have the knowledge of that product constantly updated in order to remanufacture the new spare parts that are being manufactured in the new production line. They have to be constantly updated and sometimes make very specific investments to be able to remanufacture products that represent technological leaps (human resources, economic resources, time ...). And since there are many manufacturers of cars and parts, car models, etc., the technical complexity is high.

CUSTOMERS, STRATEGY & KEY RESOURCES

On one hand, the main advantages perceived by the clients are:

- Functionality and quality (quality of the Management System is assured by the ISO 9001 and, particularly for steering racks and pumps they count on ISO/TS 16949 as well)
- Economic savings in comparison to a new product (around 40%)
- The same guarantee as a new product: 2 years. In this way the customer will always prefer to buy a reman product rather than one from a scrapyard without any guarantee, even if it is cheaper.
- Environmentally friendly product
- Especially for old and classic cars, the customer can find spare parts that the original factory no longer manufactures.

On the other hand, there are also some drawbacks for the customers, caused by the reverse logistics, since they have to pay a charge in advance when they buy the product, which they recover once the core is returned to Lizarte, as long as it is in good condition. Moreover, the customer has to handle the core's returning and pay the shipping expenses, so the farther is the customer from a company delegation, the more expensive it will be for them. For this reason is that they have 14 delegations, which also allows them to have a high service level and be more competitive.

The vital resource for Lizarte's business model is the availability of the cores as well as of the components (e.g. sensors). They also need to have a deep knowledge about the technology that makes the product work, for which they collaborate with universities and research centres. Furthermore, the learning curve of reman processes is less steep than that of automatized processes, what means that the personnel and the know-how is crucial for the company's performance.

ECONOMIC BENEFITS

The economic benefit is created because remanufacture a product requires less inputs than the conventional manufacturing and the components that are recovered are the most expensive parts of the product, hence it is cheaper. In the remanufacturing business, it is more complicated to forecast the demand since the products that break down are the new cores and that depends on which, when, where and how products fail. In order to cover such unpredictable demand, they need to have an important stock, for which they are based on statistics (e.g. models of cars by Autonomous Communities) and historical data of breakdowns. They also carry out a 3-year strategic planning that is materialized in an annual management plan. This management system is based on a balanced scorecard with indicators to measure the evolution of certain variables and thus understand the company's performance. In the day to day they monitor the activity of the company using this kind of business intelligence tools and this is the base of the decision making.

ENVIRONMENTAL BENEFITS

They are a vital part of the circular economy since they close the loop for these automotive spares, drop as much as possible raw materials extraction hence preserving the Earth's crust, consuming less energy and reducing CO_2 emissions.

SOCIAL BENEFITS

Job creation, together with value creation thanks to their collaboration with universities and research centres at local but also at European level. They are a part of APRA (Automotive Parts Remanufacturers Association) and actively participate in specialized magazines, trade fairs (e.g. Autopromotec 2017, ReMaTec 2017) as well as offer technical support and contribute to improve the social image of the remanufacturing industry.

ADVANCED MATERIALS RECOVERY

No advanced materials are recovered.

CHALLENGES TO IMPROVE THE BUSINESS MODEL

- → Continue being up to date at the technological level regarding the knowledge of the new products, being competitive in the Market and maintain the high service level. It is a great challenge to achieve cost feasibility since the technological evolution is becoming more sophisticated and thus, expensive to follow.
- → There is a need for more institutional involvement and compromise to promote and publicize remanufacturing, since socioeconomically it should have a better reputation for being a social benefit and preserving the environment. They have to make people understand the difference between "remanufacture" (whole product refurbishment, testing and guarantee) and "repair" (reparation of individual components and guarantee not for the whole product but only for the repaired parts). One measure to encourage reman products could be, as it happens already in other countries (e.g. India), that reman products should have lower taxes than traditional manufactured ones.
- → There is not yet a culture of the "Design to Remanufacture". Indeed, there are some firms that, consciously or unconsciously, manufacture their products in such a way that in order to refurbish them, it is necessary to break them up, after which the core cannot be remanufactured anymore and has to be wasted. There are some regulations already, but they are not enough and this issue should be regulated and carefully controlled (even penalize somehow those companies which are impeding remanufacturing).