

Making the move from manual to digital



About Laboratory JR Sánchez S.A.

Laboratory JR Sánchez, was founded in San Jose, Costa Rica, in October 1975, and was the first professional hearing instrument Company in Central America. Soon after, Laboratory JR Sánchez also became the area's first manufacturers of customized ear pieces.

From the beginning, Laboratory JR Sánchez followed its mission to ensure patient satisfaction by providing the highest excellence in products through use of the latest innovations and technologies.

The company soon achieved recognition as Central America's pioneer and as leading experts in the field of hearing aids and cochlear implantations.

<http://www.labjrsanchez.com>

Key Selection Criteria

- High quality of results
- A system that is easy to use
- Low learning curve for technician training
- Integrates easily with existing systems
- Supports current Hearing electronics technologies

Laboratory JR Sánchez S.A. is a hearing aid manufacturing company located in Latin America. As a mass-customization business operating in a relatively low-cost region, Laboratory JR Sánchez understood that the traditional manual production methods they were currently using would not remain profitable in the long run.

The Challenge

JR Sánchez needed to speed up production and integrate new hearing technology advancements without sacrificing the quality, esthetics, and perfect fit of their products. Their company stood on the threshold of whole new business opportunities and success, but existing manual method workflows were blocking their potential for growth.

The laboratory often received a variety of hearing aid orders at the same time. Many of these were large tender orders from the Public Health System, tagged with very short deadlines. When this happened, manual methods couldn't keep up.

Expanding staff was not an optimal answer. Manual methods are very technique-demanding and new technicians required extensive training programs in order to develop the necessary skills. This was both time-consuming and costly.

The hearing industry was facing new challenges due to an increasing demand for highly customized hearing aids designed to cope with specific patient needs as well as new electronics capabilities.

The Solution

Laboratory JR Sánchez took pride in its foremost position as innovators in the Latin American hearing industry. Therefore, it was natural for them to be in the forefront of their region's conversion from manual production methods into digitized workflows.

JR Sánchez chose 3Shape's Hearing systems because 3Shape's scanners and software represented the market's most advanced technologies. 3Shape's system covered all the industry requirements and the latest electronics options. Additionally, 3Shape's system was very easy to use, allowing extremely fast technician training.

The solution was also easy to integrate with existing equipment and interfaced well with other software, such as a system from the laboratory's electronics partners.



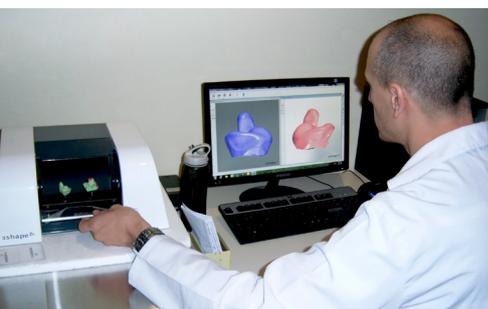
The highly productive and accurate digital workflows enabled us to grow our business without costly staff and floor space expansions, ensuring the continued profitability of our hearing instrument production despite the challenges in our relatively low-cost region."

José R. Sánchez

Laboratory JR Sánchez S.A.

Modern production of hearing instruments

Source: José R. Sánchez



ROI Benefits for Laboratory JR Sánchez S.A.

- High accuracy for perfect fitting designs reduces the need for remakes
- Fast turn-around times for coping with rush/urgent orders
- Increased productivity with same staff size
- Possible to provide competitive yet profitable prices
- Possible to win large Public Health bulk-orders and deliver on time
- Growth through increased business and reputation as technology leaders

About 3Shape A/S

3Shape creates 3D scanning and CAD/CAM software solutions. Award-winning technology that enables dental and hearing professionals to treat more people, more effectively and with improved care. A privately-owned company, 3Shape has over 780 employees with a product-development force of more than 275 professionals. Offices and service centers located in the Americas, Asia and Europe serve customers in more than 100 countries. Company headquarters are in Copenhagen, Denmark.

www.3shape.com

Workflow

3Shapes 3D scanner is used to scan incoming ear impressions in around 60 seconds to create a highly accurate 3D digital copy.

These digital impressions are then loaded into 3Shape's CAD modeling software (EarMouldDesigner or ShellDesigner) to design the required custom fit hearing aid, taking only a few minutes for each order.

The final designed hearing aids are organized in a print job and sent to a 3D printer to produce the physical device. The printing process is automated and can take a few hours, though multiple print jobs are scheduled throughout the day and also overnight (if required).

Once printed, the parts are then post processed and ready for shipping.

The Results

By implementing 3Shape's CAD/CAM system for digital production of Hearing instruments, Laboratory JR Sánchez cemented its position as the CAD/CAM pioneers and leading technology experts in the Latin American region. Since then, the laboratory has been besieged by calls and e-mails from other hearing professionals in the area who want to see this modern technology at work.

Laboratory JR Sánchez felt their business surge almost immediately. Productivity leaped, and turnaround time for large orders ceased to be an issue. The laboratory was suddenly able to cope with rush-service cases and urgent orders of any size without expensive and stressful technician overtime. The system provided excellent results, and all incoming feedback implied increased patient satisfaction and a high rate of success for their designs and products.

3Shape's digital production system for Hearing instruments put Laboratory JR Sánchez way ahead of their competitors and at the forefront of their market. They soon became the preferred choice for the majority of bulk orders in their region.

3Shape solution at Laboratory JR Sánchez S.A.

3D model and impression scanning 3Shape Legato2™ scanner

CAD Design

3Shape EarMouldDesigner™/ShellDesigner™

Manufacturing Preparation

3Shape CAMBridge™