



fundación  
**rey ardid**

*una forma de hacer sociedad*

**DIDACTIC GUIDE. IO2: Step-by-  
Step Development of Lamb Gut  
Rope Creation.**



# Personas comprometidas

La Fundación Rey Ardid desarrolla actividades orientadas a acompañar a personas vulnerables en su integración a una sociedad más rica y diversa. Desde hace más de 30 años atendemos a personas al borde de la exclusión social, personas afectadas por enfermedades mentales, personas mayores dependientes y personas con Alzheimer y otras demencias.

Nos gusta poner a la persona en el centro, desempeñando nuestra labor con honestidad y transparencia. A través de una óptima gestión de los recursos nos adaptamos a cada necesidad, con programas y servicios innovadores. Siempre con la vista puesta en crear entornos que favorezcan la dignidad personal y abiertos a la colaboración con administraciones públicas y entidades con objetivos comunes.

## Somos

2



### Humanos

Trabajamos con respeto a la dignidad de la persona, recibiendo formación y dando la orientación que cada caso precisa



### Flexibles

Nos adaptamos a las necesidades y expectativas de las personas que atendemos



### Impulsores

Generamos áreas de mejora en nuestro desempeño diario y en la motivación a los usuarios



### Rigurosos

Desempeñamos una labor honesta y de calidad, actuando siempre con la máxima transparencia

- ✓ **Soñamos con una sociedad mejor**, en la que todos estemos incluidos.
- ✓ **Creemos en una sociedad más justa** y con menos personas vulnerables.
- ✓ **Apostamos por una sociedad más diversa** y por una vida digna y plena.

## Más de 30 años de actividad



DESDE  
**1991**

Trabajando con personas con problemas de salud mental y discapacidad a través de Centros Especiales de Empleo desde **1991** y con personas en situación de riesgo de exclusión social desde 2007, cuando se constituyó la primera de las empresas sociales.



**ESPECIALISTAS EN GESTIÓN DE RECURSOS SOCIO SANITARIOS**

Somos especialistas en gestión de residencias, centros de día y servicios en el domicilio para personas mayores y personas con enfermedad mental.



**1.500 PERSONAS**

Más de **1.500 personas** trabajando y aportando valor a la sociedad.



## SUMMARY

DIDACTIC GUIDE. IO2: Step-by-Step Development of Lamb Gut Rope Creation.....	1
Introduction: .....	4
From the Slaughterhouse to the Workshop: .....	5
Training Module Didactic Sheet:.....	11

## Introduction:

In a constant search to find the ideal sound in his instrument, the double bass player Joan Xandrich, with a machine made by himself, works on the recovery of a disused craft: the elaboration of strings for instruments with lamb guts.

Thanks to the Delyramus project, this knowledge will be passed on to the participants.

This guide is structured by steps so that everyone who reads the guide can understand the procedure and technique to be used for the elaboration of strings made from lamb tripe, it is also accompanied by photographs to help reading comprehension and facilitate the understanding of the steps to follow.



## From the Slaughterhouse to the Workshop:

### STEP 1:

The casing from the slaughterhouse arrives clean at our workshop. Therefore, once we have received the lamb guts, we must check that we have the following material available:

- Cleaned lamb casings. Recipientes de plástico.
- Soda.
- Hydrogen peroxide or vinegar.
- Strips to check the pH of the water
- Ties.
- Frame for attaching the ropes.



**STEP 2:**

To remove the salt that comes from the slaughterhouse, the casings are washed several times with warm fresh water.



**STEP 3:**

Once the casings have been rinsed, they are placed in a container with warm and soda water (5ml per 2L) for about 15 minutes.

As soon as they change color and texture (harden a bit) they are ready to cut.



**STEP 4:**

Cut the casing with the cutter and place it in containers with warm water.

We separate according to its thickness in one container or another.

Right: thin guts (high strings)

Left: thicker guts ("bordones" low strings).



**STEP 5:**

Once cut, they are passed to the frame where we will place turns of casing to form the rope, (depending on the caliber we will need more or less turns).

The ends are evened out and the loops are placed.



**STEP 6:**

With the necessary size and thickness, they are placed in another container with 20% hydrogen peroxide for approximately 5mn, during which time the rope changes to white.

They are immersed in another bowl of warm water and the pH is checked with the strips.



**STEP 7:**

Once the rope is placed in two hooks, with the help of a drill it is wound up, removing the water.

Check with the hand by feeling under the rope

This process is done little by little.



**STEP 8:**

Once rolled up for drying, they are placed horizontally (always) on a rack in a dark room with a high humidity level.

Every day they are checked and tense. In about three days the ropes will be dry for sanding.



**From Workshop to Instrument:**

Once the ropes are sanded, they are ready to use.



## Training Module Didactic Sheet:

<b>ORGANIZATION</b> Fundación Ramón Rey Ardid - FRRA
<b>INTELECTUAL PRODUCT</b> O2 Development of Training Module (Design Thinking) Strings.
<b>NAME OF THE ACTIVITY</b> Training in the production of lamb gut strings for early music instruments
<b>OBJECTIVES</b> <ul style="list-style-type: none"><li>• Improve the employability of people with a disability due to mental illness through innovative training and work itineraries related to culture.</li><li>• To recover the trade of lamb-making, which is almost extinct in Spain, in order to generate a job alternative for this group.</li><li>• To involve in the training process the lamb master and teachers from conservatories of Ancient Music and musicians from Spain, to generate a participatory methodology that manages to materialize the needs of all those involved in an improved prototype rope, making possible the implementation of a Special Employment Center.</li><li>• Improve the empowerment and visibility of people with disabilities through actions that generate citizenship such as the recovery of heritage and collaboration with top artists in Spain and Europe.</li><li>• Promote the approach to culture to groups with difficult access to it, promoting a more inclusive culture.</li></ul>
<b>METHODOLOGY</b> <p>The Design Thinking methodology will be developed for the development of the training process and the prototyping of the strings based on 5 steps:</p> <ol style="list-style-type: none"><li>1) Understand the needs of the people involved (musicians and people with mental disabilities with employability difficulties) and generate a value proposition for each group, addressing their "gains" and "pains" through a map of processes and feelings of each group.</li><li>2) Define together the problem to be solved</li><li>3) Generate multiple ideas to solve it in a motivating environment of exchange, both in the training space of the workshop and in the meetings with the group of experts (musicians and conservatory teachers).</li><li>4) Prototyping (generate a minimum viable product that allows us to generate solutions to the problem).</li><li>5) Evaluate (ask for feedback and opinions about the prototypes, sending the strings to the group of experts and other collaborating musicians and improve the prototype until the desired product is obtained).</li></ol>

## CONTENTS

- Site search and purchase and installation of the necessary machinery and equipment and selection of participants.
- Initial training module on the operation of the specialized machinery by the lamb master.
- Initial meeting with group of experts to gather their needs and elaborate process and sentiment maps.
- Intermediate training module (monitor-students) with periodic external advice from the lamb master, where to put into practice the skills of the students learning the lambing technique and incorporating the technical needs detected in the process maps, to generate the first prototype. A white book will be generated to record the traceability of the variants made until the first prototype is reached.
- Evaluation and feed-back from the musicians during one month, to whom we will give a free kit of strings and we will collect their evaluation in terms of durability, resistance and sound quality.
- Finalize the prototype with the contributions of the collaborators.

## EVALUATION

### **There will be two parallel evaluations:**

1. The one referring to the evolution and traceability of the prototype, through a field diary that will generate a white book with successes and failures.
2. The one referring to the evolution of the students' learning, integrating not only those related to the technical skills acquired but also those related to the improvement of their employability (social interaction, initiative, assumption of responsibilities, empowerment...). For this purpose, daily observation and specific assessment instruments will be used.

## DISSEMINATION

- The entire process will be graphically documented (images and video) to feed the dissemination through on-line platforms: website, Facebook and Instagram. Publications will be made at the pace and progression of the training sessions.
- Publicity on online platforms and media throughout the project, trying to involve the networks of the Conservatories of Early Music in Spain and other networks related to the world of violin making, with the aim of disseminating the training project and generate expectation for a possible subsequent sale of the product if the required quality objectives are achieved.
- Presentation of the workshop, the Delyramus et Laboramus project and the finished prototype in an open day in the workshop itself and subsequent organization of a concert, involving the collaborating musicians using our strings to promote them.



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# Contratar nuestros servicios y productos conlleva grandes ventajas para ti:

- ✔ Te acoges a las medidas alternativas a la reserva del 2% de personas con discapacidad.
- ✔ Contribuyes a la creación de empleo para personas con discapacidad o en riesgo de exclusión social.
- ✔ Fomentas la responsabilidad social de tu empresa.
- ✔ Contratas personal formado y debidamente cualificado.
- ✔ Cuentas con la garantía de la Fundación Rey Ardid: sustitución en caso de baja laboral, gestión de ayudas...



## Pero también existen otras formas de ayudar:



### Contratación de servicios y compra de productos

Te acoges a las medidas alternativas a la reserva del 2% de personas con discapacidad.



### Voluntariado corporativo

Para que los empleados tengan la oportunidad de practicar acciones dirigidas a un fin social.



### Integración laboral

De personas con discapacidad o en riesgo de exclusión con planes de colocación y adaptación.



### Cesión gratuita de bienes y servicios

Que pueden valorarse y ser deducibles y nos permiten ahorrar y dedicar recursos a nuestros proyectos.



### Financiación de proyectos

Desarrollando proyectos conjuntamente que se ajusten a la cadena de valor de cada empresa.

*¿Quieres tener la sensación de recibir más de lo que aportas?*





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