

Deliverable Report

Deliverable Title:

SALEMA Final video

Deliverable No.	9.5
Deliverable nature	Websites, patents filing, etc.
Work Package (WP)	9
Task	9.2, Subtask 9.2.3
Dissemination level ¹	Public
Number of pages	17
Keywords	video, storytelling, SALEMA, project, production, filming, script, publication, views, YouTube, playlist, impact
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Due date of deliverable	April 30th 2024
Actual submission date	April 30th 2024

Technical References

Project acronym	SALEMA
Project full title	Substitution of Critical Raw Materials on Aluminium Alloys for electrical vehicles
Call	H2020-SC5-2020-2
Grant number	101003785
Project website	salemaproject.eu
Coordinator	Fundacion Eurecat

¹ PU = Public
PP = Restricted to other programme participants (including the Commission Services)
RE = Restricted to a group specified by the consortium (including the Commission Services)
CO = Confidential, only for members of the consortium (including the Commission Services)



Document history

V	Date	Author (Affiliation)	Actions& Approvals
V1	26.01.2024	L. Durnford, ESCI	Initial draft
V2	26.03.2024	L. Durnford, ESCI	2 nd draft
V3	27.03.2024	M. da Silva, EUT R. Garms, ESCI	Review and feedback
V4	18.04.2024	C. Hackenbroch, ESCI E. Bartlmae, ESCI	Review and feedback
V5	24.04.2024	Hannah Arpke, EUT & Francesca Cavezza, EAA	Review and feedback
Final	30.04.2024	L. Durnford, ESCI Hannah Arpke, EUT	Finalisation

Summary

Dissemination and communication activities are a core part of the SALEMA project and ensure that the tools and results developed within the project are communicated to support results dissemination and exploitation to/by relevant target audiences. To reach the objective of promoting the project to stakeholders, industry representatives and automobile manufacturers, potential early adopters and the general public, several different dissemination and communication tools were required. As outlined in the Grant Agreement, online multimedia and audiovisual materials – including a final video – were part of the communication strategy. The final video is for wide, online distribution targeting key audiences as well as the general public.

The video ‘Old Scrap New Alloys: Aluminium Recycling and Reducing Dependence on Critical Raw Materials’ was filmed in December 2023 on-location in Belgium and Italy and was published with a duration of 8 minutes 42 seconds on 14 March 2024 in the SALEMA playlist in ESCI’s YouTube channel: https://youtu.be/eS7meZutnNo?si=1G6RoF0cr_ONJRpJ.

The video tells the story of SALEMA’s partnership across the aluminium value chain, what that has meant in practice for the improvement of aluminium recycling, the design of new alloys using more recycled or less critical raw material (CRM) content, and the testing of the alloys in industrial processes for the automotive industry. Ultimately, the video showcases the issues the project set out to address — the need to meet the increasing demand for aluminium for lightweight and more sustainable (electric) vehicles while also reducing Europe’s reliance on the importation from other world regions of CRM used as alloying elements — and the project’s exploitable results in these areas.

At the time of publication of this report, the video had been viewed across all distribution points almost 6200 times.

Disclaimer

This publication reflects only the author’s view. The Agency and the European Commission are not responsible for any use that may be made of the information it contains.



Abbreviations

Abbreviation / Acronyms	Description
COMET	COMET Traitement (of Groupe COMET)
CRF	Centro Ricerche Fiat
CRM	Critical Raw Material
EAA	European Aluminium
ESCI	European Science Communication Institute
ENDUR	Endurance Overseas
EUT	Eurecat
ULIEGE	University of Liège
UNIPD	University of Padua

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1. Introduction and Background

Deliverable D9.5 describes SALEMA's final video, which was produced by ESCI using its video production and storytelling expertise. The video 'Old Scrap New Alloys: Aluminium Recycling and Reducing Dependence on Critical Raw Materials' has a duration of 8 minutes 42 seconds. It explains the concept of SALEMA's partnership across the aluminium value chain, what that has meant in practice for the improvement of aluminium recycling, the design of new alloys using more recycled or less critical raw material (CRM) content, and the testing of the alloys in industrial processes for the automotive industry. The video highlights the work of three key partners in these areas — Groupe COMET, specifically COMET Traitement (COMET), University of Padua (UNIPD) and Endurance Overseas (ENDUR) — as well as featuring Eurecat (EUT), University of Liège (ULIEGE) and — less explicitly — Centro Ricerche Fiat (CRF). Ultimately, the video showcases the issues the project set out to address — the need to meet the increasing demand for aluminium for lightweight and more sustainable (electric) vehicles while also reducing Europe's reliance on the importation from other world regions of CRM used as alloying elements — and the project's exploitable results in these areas. The storyline encompasses key facts and clear, simple messages that aim at a wide audience.

The video was filmed in December 2023 on-location in Belgium and Italy and was published on 14 March 2024 in the SALEMA playlist in ESCI's YouTube channel:

https://youtu.be/eS7meZutnNo?si=1G6RoFOcr_ONJRpJ

After publication, the video was distributed to the project consortium and via online channels, as well as being shown in the project final event. (See section 2.4 onwards for more details.)

1.1. Objectives of task and deliverable

The final video was produced in line with the goals of Work Package 9 Task 9.2 'Implementation of Communication and Dissemination Strategy', by addressing the general public as well as stakeholders and early adopters who are interested in the concept, progress and results of SALEMA on technological, scientific, industrial, environmental and economic grounds. Furthermore, it supported the aim to make the technology understood, show the benefits of the project's solutions and thereby foster market uptake for the new industrial processes as well as gaining social acceptance among the public for an innovating automotive sector.

The creation of the video was part of Subtask 9.2.3 'Development of Supporting Communication Means', with the aim to strengthen the visual impact of the project and provide insights about the results, supporting exploitation activities.

Distribution of the video via YouTube and the project social media channels met the requirements of Subtask 9.2.2 'Irruption in Social Media Channels', to increase the visibility and impact of the results, and to attract the interest of stakeholders and general public.

The final video opens with 'teaser' information, such as some facts about aluminium and the growing demand for it, which provides a general framework for the following story about the project, its goals, results, and wider benefits. By using non-technical language, the video aims to reach various stakeholders as well as the general public and thus have a wide outreach potential.



The video's final call-to-action directs viewers to the project website (www.salemaproject.eu) for more detailed information.

2. Activities

There were four key phases in the completion of activities around the final video:

1. **Concept definition**
2. **Production - planning & filming**
3. **Post-production – editing & partner approvals**
4. **Publication & dissemination**

2.1. Concept definition

ESCI began work to define the concept of the final video on 19 May 2023 and finalised the concept on 1 December 2023 after feedback from project coordinator EUT.

In this phase of the project, ESCI considered which exploitable results to focus on, the storytelling needed to convey them in a clear and engaging way, and identified interviewees and relevant filming locations. The structure and call to action were also taken into account in the initial concept (see Annex A).

At this stage, ESCI also investigated the availability of any partner or stock footage that could prove useful and considered the technical requirements of the filming and sound design.

2.2. Production

Logistical planning for on-site filming began in October 2023, when ESCI contacted the selected partners to arrange discussions about the requirements and dates. The schedules for filming in Italy and Belgium were finalised on 1 December, with on-location recording taking place as presented in Table 1.

Table 1: On-location filming dates, partners and focus points

WHEN	WHERE	WHO	FOCUS
5 Dec 2023	Turin, Italy	Claudio Mus (ENDUR) & Andrea Bongiovanni (CRF)	High-pressure die casting and testing of the demo frontal frame; foundry / automotive industry needs and benefits.
6 Dec 2023	Vicenza, Italy	Franco Bonollo & colleagues (UNIPD)	SALEMA alloy design methodology; alloy testing; academic / research needs and benefits.
14 Dec 2023	Mons, Belgium	Grégory Lewis & colleagues (COMET)	Multi-sensor robotic scrap sorting technologies; scrapyards / recycling industry benefits.



		with Robert Baudinet (ULIEGE) online	
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The ESCI video crew recorded interviews with the above-named individuals, as well as filming research and industrial processes related to the project activities.

The interview with Manel da Silva of EUT had been filmed at the beginning of the project, on 13 November 2021, in connection with the introductory video (Deliverable 9.4). The selected content was still context appropriate, providing a cost-effective way to include EUT and relevant content in the final video.

2.3. Post-production

The interview audio files were transcribed in order to generate content that could be filtered as the basis for the video script. The script was finalised on 24 Jan 2024 (see Annex B) and was sent to the relevant partners for feedback along with the rough-cut version of the video on 7 February. After a few minor changes it was approved for the next stage and a professional voiceover was recorded by ESCI on 16 February. After a further round of feedback between 23-28 February, the final version was approved for publication by the project coordinators at EUT on 28 February.

The final version of the video includes a small amount of stock footage and two short sections of animated project infographics as well as the new material filmed by ESCI. It also contains all speakers' details, animated SALEMA branding elements, and the EU flag and project funding statement.

The video is available in conjunction with a .srt file of captions (in English) or with the captions burned into the file.

2.4. Publication

The final video was published along with an .srt file of captions, a text describing the story, relevant hashtags, social media links, the European Union funding statement and a specially-created thumbnail image (see Figure 1).



Figure 1 – Thumbnail image created for publication on YouTube playlist

Publication was completed on 14 March 2024 in the SALEMA playlist in ESCI's YouTube channel: https://youtu.be/eS7meZutnNo?si=1G6RoF0cr_ONJRpJ

The YouTube video sharing link was then:



- embedded on the SALEMA website homepage and resources page on 14 March;
- posted on the SALEMA X (formerly Twitter) account on 14 March;
- embedded in the homepage of online publication Auto Recycling World on 15 March.

The video file was:

- posted directly on and 'pinned' at the top of the SALEMA LinkedIn channel on 14 March;
- uploaded to the project SharePoint system and shared with partners on 15 March for their own usage and dissemination;
- sent to organisers of the project's final event to be displayed at the venue (AutoWorld museum) public entrance screen on 21 March;
- shown during the final event SALEMA 'project journey' session.

3. Results

The viewing figures and other relevant statistics for each of the video distribution points at the time of publication of this report were as follows:

- SALEMA website homepage and resources page stats not available because embeds directly to YouTube.
- SALEMA X (formerly Twitter) account, the video gained 46 impressions and 7 engagements. The length of the video made it impossible to upload directly, no doubt affecting results.
- SALEMA LinkedIn channel, within two weeks it had clocked up 928 views, 958 impressions, 50 clicks, 6 reposts, 21 reactions and 78 engagements. By project end on 30 April, the video had 1165 views. 1374 impressions and an engagement rate of 7.13%.
- 65 participants of the final event saw the video during the SALEMA session.
- During the final event, the video was on a loop on a large screen by the venue entrance where paying members of the public could see it as they entered AutoWorld museum: the number of visitors who saw the video is not known.
- Viewing figures are not available for the video as shared on the Auto Recycling World homepage, but no doubt this significantly contributed to the number of views achieved in YouTube.
- On YouTube, within two weeks of publication the video had gained 4.8K views. By project end this was 4.9K.

At the time of submission of this report, the total number of video views across all distribution points was 6176.

3.1. Deviations from plan

A minor setback was the need to correct a small fragment of the voiceover after it had been recorded, which was rapidly re-inserted into the final mix without causing any delay. Besides this, no significant



delays, setbacks or unexpected results were experienced in the planning, creation or publication of the final video.

3.2. Outreach, communication, collaborations

ESCI's YouTube channel has 1.68K subscribers. By publishing in a playlist here, the video had a good chance to be seen and shared by these subscribers. Furthermore, ESCI typically boosts the visibility of new videos on its channel by placing advertisements to relevant target groups, usually seeing 91.1% of its viewing figures resulting from these actions. The SALEMA final video was advertised via Google ads and YouTube as in-feed and in-stream ads, running for 2 weeks after the release of the video. Compared to other videos ESCI advertises, the SALEMA final video experienced average performance.

The YouTube platform provides easy sharing links for distribution across websites, social media channels and other platforms, making it quick and simple to share the content through other channels.

On 15 March ESCI held a meeting with the editor of online publication 'Auto Recycling World', in which it was agreed that the video would immediately be shared on their homepage, using the YouTube embedding function. Although no specific viewing figures are available for this placement of the video, and although ESCI typically sees only 0,6% of views originating through website embeddings, this most likely contributed to the number of views achieved and helped to raise visibility of the content and project with an interested worldwide audience.

On 15 March the video file was also made available to the project consortium via SharePoint as well as via the YouTube URL, so partners can potentially distribute it via their own channels, show it at workshops, webinars, fairs, conferences or other relevant events they may attend, or upon request.

The video was shown on 21 March during the SALEMA 'project journey' session in the final event in Brussels, where 65 guests got to see it. It was also on display on a large screen in the entrance area of the venue (AutoWorld museum), where paying members of the public who were visiting the museum were able to view it.

ESCI published two posts on its social media channels about the video: firstly, on 14 March to announce and share the video itself; then on 15 March to announce that the video had been shared on the Auto Recycling World homepage.

4. Conclusion and Outlook

Based on partner feedback and the viewing figures achieved within a short space of time, the final video can be seen as a successful communication output for SALEMA. Achieving early distribution of the video by relevant external channels (such as Auto Recycling World, which also brought it to a relevant global audience) is clearly worth the effort. Overall, the rapid rise in viewing figures indicates a significant level of interest in the story, the project, its results, and the wider issues addressed.


4.1. Next steps

The video will continue to be available on the ESCI playlist and the project website homepage and Resources page in the longer term, potentially prolonging project impact. ESCI will seek further opportunities to use or distribute the video and will remind partners to do so too, as relevant and appropriate.



Annexes

a) Annex A: Video concept



VIDEO CONCEPT

Key Topic: *Aluminium, the need for recycling and rethinking with EU critical RAW Materials*

Related EU Projects: *<https://salemaproject.eu/>*

Video type : *Final Movie*

Video length: *6-8mins.*

Content proposal: *3-4 short sentences describing content of video*

- General Intro (Stockfootage/ BRoll Footage) With around 1.5 Billion cars and a median lifespan of 10 years per car we need a lot of aluminium alloys, but how do we recycle these and why are we searching for new alloys?*
- With new AI methods researchers in Belgium developed a technique to better structure recycling for reuse and circular economy approach of AL and the Critical Rare Materials like MG and SI.
In Italy the research and implementation of new developed AL alloys takes place, to find a substitute which gives the same properties as the "Critical Rare Materials" used like MG and SI.*
- What was the project about in detail? > Voices of main Players & Footage of:*
- Belgium Scrapyard, Company Comet (tool to sort scrap)
IT, Torino, Company Endurance
IT, Padova, University*

Target Audience:

- General Audience
- Stakeholders/ Consortium
- Journalists / Media

Experts & Sources: *See above*

Author: *Editor: Ariane
PM: Laura*

Shooting dates: *5./6.12.23 Italy, 15.12. Belgium*

Expected Production Timeframe: *February*





Internal Deadline for Rough Edit: 20 . January 24

Official Deadline for Final Video: February/March 2024

DETAILS FOR FILMING

Questionnaire for Claudio Mus

- only engl.
- engl. & native language
- only native language

- Selfintroduction
- Description of what they are doing at Endurance
- Description of the research process (past 4 years)
- What is the impact on the industry of the lessons learned?/
- What are the main outcomes of the project for the industry?
- Can Europe become independent this way from imports of critical raw material?

Questionnaire for Franco Bonello

- only engl.
- engl. & native language
- only native language

- Selfintroduction
- Description of what they are doing at Endurance
- Description of the research process (past 4 years)
- What are the outcomes (maybe highlight some projections on the future
- What are the lessons learned also in terms of future research?

Questionnaire for Gregory

- only engl.
- engl. & native language
- only native language

TBD

Shot List

- Italy University Research Padova:**
 - University outside
 - Lab > Computer, modelling, test station
- Lab 2 stretch test
- Italy Endurance Company:**
 - High pressure casting
 - Stamping Process
 - New Finished Parts
- Situation with Colleague from Stellantis in control room
 - **Box with alloys**
 - **Piece of alloy beautyshot for animations**





- **Belgium Scrapyard Comet:**
 - Cars arriving
 - getting recycled
 - Shredder
 - Process and work of the robots, control room
 - Interview & Situative Shots with Gregory & Robert in production hall

(Belgium Recycle Research Uni Liege:

- University, Office
- Auditorium
- Small Scale Lab Test of Alloys
- Lab
- Campus)

- **Stock:**
Big Streets with a lot of cars

Outlines/ more details Laura:

- How many cars are scrapped in EU each year?
- How much aluminium they contain?
- How much was recoverable before and how much more as result of SALEMA recycling improvements? (Comet, Uni of Liege) (How was idea of SALEMA born)

Scrap reborn – new alloys

- How much new Al & critical raw materials imported / used each year normally?
- How can scrap be part of the process instead and how much?
- What happens to scrap to make the new SALEMA alloys
 - o Creation process (Eurecat? Uni of Liege?)
 - o Testing of alloys and components (tensile strength, hardness, microscopic structure, casting defects (x-ray) (Uni of Padua)

Scrap reborn - Putting it into practice

- How much Al used in car industry (CE v EVs) and expected growth
- Casting process with SALEMA alloys (hot / cold – Gestamp) into components for cars (Endurance – frontal frame / hood of car)
- Testing of SALEMA components (as above) (Uni of Padua)
- Building the components into cars (and testing them in cars?? Sister projects do this)
- Industry view (Stellantis)





Real-world benefits

- To industry – quality & EU source
- Academic – results (LD to check balance between this and exploitation for final outcome)
- Policy - reduce reliance on CRM from other world regions
- Environment – sustainability AI production & car making
- Societal – circular economy, safe affordable EVs



b) Annex B - Video script

European Science Communication Institute ESCI	
Date of Finalization:	16.01.2024
Type of document:	
Video Title:	Recycled Aluminium – A Key to Europe's Independence from Imports of Critical Raw Materials
Length of Video:	00:00 (min/sec)
Video Format:	1920x1080 / 25fps / Codec: H.264
Aspect ratio:	16:9
Audio Format:	MPEG-4 AAC
Language of Quotes:	ENGLISH
Film Editing:	Manuel Weingärtner
Filming Countries & Location:	<input type="checkbox"/> Spain, Italy, Belgium
IV Partners:	<input type="checkbox"/> Manel da Silva, EURECAT <input type="checkbox"/> Prof. Franco Bonollo, University of Padova/ Italy <input type="checkbox"/> Gregory Lewis, COMET Group/ Belgium <input type="checkbox"/> Claudio Mus, ENDURANCE/ Italy <input type="checkbox"/> Andre Bongiovanni, Stellantis/ Italy
Sources	<input type="checkbox"/> https://hedgescompany.com/blog/2021/06/how-many-cars-are-there-in-the-world/ <input type="checkbox"/> SALEMA https://salemaproject.eu/ <input type="checkbox"/> Envato <input type="checkbox"/> ESCI Original Footage <input type="checkbox"/> Original Footage ENDURANCE <input type="checkbox"/> OriginalFootageCOMET https://www.dropbox.com/scl/f0/q6zxbjcxe7j303xo2ougr/h?rlkey=cwvp6wla4689dl9g3bmon34tq&dl=0

European Science Communication Institute ESCI			
Related EU research Projects	<input type="checkbox"/> SALEMA https://salemaproject.eu/		
TC	Scene	Text	Duration
00:54	Intro Stock Footage Cars driving ECars Aluminium Alloys, Magnesium Mining (see Intro Video)	In 2023, 288 million registered cars and trucks were counted on the streets of Europe. 10% of an average passenger car consists of aluminium; when it comes to electric vehicles, up to 30% is made of aluminium parts. And the amount of aluminium needed is expected to increase. Aluminium is around 30% lighter than steel; using it in cars makes them more energy-efficient. However, there is a speed-bump on the road to more sustainable transport: aluminium and its ore are considered as strategically important critical raw material - CRM for short. To make it into usable alloys, other CRM is needed – such as magnesium and silicon. In Europe today, we rely on imports from other world regions.	
00:55 – 01:10	Franco Bonollo, Professor of Metallurgy, University of Padua	(00:0021:21 – 00:21:51) We know that the situation currently in Europe is quite complex. And one of the main concerns is about the raw materials. [...] In this issue, we are suggesting a new alloys with the reduced content of critical raw materials with maximised content of recycling.	
01:11 – 01:23	Broll Belgium Scrapyard Comet Group, Drone Footage	Hundreds of tonnes of old cars are shredded each day in European scrapyards - a valuable source of aluminium that the car industry had not been able to use – until the SALEMA project.	



TC	Scene	Text	Duration
01:24 - 01:46	Establisher EURECAT Lab (Building with Logo, Manuel entering building) Manel da Silva, Head of Light Alloys Research, Eurecat Technology Centre of Catalonia, SALEMA project coordinator Off & On	00:10:59 – 00:11:13 In SALEMA, we are going to develop alloys for stamping, for extrusion and for the manufacture of structural components by means of die casting, which until now had to be made with primary aluminium. It was only manufactured from pure aluminium. So this will allow us to enter into applications that were not possible until now.	
01:47 – 02:20	Animation SALEMA circular infographic Broll Belgium: general impressions of scrapyards – z.B. 1:11:47, 00:35:18, 00:15:25, 00:31:40,	The idea of SALEMA was simple: change the aluminium value chain from a one-directional to a circular economy. Instead of producing alloys using primary aluminium or imported CRM, which end up in vehicle waste, the waste itself should be recycled as a source for high-end aluminium alloys. The journey of recycled SALEMA-alloys begins in Belgium. Here, Groupe COMET processes 200 tonnes of material per hour and sorts out the aluminium pieces.	
02:21 – 02:41	Grégory Lewis, Research & Development Engineer, Groupe COMET im On - Possible to cut in Gregory looking at metal scrap (Broll Belgium 00:32:31)	00:05:52 – 00:06:44 We will extract the heaviest fraction of metals. So copper, zinc, brass, lead, stainless steel will be removed from the metal mixture. At this stage we have a global aluminium fraction that will be further separated into two kinds of aluminium	

3

TC	Scene	Text	Duration
	BROLL Footage Scrapyards, table with metal samples	Some of this pre-shredded material contains different kinds of metal such as silicon, magnesium or copper. On the other side, there is aluminium with less alloying elements.	
02:42 - 03:19	Broll & Animation Automodell mit Einsatzmöglichkeiten	Being able to accurately sort these different qualities of aluminium scrap is the key to being able to recycle it for even high-performance uses such as car-part B-pillars or shock towers. This challenge has been mastered with a new technology called LIBS – laser-induced breakdown spectroscopy – a way of 'sniffing' the chemical composition of the aluminium scraps.	
03:20 – 03:37	Gregory im Off LIBS Belt (00:36:16), Laser (00:37:43) & Robots (Broll Belgium 2 Teile gepickt vor 00:41:03, 00:42:36, 00:42:47 – 00:42:51, 00:50:05, evtl. Irgendwo bei 00:58:02	00:29:24 – 00:30:05 [...] We will generate very high frequency laser beams to heat metal particles to create a plasma. And what is plasma? It's a fume. Containing all the elements contained in the initial metal scraps.	
03:38 – 03:55	Control room with data-stream	The composition of the plasma is analysed using a spectrometer and sent through an algorithm which feeds a line of robots with detailed information so they can proceed with sorting. The algorithm used in LIBS is a key innovation developed in SALEMA by the University of Liège.	
03:56 – 04:19	Gregory (off) chatting with Robert/ University Liège	TC 00:30:47 So we have a long lasting partnership with University of Liège, because they have developed huge skills about the industrial implementation of new sensors to be able to process and use huge amount of data in a very short period of time. That is the key to make such a technology profitable for an industrial partner like COMET.	

4



TC	Scene	Text	Duration
04:20 – 04:32	Close ups shredded aluminium (Broll Belgium)	The sorted aluminium scraps contain a mixture of other materials, which affect the properties of alloys. So the challenge now was how to recycle the recovered scraps into high quality products.	
04:33 – 04:49	Franco Bonollo, <i>Professor of Metallurgy, University of Padua</i>	[00:04:23:01] Aluminium coming from recycling is more difficult to be controlled. [00:04:30:00] So one of the efforts of the project is to understand which is the best possible way of recycled aluminum keeping or improving [00:05:00:00] even the final properties of the alloys.	
04:50 – 04:58	Computermicroscope (Broll Italy 01:16:30 ff)	Inventing a new 'recipe' for high-performing recycled aluminium alloys was therefore the task of the research team.	
04:59 – 05:15	Franco Bonollo, <i>Professor of Metallurgy, University of Padua Off & ON</i>	00:07:14 – 00:07:52 We started from an hypothesis of 200 compositions. We selected the best one from the point of view of the simulation and the prediction of the behaviour. [...] We take the specimen we tested, and then we perform the final selection of a couple of alloys for the demonstrators.	
05:16 – 05:37	Establisher Endurance Italy: building with Logo, production halls, design-department (Broll Italy 00:02:08 ff)	Demonstrating that the new alloys would meet the needs of industrial players in the value chain was a crucial goal. Here, Italian company ENDURANCE got busy. As an industrial foundry that casts metal parts for cars, its role was to test how the recycled alloys would work in practice.	
05:38 – 05:59	Claudio Mus, Technical Research and Development Director, ENDURANCE Overseas (On & Off)	12:30:00 In our business, we have to produce [00:13:00:00] a sound casting at the end of each single shot. One critical point that we have to consider is the design of the gating, which is the flow of the metal before entering the part that has to be carved into the steel of the mould and is very crucial to the success of the filling and solidification of the casting.	

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TC	Scene	Text	Duration
06:00 – 06:12	-Broll PRoduktionshallen, Szene Claudio & Andre vor mould (Broll Italy 00:13:56 ff), Original Footage von Claudio: Gießprozess	Changing the chemistry of an alloy changes the way the molten aluminium enters and flows through the mould. This is critical for the quality of the car parts produced in the casting process.	
06:13 – 06:43	Claudio Mus, Technical Research and Development Director, ENDURANCE Overseas	00:15:59:10 It means Knowing [00:16:00:00] the thermophysical properties and fluidity of these alloy, knowledge will help to design the next casting with a more robust base of information, meaning that we should be in condition to design the mould and the process to be successful from a scrap point of view, reducing the risk of having quality issue on the parts, So all the effort done so far will help us to reduce the time to market of the SALEMA alloys, when those will be required by our customer.	
06:45 – 06:55	Laser proof (Broll Italy 00:22:00), X-Ray (Broll Italy 00:30:31)	The newly made parts and the alloys were tested over and over again by both the industrial and academic partners to ensure they meet the high performance needs of the market.	
06:56 – 07:27	Franco Bonollo, <i>Professor of Metallurgy, University of Padua</i> Stretch test Uni Padova (Broll Italy 00:57:32ff)	00:12:37 – 00:12:59 In the project we are testing, first of all the microstructural features of the of the alloys. So the way in which the elements are generating the structure of the material. And then we are performing the mechanical testing. We have a lot of requirements from a mechanical point of view by the end users. And we are checking in the specimen if they are satisfying these requirements. 00:10:08 – 00:10:25 This casting is a very nice because it will be useful also for showing to our students the potential of aluminium associated to the foundry process, especially for high pressure die casting process.	

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TC	Scene	Text	Duration
07:27 – 07:44	Broll footage Uni Padova students	Future generations of metallurgists and engineers at the University of Padua will learn the project's alloy design methodology - which will also work for other kinds of metals. And there are other benefits, too.	
07:45 – 08:25	Broll Eurecat da Silva mit Kollegen prüft Aluminium Teile Manel da Silva, Head of Light Alloys Research, Eurecat Technology Centre of Catalonia, SALEMA project coordinator (Off & On)	00:33:37 - 00:34:17 Long term the development achieved in SALEMA can be applied to many different sectors. All those where requirement aluminium alloys are used such as from other automotive, railway, aeronautical, naval sectors to sectors that have nothing to do with movement such as at the structural level of aluminium carpentry, other structural applications and many other sectors.	
08:26 – 08:40	Composition of aluminium and transition to map of Europe with partner-logos	Today, SALEMA's aluminium alloys are ready for mass-industry uptake, contributing to Europe's goals for more sustainable transport and reduced reliance on imported primary and critical raw materials.	
	END		

