

LIFE RESKIBOOT

MID-TERM SECTORIAL TECHNICAL WORKSHOP

Ski boot assembly, characterization and testing

DALBELLO



TIMING

TIMETABLE

Action		2020				2021				2022				2023				2024			
Action number	Name of the action	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
A. Preparatory actions (if needed)																					
B. Implementation actions (obligatory)																					
B.1	Recovery of post-consumer ski boots and sorting to turn them into secondary raw materials that will be characterized in comparison to virgin ones			■	■	■	■	■	■	■											
B.2	Design for recycling					■	■	■	■	■	■										
B.3	Production process optimization and component manufacturing with secondary raw materials					■	■	■	■	■	■										
B.4	Ski boot assembly, characterization and testing											■	■	■	■	■	■				
B.5	Replication and business planning												■	■	■	■	■	■			
C. Monitoring of the impact of the project actions (obligatory)																					
C.1	Evaluation and monitoring of environmental and circularity impacts and benefits			■	■	■	■	■	■	■	■	■	■	■	■	■	■				
C.2	Monitoring using Life Programme Webtool			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
D. Public awareness and dissemination of results (obligatory)																					
D.1	Dissemination and Communication			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
E. Project management (obligatory)																					
E.1	Project Management			■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		



KEY RESULTS FOR THE PERIOD

Main results	Completion
First ski boot sample assembly	100%
Lab test and on snow test on sample ski boots	90%
Ski boot production	On-going



ACTIVITY - WORK DONE

First ski boot sample assembly

- The first assembled ski boot uses the liner and the injected parts made with recycled materials.
- The only parts that are not made from recycled material are the buckles because the aluminum needs to be pure to be processed
- For the 1000 pairs only obsolete buckles will be used (leftovers from old productions).
- All the parts are replaceable → all the rivets have been replaced by screws.



ACTIVITY - WORK DONE

Lab test and on snow test on sample ski boots

Every ski boot must withstand the following test before approval for production:

- **Release test:** the test aim is to find the torque needed to release the ski boot from a binding. There is a range of value that the boot must respect to be within the ISO norm.
- **Impact tower test:** this test simulates a fast and heavy load on the ski boot, like a skier falling from a jump. The ski boot must withstand an incremental series of loads released at increasing speed.
- **Walkmeter:** simulates the skiing life of the boot, it's possible to recreate 1 year of intense use in just 1 day. It's useful to determine the structural integrity of the ski boot after a long-term usage.



ACTIVITY - WORK DONE

Ski boot production

- Creation of Boms for liner and skiboot
- Creation of technical construction sheet
- Creation of tools and files such as procedures/instructions for production of the 1000 pa



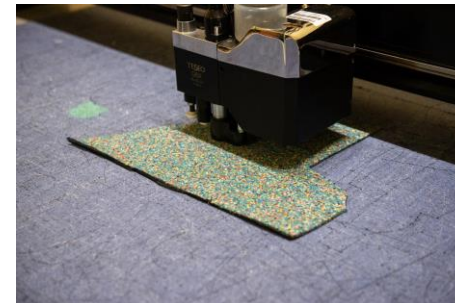
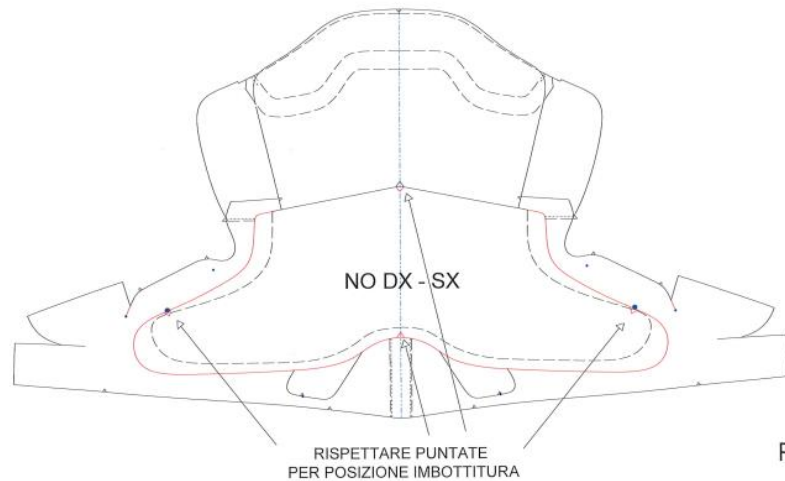
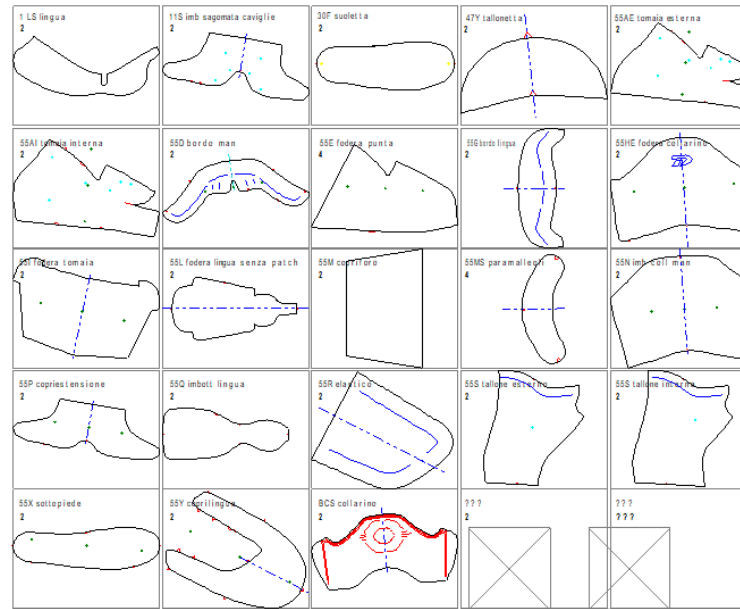
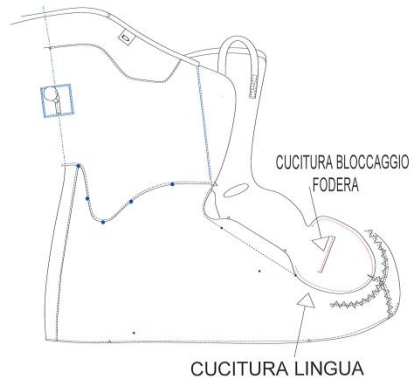
DRIBELLO		SCHEDA ATTREZZAGGIO (verticali)		NC	DIR
COD. STAMPO	1559	DESCRIZIONE	160 DS MX	TAGLIA	275
1° PESO SENZA MATT		2° PESO SENZA MATT		TOT	
PESO MATTIATO 1		PESO MATTIATO 3		PESO SENZA MATT	
PESO MATTIATO 2		PESO COMPLETO		PESO MATTIATO 2	
1° INIEZIONE					
MATERIALE 1	PO	% MATERIALE 2		% COD. MASTER	100
FORNITORE	21machi	FORNITORE		% SOLUZIONE	940
LOTTO		LOTTO		%	85
TEMPERATURE CILINDRO					
90 275 270 275 270 275					
TEMPO CICLO					
CONDIZIONAMENTO STAMPO		GOCCIA FREDDA		SILICONATURA	
90		NO		NO	
INIEZIONE					
V1 V2 V3 V4 V5 V6 V7 V8 V9 V10					
PRESSIONI INIEZIONE					
P1 P2 P3 P4 P5					
TEMPI					
Riempiamento 10, Post-pressione 15, Tappa iniziale 18, Chiusura 10, Raffreddamento 55					
CORSE					
1° molo 95, 2° molo 15					
TRAFILA					
1° molo 40, 2° molo 15					
CHiusURA					
1° molo 50, 2° molo 40, 3° molo 150, 4° molo 150, 5° molo 150, 6° molo 150, 7° molo 150, 8° molo 150, 9° molo 150, 10° molo 150					
TEMPERATURE CAMERA CALDA					
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10					
CONDIZIONAMENTO STAMPE					
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10					
NOTE PER STAMPAGGIO					
Attrezzaggio stampo	Avvio produzione	regolazione silconatura	regolazione calatura	diffusi ricambi	Interventi da effettuare
30'	10'		ROBOT.		
NOTE					
Preparato da [Signature] Verificato da [Signature]					

DRIBELLO		SCHEDA ATTREZZAGGIO (verticali)		NC	DIR
COD. STAMPO	1552	DESCRIZIONE	50 scato DS MX	TAGLIA	275
1° PESO SENZA MATT		2° PESO SENZA MATT		TOT	
PESO MATTIATO 1		PESO MATTIATO 3		PESO SENZA MATT	
PESO MATTIATO 2		PESO COMPLETO		PESO MATTIATO 2	
1° INIEZIONE					
MATERIALE 1	PO	% MATERIALE 2		% COD. MASTER	100
FORNITORE	21machi	FORNITORE		% SOLUZIONE	940
LOTTO		LOTTO		%	85
TEMPERATURE CILINDRO					
90 275 275 270 275					
TEMPO CICLO					
CONDIZIONAMENTO STAMPO		GOCCIA FREDDA		SILICONATURA	
10		NO		NO	
INIEZIONE					
V1 V2 V3 V4 V5 V6 V7 V8 V9 V10					
PRESSIONI INIEZIONE					
P1 P2 P3 P4 P5					
TEMPI					
Riempiamento 10, Post-pressione 15, Tappa iniziale 18, Chiusura 10, Raffreddamento 55					
CORSE					
1° molo 150, 2° molo 150, 3° molo 150, 4° molo 150, 5° molo 150, 6° molo 150, 7° molo 150, 8° molo 150, 9° molo 150, 10° molo 150					
TRAFILA					
1° molo 40, 2° molo 15					
CHiusURA					
1° molo 40, 2° molo 40, 3° molo 150, 4° molo 150, 5° molo 150, 6° molo 150, 7° molo 150, 8° molo 150, 9° molo 150, 10° molo 150					
TEMPERATURE CAMERA CALDA					
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10					
CONDIZIONAMENTO STAMPE					
T1 T2 T3 T4 T5 T6 T7 T8 T9 T10					
NOTE PER STAMPAGGIO					
Attrezzaggio stampo	Avvio produzione	regolazione silconatura	regolazione calatura	diffusi ricambi	Interventi da effettuare
30'	10' Min.	NO	ROBOT.		
NOTE					
Preparato da [Signature] Verificato da [Signature]					



ACTIVITY - WORK DONE

Ski boot production



THANK YOU FOR THE ATTENTION!



 Co-funded by
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LIFE19 ENV/86/000059



STUDIOFIESCHI
& SOCI
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