Hello everyone great to have you tuned in to a new Laco video nearly 12 weeks of testing and dozens of test series the result excellently tested and uniquely certified Laco pilot watches according to DIN Norm 8330 today we are talking about the Laco Novelties right after the Intro.

[Music]

It's been a long time all the more I am delighted to have him back by my side Uwe Rücker managing director of Laco welcome Mr Rücker.

Hello Amina.

Nice to have you back

I'm glad to be here.

I believe you are as excited as I am about today's talk on the new DIN watch's Hamburg and Hamburg GMT they are indeed something very special. Laco has worked on them for a long time to even obtain certification the watches had to undergo rigorous testing it was a very long and exciting development process and we will talk about all of that and much more today both watches are tested and certified according to DIN 8330 not everyone out there might initially understand what that means what is the purpose of a DIN standard?

The DIN standard which we have lying on the table has quite a few pages and regulates what needs to be done in a watch or how the watch should look to be suitable for visual flight or instrument flight. In essence it replaces an instrument in the cockpit and must therefore of course meet the requirements that a cockpit instrument would have. That means it must be easy to read not interfere with other instruments fit into the overall picture be easily understandable but also meet strict technical requirements regarding its own susceptibility to interference this is what the DIN standard regulates.

So in short it's a developed standard for Technical and Optical requirements of pilot watches.

Exactly there was a predecessor the TestAF which was a standard that started in 2012 and the DIN standard essentially replaced it. The TestAF is now 12

years old and the DIN standard has now also been around for a few years and precisely regulates these issues for Aviation.

But it also expanded the requirements?

Yes it increased some and expanded some also the DIN standard also includes other standards such as those for water resistance, impact tests or antimagnetic signatures so several DIN standards that are nested within each other.

So who sets these requirements where does the DIN standard come from?

A committee that worked on it. For one the University of applied sciences in Aachen.

Where these tests took place will come to later.

Exactly and a few pilot watch companies or watch manufacturers were also part of that committee that influenced the decision- making from the perspective of watchmaking the Sinn company was also significantly involved here.

Admittedly it was a very large and demanding project why did Laco specifically decide to do it?

Because we already had a certified watch with the big Navigator watch back in the 1940s we naturally felt compelled to do this when a new certification option became available for a pilot watch being a traditional company like Laco. We've had this on our agenda for some time now and we started the project in the middle of I think 2016 or 2017 and were relatively far along then came covid-19 and all the testing Labs were closed and there was also an opportunity to exchange ideas. And now after covid-19 we have finally made it over the Finish Line even with the tests and everything that goes with it. It was a lot of work. Simply understanding what the DIN standard says and what you have to comply with for example it describes the dial in great detail what is permissible what isn't how long the indices can be how wide they can be how many numerals can be on them Etc there are a lot of regulations that have to be adhered to precisely so you have to think about it for a while including how exactly you want to do it.

And now having completed the process it's really a testimonial for the whole company isn't it?

That's what it feels like yes exactly that we've achieved something which basically proves that we are particularly familiar with pilot watches.

In a quote from you Mr Rücker it says our DIN 8330 certified pilot watch is a milestone in laco's history we just heard that the entire Laco team has been working on it for years what is the challenge behind such a major Milestone?

The first step is to get a copy of the standard and see what it actually says it's not publicly available you have to buy it and then read through it with all the Departments to see what it means starting with the graphic design and the technical requirements that are in there and how can you link them together which options do we already have what other things we need to do to even start moving in the direction that is required by the standard and then of course a lot of graphic design you have to make sure that you incorporate as much Laco DNA as possible while still maintaining the requirements of the DIN standard and that includes things like line thicknesses for minutes and second indices hand colors or colors in general. There's a lot of very detailed description and to connect that with the technical demands behind it and the typical Laco face

You've just explained that the technical and visual requirements are specified down to the smallest detail in the DIN standard how much design Freedom does that leave you with to bring the Laco character into your own watches ?

The fact that DIN standard was of course co-created by companies that manufacture typical Aviation products means that attention has also been paid to ensure that this description does indeed produce a pilot watch but then it does become very cockpit very typical pilot watch so you no longer have the freedom to do things that you would normally do in the design of a watch to a certain extent you limited but because we're particularly familiar with pilot watches and many of these elements are familiar to us we were of course able to incorporate the Laco DNA well.

Let's break down the Laco DNA into its individual parts what are the typical Lao elements that can be found in the two watches?

Yes very typical and visible at first glance is the dark blasted case which is the typical gray that we already had in the pilot watches in the 1940s back then still lacquered today it is stainless steel blasted gray we have it in the Laco original series we have it in the Pro Series we use it in the Frankfurt GMT and there's a lot of other things in there too the shape of the case is from the Frankfurt GMT. The dial the typical cockpit dial that we also have in the cockpit watch section comes from this watch with the distinctive triangle at the top of the 12. The GMT hand which we now also have here in this version also comes from this watch the very distinctive profile of the bezel and the bezel itself come from the sportswatch range the back is embossed like the sports watch and also like the Frankfurt GMT.

And the black dial is that specified in the DIN standard or where does it come from?

Yes the black dial is specified in the DIN standard it must be map black and the numerals and hands must be white and the Luminous material is also C1 and is also stipulated.

Like all other Laco pilot watches these two models were named after a German City namely Hamburg is there a story behind it?

Yes basically you can draw a line from the past to the present the observation watches that were built in the 1940s were set in Hamburg bya The Observatory this gave them their exact time so that they were accurate before the flight and could then determine the exact position during flight and this project was also started in Hamburg by the company cotch which helped us to get involved in the project regarding the approach how to plan a project like this who has to be involved and where the test centers are who the contact persons are and so on so basically the whole process that you have to go through that's why they're called Hamburg.

There are two variants one is the classic threehand version and one is a GMT version what are the similarities and differences between the two watches?

The similarities and you can see that right away are very extensive in other words the Case. Case color, case shape case size are all the same at first glance even the dial of course but the differences are essentially the GMT display of course here we have the typical Laco handshape with the frame handed orange and this 24-hour display divided into a day in a night area in dark gray and light gray and then print it with a bright orange color for the numerals that are displayed. The movements are also different of course the GMT version has a Sellita SW 330 and the three-and version has a Sellita sw200 both movements are top grade quality as required by the standard.

Does that mean that there are no configuration options?

No the configuration options are not available because the watches are DIN tested or din certified and because the watches only meet the DIN standard as they are shown here and as we sell them if we were to install a different dial or different hands or a different back. Crystal back for example then the watch would have to be completely DIN tested and DIN certified again this would also apply to a different anti-reflective Crystal so we are not allow to make changes in order to retain this DIN certification.

It has to be said that the technical requirements of the DIN< standard were also quite challenging the watches were subjected to a very demanding functional and endurance test for weeks they had to pass three categories the first was functionality meaning how easy is it to use the watch how well can it be read right now we can see pictures from the accuracy and power reserve tests. The watches were tested for their physical resilience they took a good hammering from the hammer and were sent flying around or were given a

good shake on the vibration device for example among other things typical Aviation liquids such as diesel were also tested and in the last category which was about safety magnetism played a very very important role how does the watch behave under cockpit lighting how compatible is it with the night vision devices or what about the strap attachment and that was really only a small part of the test in total there were 16 tests.

yes exactly 16

So a huge test to what extent is it possible to prepare the whole test scenario in advance?

The tests are described and the requirements are also described in the DIN standard the 8330 describes exactly what the 8330 requirements are and also includes other DIN standards that are included in the 8330 as subtests these include for example water tightness impact resistance vibration resistance Etc and of course you have to study them carefully the requirements on the one hand but also how they're tested and some of the test situations can of course be recreated and then tried out and tested in House. Of course you have to prepare for this by thinking carefully about what you are setting out to do what can I do within the watch to be able to fulfill these specific requirements and of course you have to adapt the design visually but also technically in terms of construction and of course we already have a large repertoire of measures that we have taken in the past for our Squad watches for our sports watches and also for our pilot watches so you can draw on this knowledge and prepare yourself well by trying these things out in the tests and then gaining certainty that you are doing the right thing or have already done so in the past and every now and then when you realize that something isn't working you have to think about how to improve it and then with the help of the suppliers and the experts in the test lab you always find ways and approaches to improve the quality of the individual test results.

So which tests were carried out inhouse in advance for example ?

definitely the impact tests for example or the water tightness test we can do the vibration test we can test against the typical Aviation liquids and also try out different sealing mechanisms for example or try out different approaches in isolation to see which one is probably the right one for this watch.

What expectations or perhaps stress do you have going into such a demanding testing process?

Stress is the wrong word from my point of view I was more Curious and intrigued it was an exciting experience to see how to get there how to get to the test and how the tests are then carried out to see that everything works that everything has been worked out and all of these things just having the

experience of passing this test seeing the test results and seeing it just work is a really nice story.

In the end it's the result that counts and Laco made it. We took the certificate home with us if you want to find out more about the tests you can watch our three part video series we followed the whole thing for you on location and recorded it in great detail the three parts are linked in the info box we are very curious to hear what you guys think Professor Dr Janser who conducted the tests mentioned in the test video among other things that only a few watch manufacturers in Germany dare to approach the portfolio of tests how important is further development of the DIN standard in and for the German watch Market?

I think something like the DIN standard for pilot watches is a very German thing standardizing things and clarifying what you can expect from a product which requirements the product meets and what you get for your money and also to know exactly in which bandwidth in which framework condition the product works that's a very German idea we know it from the industrial processes where certain procedures are standardized and I think it's also quite good for the watch industry in general and for the pilot watches in particular to have a standard and to know exactly what to expect from the product what can I expect and what can't I expect and I also think it's good to be able to really measure this and not just describe what the watch does in fancy words but with hard facts that's why I think it's a good idea that needs to be developed further it would also be nice if more and more people would get on board and do these tests and further standards are being being developed for watches that have to meet certain characteristics.

We are slowly reaching the end Mr Rücker finally it has to be said that this has been a long development process with many people involved.

It was an extensive exchange between many areas those being standardization bodies test labs and employees from our own company of course.

I would like to say a huge thank you to everyone involved working together very intensively sometimes on a very friendly basis and it was great fun for everyone to pass these tests and work towards them so thank you very much for that.

I would also like to thank the company Sinn in particular because Sinn encouraged us to get involved in this project Sinn also helped us to understand the typical hurdles that can and should be expected in such a project we had a very pleasant very friendly meeting in Frankfurt at the start of the project so many thanks for too.

If you choose one of the two watches it will be delivered to your home in an aluminum case which we already know from the Frankfurt GMT let's open the whole thing up.

Obviously the watch inside as expected but also a hang tag which we already know from the Frankfurt GMT. There It Is orange here we now have a gray one reading ready for takeoff and of course the corresponding documents.

So lots of nice little gadgets that come on top. We are very excited to hear what everyone has to say about the new Laco DIN watches please let us know in the comments other than that Mr Rücker thank you for being here today.

thank you very much for the interview

my pleasure thank you all for watching and we'll see you next time.

[Music]Hallo zusammen

und Herzlich Willkommen zu einem neuen Video in diesem Video zeigen wir euch unsere Bronzemodelle die wir derzeit mit einem Durchmesser von 42 mm anbieten

Die Gehäuseform ist identisch zu den Fliegeruhren der Originalserie Serie sowie den Erbstück Modellen mit den gealterten Edelstahlgehäusen. Wie bei den Erbstück Modellen haben wir auch hier die bereits durch Laco gealterten Zifferblätter und Zeiger.

Anders als bei den Erbstücken wird das Gehäuse hier aber nicht vorgealtert sondern entwickelt erst beim tragen eine eigene Patina daher werden die Bronze Modelle auch eingeschweißt ausgeliefert und glänzen zu Beginn noch goldgelb.

Die Uhr die wir gerade zeigen hat bislang nur leichte Alterungsspuren so dass die ursprüngliche Gehäusefarbe noch gut zu erkennen ist.

Um den Hautkontakt mit der Bronze möglich zu vermeiden ist der Boden der Uhr aus Edelstahl gefertigt denn es kann vorkommen dass die Bronze durch die Alterung einen leichten Grünspann bildet der auf die Haut abfärben könnte.

Dies vermeiden wir durch den Edelstahlboden auf dem die typische Gravur der original Beobachtungsuhr aus den 40er Jahren zu sehen ist. Hier sehen wir das Armband mit Nieten ein sogenanntes geschlossenes Fliegerband welches ebenfalls an die Originale der 40er angelehnt wurde durch diese Bandform mit der Rollschließe hat die Uhr einen guten Halt und fällt nicht vom Handgelenk falls sich das Band öffnet.

Wie bei den historischen Vorbildern haben wir auch hier eine markante griffige Krone mit Steg. Bei den Uhrwerken verwenden wir Schweizer Sellita Werke weihweise in Automatik oder Handaufzug. Standardmäßig in der Elaboré Ausführung und wer möchte kann das Werk auch auf die Top Ausführung upgraden.

Als zusätzliche individualisierungsoption ist eine Gravur auf dem Gehäuseboden möglich. Die Bronzeuhr gibt es ebenfalls mit dem Zifferblatt im sogenannten Baumuster B.

Wie auch das vorher gezeigte Baumuster a hat auch diese Version ein vorgealtertes Zifferblatt und Zeiger sowie das gleiche Gehäuse mit den geraden Bandanstößen und der FL Gravur an der Gehäuse Flanke die zu den typischen Elementen einer Fliegeruhr gehört. Auf dem B Zifferblatt kann man gut erkennen dass wie bei den historischen Beobachtungsuhren früher nur jede zweite Ziffer mit Leuchtmasse belegt ist und daher einen anderen Farbton hat.

Im Dunkeln leuchten die Ziffern 10 20 30 und so weiter und das Fliegerdreieck auf der 12 Uhr Position. Früher wurde noch Radium als Leuchtmittel verwendet und heute wenden wir die bekannte Leuchtmasse Superluminova C3.

Die Zeiger sind ebenfalls mit Leuchtmasse ausgefüllt damit die Uhrzeit bei Nacht klar und präzise ablesbar ist. Standardmäßig ist das Saphirglas einseitig innen entspiegelt auf Wunsch bieten wir auch eine beidseitige Entspiegelung an.

Wir zeigen euch die Bronzeuhren im Vergleich zu einem Erbstück Modell in der gleichen Größe links das Erbstück mit gealtertem Edelstallgehäuse und rechts die Uhr mit dem Bronzegehäuse von der Seite kann man den Unterschied der beiden Gehäuse sehr gut erkennen wobei das Bronze Modell rechts noch keine starke Patina hat. Die Alterung beim Erbstück bleibt wie hier zu sehen und altert nicht weiter.

Um den Alterungsprozess zu zeigen haben wir hier noch eine zweite Uhr zum Vergleich die schon deutlichere Spuren der Alterung zeigt. Insgesamt ist diese schon viel dunkler und glänzt weniger je nach Trageverhalten entsteht die Patina beim einen schneller und beim anderen etwas langsamer was diese Uhren jetzt noch nicht haben sind grünliche stellen die erst nach einiger Zeit beim Tragen entstehen. Wir verwenden hier eine Aluminiumbronze die relativ langsam altert dafür aber besonders gleichmäßig passend zu den Uhren kommen die Bronzemodelle und die Erbstücke in einer schönen Holzbox daran ist die Uhr und seitlich das Booklet und die Garantiekarte im Deckel findet sich noch mal das Logo und die Scharniere passen auch zum Vintage Stil der Uhr.

Dank des kleinen drück Knopfes geht die Uhrenbox auch nicht ungewollt auf.

Das waren unsere Bronzeuhren mit 42 mm Durchmesser zu unseren Original Fliegeruhren und den Erbstücken haben wir einen ausführlichen Talk gedreht die beiden Videos verlinke ich euch in der Infobox schaut da gerne vorbei ich bedanke mich fürs zuschauen und sage Tschüss bis zum nächsten Mal.