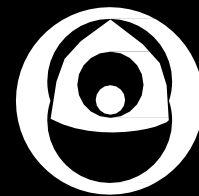


WANKEL



Journal

issue 109 - IV 2023





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Editorial

By Heiko Rossnagel - For the term "*Continuity*" can be found in the "universal reference work" for the German language, the Duden dictionary, the synonyms "*consistency*", "*endurance*", "*constancy*", "*continuity*", "*persistence*" and "*perseverance*" can be found. All terms that unintentionally appeared continuously before my inner eye when I was compiling the articles for this issue. In the interplay of this term, however, its counterparts, *change* and *transformation*, must also be considered. After all, where would societies as a whole, or even just parts of them, be if they only followed the concepts of *continuity* and ignored *change* and *transformation*?

The difficulty lies in the complexity of recognising which part of a whole is better changed and which part should continue to exist.

In the case of the Ro 80 Club International, this interplay of the two poles works extremely well, thanks to the outstanding work of all club members. With a *perseverance* that has lasted for many years now, our second chairman Andreas Meyer takes care of the technical matters in particular, so that the *continued existence* of our vehicles is ensured at a high technical level. It was therefore not surprising that he was unanimously confirmed for a further term of office at the regular election of the second chairman at the Annual General Meeting.

The Annual General Meeting took place on Lake Constance, which originally led me to weave in a play on words with *Konstanz*. But this gag would have been too "cheap" even for me, especially as it was held in Lindau and not in Constance.

Constance. *Constance*, however, is characterised by the work of the new host of TES (now OTC) Frank Obrist. His company develops pioneering alternative fuels that could point the way to the mobility of the future. A perfect interplay of *perseverance* and *change*. As part of the AGM in Lindau, we were given an impressive insight into the perfect interplay of these two attributes during a presentation and a tour of OBRIST DE (from page 8).

Consistency was also documented by the celebrations in Neckarsulm to mark "150 years of NSU".

Showed the "house brand" (Audi/NSU) of our Ro 80 all the many years that have passed that "Innovation. Daring. Transformation." is not just an empty slogan to mark the anniversary, but is also synonymous with *continuity*, *change* and *transformation*, thus benefiting an entire region. The detailed report by our Swiss colleagues on the festive event can be found from page 16 onwards.

The Japanese brand Mazda can probably be credited with *persistence*. After all, they were the last car manufacturer to bring vehicles with Wankel drive technology onto the market. And even though this era appears to have officially ended around eleven years ago, the development departments in Hiroshima never gave up on this concept. Following the market launch of the single-disc Wankel range extender in the MX-30 e-Skyactiv R-EV (first driving report from page 63), the "Iconic SP" study is now making people sit up and take notice. The sports car generates a good 350 hp with the help of a twin-disc Wankel generator. That's something to look forward to in the future! (You can read the presentation of the sports car study from page 68 onwards).

A note on my own behalf: "And every day the groundhog greets the groundhog" is a degenerate version of *continuity* which could be desirably put "ad acta". With the help of *change*, all future submitters of articles for the Wankel Journal can make a contribution. The appropriate instructions can be found on page 74.

With annual *continuity*, the entire Wankel Journal team wishes you a merry and carefree Christmas and a good start into the year 2024.

We wish you *perseverance*, *persistence* and *consistency* in the cultivation of our shared hobby and don't forget *change* and *transformation*...towards the positive!

I wish you a peaceful and contemplative festive season according to the motto of the Bavarian comedian Karl Valentin: "When the quiet time is over, then it will finally be quieter again!"



Your editor Heiko Rossnagel

News from the Executive Board



Dear members of the Ro 80 Club International, for a club with around a thousand members, it is gratifying to see it continue to grow! In August, September and October, another 21 Wankel enthusiasts found their way to us, almost half of them from other European countries (3x Austria, 2x Great Britain, 1x Belgium, 1x Poland, 1x Canada and 1x France). As always, we warmly welcome the newcomers and hope that they feel well looked after when they take part in the activities and get to know the good supply of spare parts.

In August, the warehouse party took place for the fourth time in Pattendorf. The weather was fine and the hard-working warehouse team catered for our well-being with food and drink. This time the number of visitors was somewhat lower and we are therefore considering whether this open day should only take place every two years.

As expected, the number of orders was highest in August with over one hundred, but it was still a good seventy in September and October. This means a lot of work for our warehouse team and I believe that I speak on behalf of our members when I say a big thank you - also for the fast and careful handling of the shipments!

There is now a warming room so that the hardworking helpers don't have to freeze in the winter months in the warehouse. This consists of a caravan, which is located in the warehouse and is electrically heated. Smaller parcels can be packed and paperwork completed in it. Heating the warehouse by partitioning off a room would have been too costly and not very promising.

On 30.09.2023, this year's AGM took place once again as part of the autumn meeting, which was held in Rankweil/Vorarlberg in glorious summer weather. The proximity to the TES, now OTC, in Lindau gave us the opportunity to hold the AGM there - after refreshments and a welcome from the host, Frank Obrist, who also gave us an interesting insight into the work of his company. The 60 or so attendees at the AGM unanimously re-elected Andreas Meyer as 2nd Chairman. From next year, the AGM will take place as part of the spring meeting.

The winter meeting, which was originally planned to be in South Tyrol, will take place in the central Black Forest. The spring meeting with AGM will then be held in Bernkastel-Kues and in autumn our destination will be the Cottbus/Spreewald area.

At the beginning of June 2024, the International NSU Meeting will take place in Fieberbrunn/Tyrol, which is organised by the Ro 80 Club International under the leadership of Andreas Meyer. Hopefully many members will find their way there with their Ro 80! Further information about the meeting and registration can be found on our homepage.

I hope that many Ro 80s will again take part in the meetings, trips and trade fairs next year, and I wish you a quiet and peaceful time at the end of the year.

Ursula Rudolf, Treasurer

Results of the member survey

Detailed results -

"Communication with club members"

By Gunter Olsowski - In our member survey, we asked our members for their opinions and wishes between 29 November 2022 and 9 January 2023.

In this issue, we continue with question 12:

"How do you rate communication with club members (via email, telephone, WhatsApp, etc.)?"

and the corresponding input option for

"Comments, praise and criticism". This newly section was given a grade of 1.87.

Responses to *"Comments, praise and criticism"*

were given by approx. 12% of the participants (60 responses), of which approx. 83% were only praise and positive comments, the rest were constructive suggestions for improvement and only a few points of criticism.

Let's start as usual with the suggestions for improvement and points of criticism: Here are some examples with comments:

"Current list of members (1xyear) with contact details would be desirable.

"The list of members I have is sorted by postcode.

That's impractical, I always search by name first, not postcode, to contact a colleague, totally impractical!"

"If I was looking for a specific member, I used to be able search for it myself in the member directory."

On the subject of membership lists: Every new member receives a pdf membership list with name, city and telephone number when they join, sorted by country and postcode, so that they can find other members in the region as quickly as possible.

In addition, the regulars' table leaders receive a complete Excel list once a year or on request, which they can sort as they wish. For data protection reasons, we cannot distribute complete lists to everyone. However, corresponding lists can be generated on request.

"A disciplined official WhatsApp group would be a great thing, especially if lots of people would join in, for example if there are problems on the road. Or information about events or spontaneous meetings could also be shared. Unfortunately, the WhatsApp group I got to know consisted too much of completely superfluous rubbish that didn't really matter"

There is in fact an informal WhatsApp group in the Ro 80 Club in which participation is

is voluntary. It is not moderated (which is also difficult with WhatsApp) and therefore "foreign objects" appear from time to time. Unfortunately.

"I would like to be able to easily reach someone on a fixed day of the week at a fixed time (1-2 hours) who does not require digital printouts from me." Normally, our order processing department with Steffen Hofmann can be reached by phone almost every evening from around 9.00 pm. E-mails are usually answered the following day. As we all work on a voluntary basis, we cannot offer a fixed time like an office.

"Difficult to find the right contact person." *"They haven't helped me with enquiries yet."* The question for what? When it comes to spare parts or technology, we have competent contacts in Steffen Hofmann, Matthias Steil and Andreas Meyer. who are happy to help.

And now the positive comments with some selected comments:

"As a new member, I was immediately and profoundly welcomed, accepted and helpfully integrated via the technology track! The Ro 80 Club International is a very stimulating "community" here! (compared to other classic car clubs!"

"The club is on hand to offer support if you need advice. Technical support from Andreas Meyer is perfect."

"The guys are all incredibly helpful!" *"E-mail communication is excellent."*

"I am now networked with several club members and feel that I am in very good hands."

"Je communique par mail avec Pieter Jakobs et Andréas Becker qui sont francophones".

"Every question is patiently answered by Andreas Meyer and others. Would say 1 +++!"

"Always available and very helpful! Simply "TOP"!"

"Always friendly and competent."

"Always available."

"Compared to other brand clubs, I think the activity of the Wankel Club is outstanding."

"Very nice and quick help with problems."

"Always open to concerns of all kinds."

"Extremely friendly and helpful. (Andreas Meyer and Matthias Steil)"

"Exemplary accessibility from Andreas."

"Rarely needed, but always helped when needed!"

New members of the Ro 80 Club International

Welcome to the Ro 80 Club!

From the beginning of August 2023 to the editorial deadline at the end of October 2023, we welcomed another 21 new members to the club (in order of entry).

Welcome to the Ro 80 Club!

Since the beginning of August 2023 until the end of October 2023 we could welcome 21 new members in the club (in the order of entry).

Mr Til Faßheber - 17192 Kargow

Mr Martin Steinbrecher - 26441 Jever

Mr Jürgen Schiller - 32457 Porta Westfalica

Mr Rolf Harms - 26316 Varel

Mr Ulrich Stephan - 74391 Erligheim

Mr Torsten Just - 95367 Trebgast

Mr Christoph Lauber - 42327 Wuppertal

Mr David Fletcher - R2N 3C2 Winnipeg,
MB (CDN)

Mr Martin Schmid - 77815 Bühl

Mr Claus Peter Austherr - 67808 Mörsfeld

Mrs Brigitte Markl - 1220 Vienna (A)

Mr Erich Markl - 1220 Vienna (A)

Mr Mateusz Sowinski - 93-370 Lodz (PL)

Mr Douglas Wright - KT20 6LN Kingswood (GB)

Mr Rüdiger Pauls - 30974 Wennigsen

Mr Willi Forster - 84034 Landshut Ms

Nicole Raatz - 6971 Hard (A)

Mr Thomas Sennert - 74172 Neckarsulm





















Monsieur François Rambaud
- 25210 Bonnetage (F)

Mr Peter Murphy -
IP22 2NX Market Weston (GB)

De Heer Herman Moeys - 3010 Kessel-Lo (B)

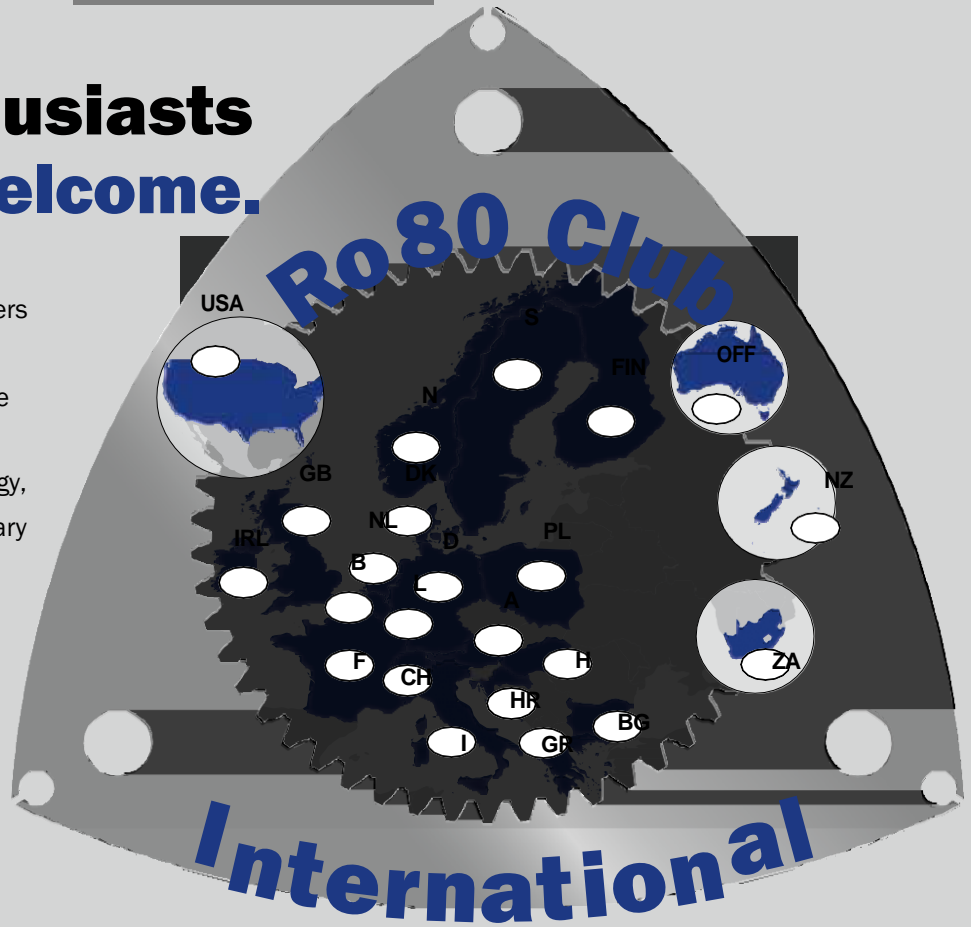
Member statistics

Current list of members (31st October 2023)

		Country	Members	Change
	1	D	824	plus 12
	2	A	45	plus 3
	3	NL	32	
	4	F	26	plus 1
	5	I	21	
	6	GB	17	plus 2
	7	CH	12	
	8	B	11	plus 1
	9	S	7	
	10	OFF	6	
	11	USA	6	
	12	L	4	
	13	IRL	3	
	14	DK	3	
	15	N	3	
	16	NZ	3	
	17	PL	3	plus 1
	18	H	2	
	19	ZA	2	
	20	CDN	1	plus 1
	21	GR	1	
	22	BG	1	
	23	FIN	1	
	24	HR	1	
	25	ROK	1	
Total:			1036	plus 21

Wankel enthusiasts worldwide welcome.

- Largest association of Ro 80 drivers worldwide
- With about 1,000 members in more than 20 countries
- A club for rotary engine technology, open to friends of all kinds of rotary engines



**We are looking forward to
new friends and members**



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**The legend is alive.
Come on board!**

Autumn meeting 2023 in Rankweil / Vorarlberg

By Brigitte Markl, Nicole Raatz, Susanne Doppelmayr, Walter Till, Gunter Olsowski - Ten years after the Vorarlberg meeting that I organised in May 2013, I was able to invite the members and friends of the Ro 80 Club back to my adopted home. I have been living where others go on holiday for 18 years now and know Austria's smallest federal state quite well thanks to numerous Ro 80 tours. I was therefore able to support our event manager Steffen Hofmann in the preparation and realisation of the event. While most of the meeting literally fell through over 10 years ago, we had fantastic weather with very pleasant temperatures on this last weekend in September. With over 40 Ro 80 and on Saturday evening almost 90 participants, our autumn meeting was extremely well attended, including some guests who were there for the first time and some of whom signed their membership application at the meeting.

Reporting on our autumn meeting is a team effort this time. New members Brigitte Markl from Vienna and Nicole Raatz from Hard will be reporting on the excursions on Saturday and Sunday, Monday will be covered by Walter Till and Friday and Tuesday by

me. The report is supplemented with an essay by my wife Susanne, who was present at some of the programme points.

Day 1: Friday, 29 September 2023

(by Gunter Olsowski)

Nicole Raatz (with my red 72) and I in the 68 Sepia arrived at the Hotel Firmament in Rankweil at around 3.00 pm, where a few club members had already arrived and sat in the beer garden (picture 1). After an Aperol or two, the already good atmosphere got better and better and we were almost glad that nobody took advantage of the demonstrative ride-along facility we offered. We were able to set up the Ro 80 on the forecourt (pictures 2 and 3), which was duly honoured by a wedding party in the same hotel (the bride and groom arrived in a VW Bus T2). By 10 p.m. pretty much everyone was there and we let the evening draw to a cosy close (pictures 4 and 5).

Day 2: Saturday, 30 September 2023

(by Brigitte Markl, Vienna)

The Ro 80s were lined up in front of the Hotel Firmament, fully fuelled, well-oiled and beautifully polished, ready for their first trip together.



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Strengthened by a hearty breakfast, the club members arrived punctually at 09:31 to receive the final instructions from Gunter Olsowski, 1st Chairman of the Ro 80 Club International. Valuable technical support was provided by Steffen Hofmann. He used a microphone and loudspeaker to ensure that the more than 80 participants were able to hear the official welcome, the day's schedule and instructions on the route. After all, we wanted to drive through Rankweil in a nice Ro 80 convoy and not lose anyone on the way to Lindau (pictures 6 and 7).

As club members recently recruited by Gunter, my husband Erich and I have already developed a great passion for the unique Ro 80, although we don't yet own one ourselves. However, we quickly realised that: "You can't have just one!", and so we were delighted that Gunter entrusted us with his beautiful '68 Sepia for the weekend. He himself wanted to lead the Ro 80 convoy with his red 72.

Before we could set off, after a short discussion, it was clear which of us would be at the helm that day: Erich - for the time being ;-)

After a short diversions via Westallgäu (picture 8), the colourful column of the Ro 80, accompanied by numerous admiring glances, moved to Felix-Wankel-Straße 10 to line up again in front of the impressive headquarters of OBRIST DE GmbH (pictures 9 to 11).

the impressive headquarters of OBRIST DE GmbH (pictures 9 to 11).

Frank Obrist, club member, CEO and founder of OBRIST Technologies, informed us about the history of the building and gave us an interesting insight into current technical developments for the future production of CO2-neutral fuels based on methanol (Fig. 12).

In the meantime, we were refreshed with cool drinks, which we thoroughly enjoyed in the sunshine and high temperatures.

After a hearty snack, followed by coffee and cake, this year's general meeting took place. In addition to formally required reports and resolutions, the Ro 80 club members received important information on club life and club members, administrative activities and technical problems or spare parts - including an overview of the current stock. In subsequent discussions, questions and suggestions were



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discussed and activities planned for the future. Those who did not wish to attend the meeting were able to take a leisurely stroll through the beautiful surroundings or visit the island of Lindau. Others did not want to part with our Ro 80 and kept "watch" (Fig. 13).

This year's General Meeting was concluded after all items on the agenda had been duly dealt with - and with the admission of a new member, Nicole Raatz (Fig. 14).

Satisfied, we then staggered to Rankweil, where we were invited to the traditional buffet by the Ro 80 Club at the Hotel Firmament in the evening. In a cosy atmosphere and with excellent food and a glass or two, we had interesting conversations, cultivated friendships and made new ones. Erich and I really enjoyed our first meeting together, and to be on the safe side we postponed the decision as to who would drive the 68 Sepia on Saturday.

Day 3: Sunday, 01 October 2023
(by Nicole Raatz, Hard)

Dear diary,

On my first night as a new NSU Ro 80 International Club member, I was able to sleep very well despite my great joy and excitement. The first official day trip should also have a lot to offer.

After the briefing, starting at 9.21 a.m. and conducted by Gunter (Fig. 15), I was immediately assigned as co-driver with the route navigation and commissioned by Andreas Bertsch to take the pictures and video documentation. Fortunately, Edi was also at my side as an experienced navigator. On the way to Café Lari Fari, arrival time 10:49, we conquered a series of serpentine bends at high speed (Fig. 16), which upset the stomachs of the youngest participants and also caused one or two Ro to emit a cloud of white smoke. Once we reached the top, we popped the bonnets and enjoyed the view of the mountains in the bright sunshine with a drink, surrounded by the Ro 80s (photo 17).

At 11.30 a.m. sharp, all Ro 80s set off again towards Schwarzenberg, where another highlight of the day was already waiting for us.



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On the way, we were slowed down by a few traffic lights, otherwise we would certainly have broken through the sound barrier in style. However, the moment in the red phase also offered us a wonderful sight in the side mirror: one colourful Ro 80 after another between the trees in the middle of nowhere. What could be more beautiful? (Image 18 - Photo by Andreas Bertsch)

In Schwarzenberg we were welcomed by the Wälderbähnle club team with a great local lunch and the chairman, Oskar Müller, gave us a fascinating presentation on the impressive history of the Wälderbähnle "In the rhythm of the old days" (picture 19). Well-fortified, we left the Ro 80 at the station (picture 20) and travelled on the historic steam train, with plenty of white clouds of steam, to Bezaus, where a delicious homemade apple strudel was already waiting for us (picture 21). The time spent at Bezaus railway station was not only an invitation to enjoy dessert, but also to explore the Bregenz forests traditions in the steam locomotive such as d' Jüppô or in the railway carriage to the Wälderschenke. Here the

Berlin regulars' table in particular felt very comfortable and in good hands (Fig. 22). Will there soon be a mobile Berlin outpost in the Wälderbähnle in the near future? Who knows (picture 23).

After the historic experience in the Wälderbähnle and a memorable passenger statement: "Oh look, an NSU Ro 80! A true masterpiece of the automobile industry. That's unbelievable, I'm going crazy! There are at least 20 around at once! That's unbelievable!", we continued our ride in the Ro 80 and made our way together to Bödele (picture 24). The car park was resplendent in the colourful splendour of the Ro 80 and once again caught the eye of many a passer-by (photo 25).

After so many experiences and emotions, we enjoyed the view of the Bödele and then made our own way back towards Rankweil. On the motorway at the latest, some Ro 80s found themselves overtaking and we all returned together to the "Taube" brewery pub. At the end of the day, we unwinded with a culinary Ro 80 menu and a drink. What an impressive, eventful and unforgettable day!



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Thanks for that and see you at the latest on the next trip, when the NSU Ro 80 calls for the next adventure (Fig. 26)!

Day 4: Monday, 02 October 2023

(by Walter Till)

Right on time at 9.21am, Gunter announced the briefing for the Monday route in front of the Hotel Firmament and gave the start signal at 9.31 am. Why does he have a penchant for unusual times? Quite simply - they are more memorable because of the "aha" effect! The beautiful "mountain and valley tour" ridden the day before had already been quite a challenge with the ascent of the Faschina Joch at an altitude of 1486 metres. Monday's tour, however, went one better. The pass road up to the Furkajoch at an altitude of 1759 metres was really a challenge for the Ro 80 and its drivers. Numerous bends, tricky narrow sections and challenging gradients had to be mastered. Often this was only possible in speed level 1.

On the way, we were greeted by a racing cyclist pedalling with top-class equipment. Willi F., a guest participant in his mid-sixties,

sportsman, wanted to tackle the pass road by bike (without electric assistance!) and had set off half an hour before us.

After around 25 kilometres, we arrived at the Furkajoch and were treated to a fantastic backdrop. A photo shoot was the order of the day, and the hard-working Wankel saloons were allowed to take a well-earned breather. As if on command, many bonnets opened to cool down or be checked (Fig. 27). For most of them, the temperature display was in the thickly shaded white area. Some, however, were already oscillating in the red range and suspicious smoke signals from an open bonnet immediately called the indefatigable



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Andreas Meyer on the plan. But our 40 or so pieces of jewellery bravely mastered their driving duties despite their advanced age. After just under an hour, the journey continued through the breathtaking landscape over the Hoch-Tannberg Pass at an altitude of 1675 metres. After around 40 kilometres, the colourful NSU vehicles presented themselves against the picturesque backdrop of the lake shore in Warth (pictures 28 and 29). The nearby Walder Metzgerei butcher's shop tempted the riders with tasty sausage, meat and cheese specialities for purchase or a snack. The journey continued to Lech, around seven kilometres away. The rich and famous are unmistakably to be found here. When our

convoy of vehicles entered the specially reserved village car park in the centre of the upmarket holiday resort (Fig. 30), many of the well-heeled Ferrari, Maserati and Porsche drivers briefly caught their breath. They stopped their roaring cars, watched in amazement as Ro 80 followed Ro 80 and busily used their mobile phone cameras. Even a motorcyclist from the Allgäu region said in disbelief: "That's not possible!" (There's no such thing!). Well, they had never seen anything like it! On the sun terrace of the nearby Hotel Arlberg, cheese spaetzle awaited those who had not yet savoured it in Warth - at its finest. Okay, not quite cheap, but after all, the celebrity resort of Lech also offers a special ambience (photo 31). The return journey to Rankweil was organised by most of us as we saw fit.



21

Day 5: Tuesday, 3 October 2023
(by Gunter Olsowski)

Departure day! But not for everyone. A smaller group (Fig. 32) accompanied us to Lustenau, about 20 kilometres away, where we visited the museum "Rheinschauen" where at the Lustenau depot



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an interesting panopticon awaited us. Technology to touch, landscape to experience, more than 120 years of living history, but also the present and future in an exciting and understandable guided tour organised for us (Fig. 33). After five days of good humour with "uphill and downhill" rides and lots of good cheer, our meeting ended with many impressions. Everyone returned home safely. Thank you very much for being there.

Pictures: Brigitte Markl, Nicole Raatz, Susanne Doppelmayer, Walter Till, Gunter Olsowski



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The miraculous Ro 80 Club

(by Susanne Doppelmayer-Olsowski)

When Gunter and I got married 14 years ago, the Ro 80 Club was a long way off and I was completely unsuspecting. Then came the relevant "Tatort" programme and heralded a new phase in our lives: it was clear that a Ro 80 was coming into the house. We now have three Ro 80s, a Beetle and, on top of that, Gunter is the club's first chairman. From 0 to 100 in a short space of time - as a Ro 80 wife, you have to cope with so much power. To this day, I have no affinity for cars and don't get excited about long journeys, unlike my husband. He is happy with the hum of the engine and enjoys the good roadholding of the Ro 80.

I often think to myself that it doesn't take much to be happy; for example, a few towels and swimming costumes are enough for me in summer. Gunter needs more than that. After all, a Ro is no small thing. It is a demanding car with many moods. Suddenly, while on holiday, the right-hand window pane disappears. In the middle of Vienna's Gürtel motorway, the car grumbles and simply stops. Indicators fail. Doors rattle and are difficult to close or open. In summer, the Ro turns into a heat pole, keyword: huge windscreen. And of course there is neither air conditioning nor heated seats.

So what makes the car so appealing?

On the one hand it is the special engine and the design, but on the other hand it is also the affordability. In addition, the small number of units makes the car a rarity. So a Ro 80 is only for those who are interested in technology and aesthetics, and these are good prerequisites for a successful club life.

As it turned out during this year's autumn ride, my premonitions were confirmed and there were a few ailments on the part of the Ro 80, but that doesn't bother anyone in the club. On the contrary: people are eager to speculate, a diagnosis is made and in no time at all the faults are rectified. That's Ro 80 life. The cars keep their owners on tenterhooks. There is always something to talk about and everyone agrees: once a Ro 80 - always a Ro 80!

In the meantime, I sit stoically in the car when it breaks down, read my emergency literature about the "Art of composure" and Gunter works around until the Ro is fit again. The cars' own lives keep the club alive. There are many cheerful Ro 80 stories and new ones are added. This, and the fact that it is not an elitist club, is what makes the club so appealing and special.

150 years of NSU -
Swiss Ro 80 Club
celebrates in Neckarsulm
Text: Frank Zinn and Dario Tommasini

Pictures: Frank Zinn, Dario Tommasini, Raphael Müller



Friday morning: the alarm clock rings early, but for once it's not difficult to get out of bed. The anticipation of the weekend ahead is simply too great. The knowledge that we will be spending three days with good friends and our beloved Ro 80 around its production site in Neckarsulm is pure motivation.

A total of seven Ro 80s from all over Switzerland are on their way to the meeting point at the Neckarburg motorway service station. Slowly they all arrive. The first vehicles are already attracting attention from those resting. We get appreciative "thumbs up" and the odd mobile phone photo is taken. One visitor even stands up from the camping chair he has brought along to get a better view of the passing cars. After a coffee together, the convoy continues towards Neckarsulm. It's an exhilarating feeling to be on the German motorway together with six other Ro 80s - admittedly at a pretty good speed. What effect will it have on other road users when this special convoy passes them in the left-hand lane?

We want to check into the hotel in Neckarsulm first. Time is pressing and so lunch has to be cancelled for once. However, the knowledge that we are about to be given a guided tour of the legendary site puts all our physical needs to one side.

Marco Brenn (1st Chairman of Audi Club International Germany) is already waiting for the NSU fans at the Audi Forum and warmly welcomes us to the factory tour.

The two AUDI AG tour guides then welcome us and divide us into groups. We leave the Forum and start the sightseeing tour by coach. Our route takes us right past the oldest hall on the factory premises. A red brick building dating from 1910 conveys the flair of over 140 years of industrial tradition at this location. Passing numerous buildings from more recent times, we repeatedly discover camouflaged vehicles on the factory roads, the so-called Erbkönige.

Arriving at one of the production halls, we enter via the goods lift. It all seems oversized, but while



the first impression still needs to be processed, our tour guide makes rapid progress. He shares his specialised knowledge of the production processes in a very entertaining way. On one side, we see a fully automated production line with robots working frantically, giving us an impression of modern production methods. On the opposite side, semi-finished vehicles run past us, lined up closely together on the assembly line. Nearly all of them are painted black, there NSU was more courageous with its choice of colours.

Targa orange, Gemini blue metallic or alfarot appear in the mind's eye. We follow the production line, past skilled workers installing the individual vehicle components. We are given a detailed explanation of the processes so that an hour and a half flies by. The next item on the programme is already approaching.

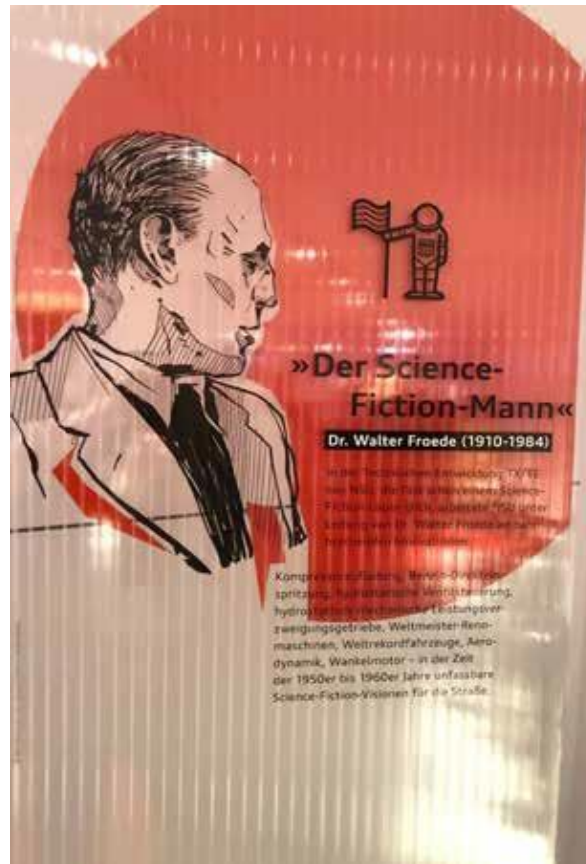
A guided tour of the German Two-Wheeler and NSU Museum. We enter the former castle of the Teutonic Order in the centre of Neckarsulm, just a five-minute walk from the Audi Forum removed. The museum director Natalie Scheerle-Walz and curator Sven Heimberger are already waiting for us. They give us a warm welcome and radiate their delight at the visit from the large NSU fan community.

We start the tour with the special exhibition "150 years of NSU innovation. Daring. Transformation". We look curiously at the exhibits on display, mainly racing motorbikes from the 1950s. The museum experts explain the special features of these vehicles and their development history. There is no time to linger, we are led down a staircase into the castle's cellar. I wonder what awaits us here, perhaps a wine cellar where we can sample some of the precious treasures?

No, we won't be served a fine wine, but real treasures are stored here. A knitting machine, bicycles, motorbikes and even NSU cars from the late 19th century to the first half of the 20th century are on display here. Our eyes wander around in amazement at the exhibits. The vaulted cellar seems to be huge and so the theme changes to the brand's post-war history.



- 1 Pack formation at the Neckarburg motorway service area
- 2 AUDI Forum with the large exhibition on the top floor
- 3 Attentive audience at the Zweirad- und NSU-Museum
- 4 Natalie Scheerle-Walz and Marco Brenn welcome us in the Museum 5
- 5 Innovation. Daring. Transformation. The motto of the anniversary
- 6 Under the leadership of Dr Walter Froede, the TX/TE department developed Pioneering innovations



- 7 The trained eye immediately discovers the essentials in the museum's depot
- 8 Hartmut is still looking, Ursula knows exactly what she wants
- 9 The blue Ro 80 has been in the Zweirad- and NSU-Museum for decades
- 10 Part of the Swiss Ro 80 fleet on the Piazza. You can always find our president thanks to his anniversary T-shirt!
- 11 EP 4 - realised by 12 trainees within a few months



8

A blue Fox, followed by a black Max and next to it the Konsul, as well as other successful models from Neckarsulm, are complemented by cutaway engines, illuminated advertising and enamel signs. A closer look reveals the intricate details of the extensive exhibition.

We continue on our tour and see the Prinz, TT and Ro 80. The question inevitably arises: how do you get a car into a vaulted cellar?

We don't have much time to think about it, and a short time later we find ourselves on the upper floor of the museum. All the major brands in motorbike history are on display here, but the smaller ones are also gracefully arranged. The extensive collection, complemented by an entertaining and competent guided tour, unfortunately makes time pass far too quickly here too.

Immediately afterwards, we move on to the evening programme. The NSU-Prinz- & Zweirad-IG has invited us to a club evening in the Bauer family's pub. We approach the pub a stone's throw from the museum. The façade is decorated with original NSU flags from the 60s. "A pleasure to drive- NSU Prinz 1000 TT" can be read among other things. Our group of visitors is greeted with champagne at the entrance. As we enter the restaurant, the smell is already appetising.

Our hosts spoil us with Swabian home cooking and regional wines from their own production.

The organiser of the evening event, Frank Zinn, welcomes us on behalf of the NSU-IG with a brief review of the anniversary year. He concludes his welcome address by thanking those responsible for this anniversary event.

Of course, they should also be mentioned here: The Bauer family for the club evening in the family pub and Klaus Arth for the exciting lecture, Audi Tradition for the factory tour, Iona Böings and Marco Brenn (board members of Audi Club International Germany) for financing the tour.



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10

at the Deutsches Zweirad- und NSU-Museum, as well as the invitation to a champagne reception. We would also like to thank Uli Latus (NSU/Wankel-Spider Club Germany) for organising the "Living Museum" on the piazza in front of the Audi Forum. Finally, the commitment was honoured in style with gifts of wine and chocolates.

With the NSU drivers in an exuberant mood and exchanging expertise, the last item on the day's programme is coming, Klaus Arth, known for his numerous NSU publications, entertains us with his presentation. Most of the experienced NSU enthusiasts are completely unaware of this story: When the Prinz was unveiled at the 1957 IAA, NSU wanted to build on its long tradition in automotive engineering. A year earlier, the marketing strategists had the Type 8/24 PS from their own pre-war production restored and presented it alongside the new Prinz. Klaus goes on to explain how the vehicle was driven by NSU at veteran rallies and excursions until the early 1960s. We round off the evening with wine and stimulating conversation.



11

It's Saturday morning, the Audi Forum opens its doors and the NSU Fan Day begins. The piazza is steadily filling up with bicycles, mopeds, scooters and cars from NSU. We also present our vehicles in front of their birthplace. There is a lot to see in the forum.

On entering, one vehicle in particular stands out. It looks so new and yet typical Prinz style elements betray its origins. EP 4 is its designation. It is a project by selected trainees from various disciplines at the Neckarsulm plant. The NSU Prinz 4 bodywork has been widened, because the assembled Audi A1 axles required around 30 centimetres more space. The original brake system was undersized for the 240 hp of the electric drive, so the responsible designers had to switch to a new brake system which they took from the A1 parts shelf. The vehicle triggers emotions! It will never go into series production like this, that should be clear. But the NSU EP 4 conveys a message: if Audi were to revitalise the NSU brand, these vehicles could look something like this. Unmistakably an NSU with the latest technology. This project has definitely succeeded in raising awareness of the traditional brand among a younger generation. After all, today's trainees are the potential decision-makers of tomorrow. In the cinema, we are enthralled by image films and factory documentaries from the company's heyday: "This is what it's like at NSU..."

On entering the top floor, a strange piece of equipment catches the eye. A knitting machine from the original years shows the beginnings of the global brand. The company history is

- 12 Fred Schulze (centre) on NSU Fan Day: "I am courageous that innovative products for mobility will still be manufactured here in Neckarsulm in 150 years' time."
- 13 A Ro 80 with KKM 871 in the large exhibition on the top floor
- 14 The goosebumps feeling is coming!
- 15 The fan day is coming to an end. But for us, it's on to the brewery!
- 16 Uli Latus in front of part of his rolling museum



12

is lavishly illustrated by bicycles, motorbikes and automobiles from early Neckarsulm production. The almost complete product portfolio from the 50s to the 70s rounds off the exhibition. The official opening of the Fan Day is about to take place. From the stage in the delivery hall, Fred Schulze (Plant Manager), Rainer Schirmer (Chairman of the Neckarsulm Works Council) and



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14

Eberhard Jochim (representative of the city of Neckarsulm). All three express their deep attachment to the plant. They give very private insights into their own employment or that of family members at this location.

The piazza is now filled with historic NSU vehicles. Uli Latus welcomes the numerous visitors in bright sunshine. He moderates the "Living Museum" and presents selected exhibits from the participants who have travelled to the event. The owners talk about their vehicles and their special features. By emphasising these milestones, the innovative strength of NSU becomes clear.

The 150th anniversary will not only be celebrated at the Audi Forum, but also in cooperation with the German Two-Wheeler and NSU Museum.

A varied programme awaits us here too. In addition to specialised book readings, we have the extremely rare opportunity to view the rarities in the museum depot. The crowning highlight is the launch of the NSU world champion machine Rennmax from 1953. An enthusiastic crowd has already gathered in front of the depot. To catch a glimpse of the racer, you have to work your way forwards through the excited crowd. The big moment is imminent, Sven Heimberger is sitting on the racing machine and has already positioned it on the roller starter. The engine starts to move with a slight bubbling sound, the throaty sound brings a broad smile to the faces of the technology enthusiasts. The revs rise, the level

is deafening, it gives you goose bumps. The demo rides in front of the museum are an indescribable experience.

Before the evening event, we want to park our cars in the hotel's underground car park again. After all, it's only a stone's throw away from the Audi Forum. What we had already suspected actually happens: When several Ro 80s drive into a modern garage together, an exhaust alarm is triggered. We are spared a shower by the sprinkler system - we are simply asked to leave the room.

The Audi Forum continues with the loud conclusion of the evening. On stage, the Audi Big Band entertains us with musical classics from the last few decades through to interpretations of current hits. The colourful light show underlines the acoustic perception. The Audi delivery hall becomes the NSU festival hall.

We have already skipped lunch on Friday and don't want to skip another meal on Saturday. So we head to the nearby brewery, where we have reserved a large table. In pleasant temperatures, we enjoy the delicious food as well as a beer or two. As is so often the case, time passes far too quickly - it's Sunday again! For the last time, we meet up for a communal breakfast at the hotel. Checking out is particularly quick. All we have to do is put the keys for the rooms and garages in the lockers provided.



15

Let's go! Destination: Porsche Museum. But wait! First we need to top up the vehicles' fuel reserves. Some decide in favour of the good 100 octane. Only the best for his favourite!

At last, the cars can once again do what they were designed for: Driving! We glide gracefully along the road to Stuttgart. The exhibition is located in a breathtaking art building. The large sculpture "Himmelsstürmer", which carries three Porsches at a height of 24 metres, is already in the roundabout in front of it. We park appropriately in the museum's underground car park. Here, too, everything turns round after our classic cars. The actual museum is reached via a long escalator. The exhibits are displayed in the corridor that winds its way gently upwards. Anyone who thinks that Porsche only has the legendary 911 to offer will be proven wrong here. Alongside numerous racing cars, the transaxle models are also on display. It goes without saying that



16

- 17 Porsche utilises good design from the past for today
- 18 Dynamism in architecture too - the Porsche Museum



17

tractors are not missing. Who would have thought it: Porsche even built the first hybrid vehicle in its early days! The colossus known as the "Semper Vivus" was even equipped with wheel hub motors!

You can linger at Porsche for hours, but we have to start thinking about the journey ahead. Simply hitting the motorway and back home is out of the question for us.

We drive past the legendary Solitude castle. An imposing building in which

numerous NSU vehicle presentations and press conferences have taken place. But now back on the motorway. As we had done two days earlier, we stopped briefly at the Neckarburg motorway service area to say goodbye and then headed home.

To summarise the weekend event: it was more than worth it and anyone who wasn't there missed out! What remains of this weekend are countless impressions. The organisation team did an impressive job! Our thanks go to Audi AG, the Audi Club International and the German Two-Wheeler and NSU Museum. It is remarkable how much effort the organisers have put into creating an unforgettable event for us. You can only experience an anniversary celebration like this in Neckarsulm.



18

Winter meeting in the Black Forest

09.02.-12.02.2024

By Steffen Hofmann - Our starting point for the winter meeting, the Hotel Concorde, is located between the towns of Donaueschingen and the twin town of Villingen-Schwenningen in the Black Forest-Baar district.

The region's attractive low mountain range landscape lies on average between 700 and 1,000 metres above sea level and is largely located in the Southern Black Forest Nature Park, to which our tours also lead.

Preliminary programme

Friday, 09.02.2024

- Arrival at the Hotel Concorde at Donaueschingen airfield.
- 15:30 - Those already present will have the opportunity to explore the nearby old town of Villingen on a joint tour/walk with a local.
- 18:30 - Dinner together at the Hotel Concorde.

Saturday, 10.02.2024

- At 9.15 a.m. we set off into the Black Forest for Museum Day in the towns of Schramberg and St. Georgen. In Schramberg, at 10.00 a.m., we will start a guided tour of the Junghans Terrassenbau Museum. There we will embark on an exciting journey through the history of watchmaking in the Black Forest from the 18th century to the present day. The Terrassenbau is one of the most architecturally interesting industrial buildings on a slope in the world. It has long since become a landmark of the town of Schramberg. A special feature: the long, narrow rooms are designed in such a way that almost all workstations are directly next to the window. This meant that the nine floors offered daylight for all employees and were ideal for the production of precision mechanical products. www.junghans-terrassenbau-museum.de
- Individual lunch after the museum visit.
- In the afternoon there is the opportunity to visit various museums in Schramberg. Four individually designed worlds of experience



1 Junghans Terrassenbau Museum
2 Museum Inventor Times
(Image - Wikipedia) 3 Car collection Steim

1



2



3

bring contemporary history to life and invite you to see, remember and marvel. These four houses make the hearts of technology and museum fans beat faster. They are located in the immediate neighbourhood and can be easily reached on foot.

1. The "ErfinderZeiten" car and clock museum
2. Steim car collection
3. Diesel Museum
4. Railway museum

- 4 Benedictine
Abbey of St Peter
- 5 Titisee (Image -
Hochschwarzwald
Tourismus GmbH)
- 6 Danube spring
(Image -
Wikipedia)



4



5



6

Detailed information at: <https://auto-und-uhren-welt.de/de/museumslandschaft>

Alternatively, you can head straight to St. Georgen, the former home of manufacturers Dual and PE, to visit the German Phono Museum. www.deutsches-phonomuseum.de

A guided tour is recommended, which is why it is necessary to register online.

Afterwards we can have a coffee at the Hotel Federwerk. Then return to the hotel.

- 18:30 Dinner together at the Hotel Concorde.

Sunday, 11.02.2024

- At 9.30 a.m. we start our trip to the Upper Black Forest at over 1000 metres.
- Our destination is the former Benedictine abbey in St Peter's. There, at 11.00 am, we will be given a

guided tour of the church, princely hall and library. www.geistliches-zentrum.org

- We then drive to the Gasthaus Sonne Neuhäusle for lunch together.
- Well-fortified, we make our way to Titisee. After a walk through the town, we have the opportunity to enjoy coffee and cake together. Individual return journey to the hotel.
- 18:30 Dinner together at the Hotel Concorde.

Monday, 12.02.2024

- Individual journey home.
- Departure after breakfast. We drive to the source of the Danube in Donaueschingen. www.donaueschingen.de/donauquelle There is also the opportunity to visit the Princely Collections or the "Museum Art.Plus".

Please book the rooms in the hotel yourself under the keyword "Ro 80 Club International e.V.":

Concorde - Hotel am
Flugplatz Dürrheimer Str. 82
78166 Donaueschingen
Phone +49(0)771-83 63 0
Mail: reservierung@concorde-donau.de

Economy Class single room for 1 person: € 89.00 p.z./p.n.

Business Class double room for 2 persons: € 124.00 p.p.p.n.

The room prices include breakfast and visitor's tax.

The room contingent is available until 31.12.23. After this date, availability and price can no longer be guaranteed.

Participation in the meeting is only possible with registration: Please note the registration form on our website!

Registration deadline is 22.01.24!

Steffen Hofmann

Contact: veranstaltungen@ro80club.org

First use of the Stammtisch beach flags in North Hesse



- 1 Colourful troupe
- 2 Greetings from Naumburg
- 3 In Schwarzenborn

1

From Margarete and Axel Scharninghausen - Thanks to excellent co-operation with the Trinamo team, we received a large package of the new regulars' table beach flags in Gudensberg - at the same time as Gunter in Lindau - and therefore just in time for the NSU camp in Naumburg/Hesse. We had received the new accessories as a collective order for the three regulars' tables North, East Westphalia/Lippe and North Hesse, as it was planned that all three regulars' tables would meet in Naumburg for their first use. Although the OWL regulars' table was unable to attend at short notice, a spontaneous gathering of 13 Wankel vehicles on Saturday afternoon produced a colourful picture in glorious weather (pictures 1 and 2). Among them were nine Ro 80, three

NSU Wankel Spider and a Mazda RX-7. The number of Wankel fans is also growing in the IG community.

A few participants spontaneously agreed to visit the old-timer meeting in Schwarzenborn in the Knüll the next day. Our youngest member arrived very early with his girlfriend and uncle and stood in the entrance area right next to the live band. Because of the very loud music, the young people couldn't stand it any longer, so unfortunately it was no longer possible to take a photo.

We had already got to know an elderly gentleman who was a classic car enthusiast the previous year, who invited us to park our vehicles on his property (which is right next to the festival area).



2



(Fig. 3). Here, too, the new equipment was used successfully (picture 4). We were then able to relax a little in the glorious summer weather (picture 5). As a thank you, we presented the newly acquired Wankel friend with a souvenir photo on a hard foam board in the name of the Stammtisch (picture 6). It now has a place of honour in his living room.

We are already looking forward to many more uses of the new beach flags.

Pictures: Margarete and Axel Scharninghausen



5



4 New equipment
5 Team
6 Thank you

6

Regulars' table love

By Thomas Mix - The Berlin Stammtisch is special because it is the Berlin Stammtisch. And of course our Stammtisch is also full of likeable people. Stars and starlets are there, a few more celebrities, a few Swabians anyway - as befits Berlin - and of course French people too. The old West Berlin is still there, as are the fresh and cheeky Osis, who are also damn good at tinkering. And the Berlin melange is so inspiring that wild and creative energies mix with caution.

One of our stars is certainly Dieter Adomeit. The most prominent car engineer east of the Rhine and not only an expert with ideas for millions of drivers, but also a damn fine chap - generous, humorous and always ready to lend a helping hand! Wolfram Saretz, also from West Berlin, only recently took over the management of the regulars' table and, poof, there is already a great structure in the club with regulars' table meetings, workshops, excursions and technical assistance, as well as advice for future Ro 80 drivers.

On the occasion of the technical meeting on 26 August in Dieter's voluminous rooms in the north-west of Brandenburg, we wanted to try out a new format, namely the Ro 80 evaluation in teams. There were 15 Ro 80 fans there, the lifting platforms anyway and plenty of enthusiasm. At some point during the day, the power went out permanently. So it couldn't go on. And then came the hour of the Berliners, who were looking for something to do. The good thing about us Berliners is the benevolent grumbling that our capital is known for. The highest praise of a Berliner is...you know it: "You can't complain!" So that's the setting we found ourselves in during the power cut. But Berliners can do things differently and I'd like to tell you about it.

My own Ro 80, marathon blue from 1976, had a dipped beam problem. It didn't work. Parking lights...yes, high beam...yes, but dipped headlights...no! A pool of eight fans quickly stood around the car, including two BMW enthusiasts, but that's just by the way. Andreas, who had been our regulars' table leader for decades, pointed to the switch ("common problem, easy to fix", says Andreas). I myself, along with Wolfram, simply surmised two

broken light bulbs and unscrewed the cover, while Reinold took a current tester out of his vehicle to check that the current was flowing. Jürgen (heavily BMW-inspired) thought of the fuse and our longstanding member Klaus Podgora said dryly: "It's the relay, it's definitely dirty!" and rubbed the relay a little.

The result: the dipped beam flickered hesitantly and then suddenly lit up the wall as if there was no tomorrow. A big "hello" went round. But now Torsten (from our eastern part of the city, man of knowledge and action) came and took the relay off and on and cleaned the contacts by hand, pressed them a little wider (for more contact) and put the same contacts back into the relay with the note: "But it's not an original relay, because the fastening is missing." Afterwards, Torsten will get the "right" relay and we will meet at his workshop to professionally restore it to its original state. I'm looking forward to that!

Conclusion: Berlin remains Berlin! You can say what you like, but it's not without reason that our capital is what we expect it to be:

A Mediterranean mess, a bureaucratic monster, but also full of creativity and helpfulness in the neighbourhoods. Our neighbourhood is called Ro 80-Stammtisch Berlin/Brandenburg. And arrogant as we are here: "Nobody can do us!" By the way, we are also "open" to guests, so you can share in the love for our regulars' table!

A cheerful greeting to you: Tom!

Cologne-Bonn regulars' table trip to Panarbora Park and to town of Blankenberg

By Hans-Peter Weinand - On Sunday, 6 August, at around 9.30 a.m. in cloudy and rainy weather, eight brave Ro 80 regulars gathered at the agreed meeting point, the Allnerhof in Hennef (Sieg) (pictures 1, 2 and 3). Horse lovers would certainly have loved this place. The Allnerhof was built in 1911 in the style of a closed Franconian farmstead, which is now used as a farm with boarding horses.

Thanks to the excellent preparatory work of our Stammtisch colleague Ferdi Koch and Stammtisch leader Michael Köbele, no questions remained unanswered about the programme. Before setting off, Ferdi Koch handed out his elaborately prepared road book (Fig. 4), a drawing showing the car park reserved for us at the parish church of St. Katharina in the

town of Blankenberg and the menu of the destination pub "Zum alten Turm". Four Ro 80s, each occupied by two people, drove to Panarbora Park following the road book, which was provided with direction arrows, precise kilometre information and even speed camera warnings. The special feature of the road book: it was read from bottom to top in the direction of travel.

Our journey took us over the Siegbrücke bridge on the B478 to the winding but scenic L352 L352, which gave our Ro 80 a slight rolling motion. We travelled through Heisterschoß, Wolperath, Neunkirchen-Seelscheid and onto the L312 through Wersch via Ruppichterorth back onto the B478 towards Waldbröl. The windscreen wipers were in constant use, but according to a quote from Confucius, the journey is the reward, so we still enjoyed the ride. When we arrived at the Panarbora Park on Nutscheider Straße, we parked our Ro 80 opposite the entrance at the side of the road on free parking spaces (pictures 5 and 6). By the way: "The name Panarbora is made up of the Latin word for tree "Arbor" and the Greek "Pan", the shepherd god and god of the forest and nature in Greek mythology" (source: Wikipedia).

"The treetop walk of the Panarbora Nature Adventure Park is North Rhine-Westphalia's longest barrier-free treetop walk (pictures 7, 8, 9, 10 and 11). From here, you can experience nature from a completely new perspective. With a length of 1,635 metres (including the paths of the observation tower), it leads on a circular route through the treetops and offers breathtaking views. On very clear days, you can even see Cologne Cathedral and the Siebengebirge mountains near Bonn from the observation tower. The Panarbora nature adventure park, built by the German Youth Hostel Association, was opened in September 2015.

Tree houses and "global villages" make the youth hostel popular accommodation for school trips and group holidays, as well as for families. Thanks to the unique combination of facilities such as the treetop walk, the information portal with water and adventure playground and the nature experience academy, Panarbora offers a holistic environmental education approach - beyond the borders of North Rhine-Westphalia.



1



2



3

- 1 Meeting point
Allnerhof
- 2 Allnerhof
entrance
gate
- 3 Allnerhof
stable
building
- 4 Roadbook
- 5 Arrival
Panarbora Park
- 6 Parking at
Panarbora Park
- 7 Panarbora Park
entrance

Ro 80 Club International e.V.
Stammtisch Köln/Bonn

Roadbook für Ausfahrt zum Panabora-Park und nach Stadt Blankenberg
(06.08.2023)

Richtung	Beschreibung	km
Ankunft Panabora-Park (10.45 Uhr)		
←	Im Kreis: 2. Ausfahrt (Ri. Panabora)	40,4
→	Rechts (Ri. Altenkirchen/Panabora)	37,9
→	Im Kreis: 1. Ausfahrt (Ri. Gummersbach)	37,4
→	Im Kreis: 1. Ausfahrt (Ri. Gummersbach)	37
←	Im Kreis: 3. Ausfahrt (Ri. Waldbröl)	28
↑	Geradeaus weiter (Ri. Ruppichteroth)	24
→	Rechts (Ri. Ruppichteroth, durch Wersch)	18,8
↑	Im Kreis: Geradeaus (Ri. Much)	11
↑	Im Kreis: Geradeaus	/
Achtung	Blitzer in Wolperath	7,5
↑	Geradeaus durch Heisterschoß	5,3
←	Links (Ri. Happerschoss)	0,5
→	Rechts (Ri. Waldbröl über Siegbrücke)	0,1
←	Links (nach Abfahrt Parkplatz)	0
1. Abfahrt ab Treffpunkt Hennef (9.45 Uhr)		

Richtung	Beschreibung	km
Ankunft in Stadt Blankenberg (14.00 Uhr)		
↙	In Stein: Scharf links und sofort wieder links (Ri. Stadt Blankenberg)	79,9
Achtung	Blitzer	72,2
↑	Geradeaus durch Eitorf	70,1
←	Links über Sieg (auf Vorfahrtstraße bleiben)	67,5
↑	Geradeaus durch Herchen	61,3
→	Rechts (Ri. Eitorf)	53,3
→	Rechts (Ri. Eitorf)	53,1
→	Im Kreis: 1. Ausfahrt (Ri. Dattenfeld)	48,3
↑	Im Kreis: 2. Ausfahrt (Ri. Windeck)	41,5
2. Abfahrt ab Panabora (13.00 Uhr)		

Hinweise:
Die Tabelle liest sich von unten nach oben!
Bitte stellt Euren Tageskilometerzähler auf Null.
Im Panabora-Park haben wir maximal 2 Stunden Zeit.

4

The two main pillars of Panarboria are:
"Experiencing nature and foreign cultures up close" (source: Waldbroel.de).

The tour of the treetop walk offers a number of interactive learning and adventure stations that are not just fun for children. The ascent to the observation tower could also be managed with a pushchair or wheelchair. Due to the weather, however, the view was rather mediocre and we quickly decided to descend again. Once we reached the bottom, some made a tour through the park.

The more "knocked off" members of our group preferred a hot cup of coffee in the restaurant.

We left Panarboria Park at 13:45 (Fig. 12) on the B256 towards Windeck, from the "Burg Windeck Denkmal" roundabout onto the L333 towards Dattenfeld, with the River Sieg on our left; we continued through Schladern, Hoppengarten, Herchen, Stromberg and past the Unkelmühle hydroelectric power station, crossing the River Sieg at Alzenbach, which from then on was on our right; through Eitorf, a stretch along the railway line towards Hennef, through Bach and Bülgenuel; at Stein turn left towards the town of Blankenberg (pic. 13).

Stadt Blankenberg is a district of the town of Hennef in the Rhein-Sieg district. The component "Stadt" in the place name is a reminder that the village was an independent town from 1245 to 1805, to which the neighbouring villages also belonged. The town emerged from the castle of the same name, which was built as the seat of the Counts of Sayn. The town of Blankenberg lies around 5.5



5



6



7



8



9a

8 Tower and treetop walk

9a Viewing platform treetop walk

9b Viewing platform treetop walk

10 On the Observation tower

11 View of the Panarbora Park

12 Off to the town of Blankenberg

13 City Blankenberg

14 Parking in the town of Blankenberg

15 Restaurant zum alten Turm

16 In a cosy round



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kilometres east of the town centre of Hennef directly on a loop of the River Sieg. However, Blankenberg is not located directly on the river, but on a steep ridge above the Sieg. "The altitude in the northern area of the castle ruins is 152 metres above sea level. At this point, the Sieg is approximately 73 metres above sea level. NHN. Below the town of Blankenberg, at the foot of the mountain, lies the district of Stein. Opposite, on the other side of the Sieg, lies the village of Auel in the aforementioned river bend" (source: Wikipedia). A visit to the village would certainly have been worthwhile, but we decided against it due to the weather.

In the town of Blankenberg, we parked our four Ro 80s on the forecourt of the parish church of St Catherine, which was kindly made available to us as a car park. This was organised by our regulars' table colleague Ferdi Koch.

He also secured the car park with a "No parking" sign to prevent wild parkers (Fig. 14). From our car park it was about 50 metres on foot to the restaurant "Zum alten Turm" (picture 15). "The half-timbered house "Zum alten Turm" with restaurant and ice cream parlour is probably the oldest house in the town and dates back to around 1600. It is part of the picturesque and medieval town of Blankenberg. For six generations, since 1720 to be precise, this Restaurant is operated by the Drecker family" (Source: www.zumaltenturm.de). At the end of our regulars' table excursion, we recharged our batteries with the culinary delights of the "Zum alten Turm" restaurant in a cosy get-together (Fig. 16), so that we could make our way home feeling rested and full.

Pictures: Hans-Peter Weinand



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Autumn meeting of the Franconian regulars' table

A meeting at the border

From Franconian beer country to Franconian wine country on the edge of the Steigerwald

By Margarete Scharninghausen - More than 20 years after the first Franken-Stammtisch in Gerolzhofen in July 2000, the Franconians met again on 15 October 2023 in the small town, the gateway to the Steigerwald. It started with a

Guided tour of Gerolzhofen's old town centre. We learnt, for example, that there used to be 35 breweries in Gerolzhofen and that the Würzburg cathedral treasury only survived the war and the Würzburg firestorm

- 1 From the newspaper of the meeting in July 2000
- 2 City tour
- 3 Exit plan - so that nobody gets lost
- 4 Exit
- 5 At the Gaibach constitutional pillar
- 6 At the Constitution pillar Gaibach
- 7 At the Gaibach constitutional pillar
- 8 Problem solution
- 9 At the Oberschwarzacher Hörnle
- 10 At the Oberschwarzacher Hörnle
- 11 With the Fire brigade
- 12 Handling rescue shears
- 13 Handling rescue shears





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The column, designed by the architect Leo von Klenze, was completed in 1828. The inauguration ceremony took place in the presence of King Ludwig I.

Funnily enough, three Ro 80s had a technical problem during the trip - all independently of each other with the power supply from the battery. All the problems were solved, so that no one broke down.

We then travelled through the Franconian wine country to Oberschwarzach to the Vierzehn- Nothelfer-Kapelle on the "Hörnle". There, with a stormy wind a marvellous view was offered over the Steigerwald foreland as far as the Rhön. Back in Gerolzhofen, the Franconian regulars were guests at the volunteer fire brigade for coffee and cake. As my hobby, apart from the Ro 80 and "Wankelei", is the fire brigade, it was a great pleasure for me to give a short tour of our fire station. Everyone was able to get their hands on a pair of rescue shears and spreaders and make a few cuts on a "scrap car". Luckily there was one, because nobody wanted to make their Ro 80 available.

Pictures: Jörg Zink and Steffen Hofmann



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because he was hidden in the steeple of Gerolzhöfer Steigerwald Cathedral.

After lunch with Franconian delicacies, we set off on a round trip through the countryside around Gerolzhöfer. Our first destination was the Constitution Column in Gaibach - one of 13 "Places of Democracy in Bavaria". Out of enthusiasm for the Bavarian constitution of 1818, Count Franz Erwein von Schönborn had a monumental column erected at his castle in Gaibach.

3. Technology workshop of the Ro 80 regulars' table Berlin-Brandenburg

By Wolfram Saretz - The 3rd technology workshop of our regulars' table began on 26 August 2023 at 11:00 a.m. again at Ingrid and Dieter Adomeit in Netzeband. There were 20 regulars' table participants and guests with eight NSU Ro 80s and other vehicles (including a Fiat Dino with a V6 engine) in Netzeband. After a brief welcome and introduction by our host Dieter Adomeit and myself, in which we explained our ideas about the organisation of this workshop as a playful Ro 80 evaluation course, Oliver Thiel took over the running of the workshop by explaining the rules of the course in detail. Oliver had prepared meticulously and produced three documents, which were distributed in the form of copies. These three documents were

- Scoring sheet NSU Ro 80
- Explanation of the rules of the assessment course
- Guidance for the vehicle inspections

I would like to take this opportunity to thank Oliver once again for all the work he has done in advance!

The evaluation was based on four categories, each with a rating in the form of a censorship and a commentary, namely for

- Car body
- Technology
- Interior
- Originality

The guidelines set out the criteria according to which the relevant categories were to be assessed. Before we could start, the vehicles to be analysed had to be identified and the teams formed, whereby teams of two people each had to evaluate the selected Ro 80s. Five Ro 80 owners agreed to have their cars assessed (Jean-Philippe Colas, Achim Koch, Joachim Lenz, Gunter Wieden and Tom Mix). Seven teams were formed to evaluate the Ro 80.

Now it was time to get started. The seven teams, i.e. 14 people, began to evaluate the five objects examined on the basis of 42 criteria, including the car floor, with the help of two lifting platforms.



It should be noted that a criterion such as "condition of the doors" was included in the assessment once and not four times. If you multiplied criteria such as "doors" or "tightness of the shock absorbers" by four, you would end up with 74 individual tests per vehicle. It's easy to imagine that it was a bit chaotic at times. The fact that it actually worked was not least due to the well-known generosity of our hosts, with sufficient space, several lifting platforms, tools, etc. and, above all, technical expertise available.

We were confronted with a special situation in the middle of the event when the electricity, provided entirely by the PV system, failed, meaning that it was no longer possible to operate and lower the lifts. This affected Jean-Philippe and Joachim Lenz's cars, which was particularly annoying as Joachim had travelled all the way from Leipzig. Unfortunately, the problem could only be solved later in the evening, after most of the participants had already left. So Jean-Philippe

and Joachim made their way back by train, which they both carried with astonishing humour.

This incident naturally had a massive impact on the investigations, meaning that only the results collected up to this point were available for evaluation. The evaluation of the results is still pending, as it could not take place as planned by the next regular deadline in the following week. However, Oliver will certainly report back at our next meeting in October. But we were already able to draw a first conclusion in the evening. If we wanted to repeat a technical workshop in this form, the number of teams and the Ro 80 to be tested should be reduced, the catalogue of criteria should be tightened and the individual points should be weighted. But more on this later, including the evaluation of the results. Due to the unplanned end to the assessment course, we had time to deal with other topics. Unfortunately, Jochen Losereit was not present, so we don't know how Jochen's plans to rebuild a downdraft carburettor



with the repair kit from the club and to share this with us by means of videos. However, another topic could be addressed, namely Torsten Wick and Andreas Müller reported on the various possibilities of making brake lines from steel, KuNiFer, etc. in general and for the Ro 80 in particular. The background to this is an enquiry from our regulars' table member Robert Wißmann, which has already been discussed intensively in the Ro 80 forum. Other topics, e.g. how to convert the fuel supply to electronically controlled fuel injection, were not discussed this time, but will be pursued further.

In the early evening, despite a few adversities, the workshop came to a very harmonious end. I think everyone enjoyed the day and learnt a lot again.

Once again, my heartfelt thanks go to our lovely hosts Ingrid and Dieter Adomeit, who, in addition to their usual hospitality, once again spoil us with delicious sausages, meatballs, etc.

Thanks also go to everyone else who contributed to the success of the day.

Pictures: Oliver Thiel



Audi 100 with KKM 871

By Guido Rapsch and Heiko Rossnagel - At the annual general meeting at the OTC (formerly TES) in Lindau, one vehicle caught the attention of many club members. At first, it was because an Audi 100 had simply appeared in the line-up among all the Ro 80s, and in the second moment, when the bonnet of that very Audi opened. The puzzled faces of the "bonnet divers" indicated something very unusual.

With a closer look at the vehicle the looks explained themselves, because the Audi 100 from the

Year 1978 (Type 43 C2 - Audi 100-5/E.GL-5E - equipment: CD) has an engine with the magical abbreviation "KKM 871". This is a 2-disc Wankel engine with 750 cc chamber volume, double side intake and K-Jetronic injection for normal petrol. Its output is between 170 hp (carburettor engine) and 200 hp (injection engine).

Performance can be increased by optimising the exhaust and ignition up to 220 hp.

The maximum torque is 212 Nm at 3000 rpm (sometimes also 4000 rpm). The transmission is an Audi 3-speed fully automatic with a gearbox bell housing to match the 871 engine.

As Audi (according to a statement of the technical Group management for liability reasons) did not support this project, the Felix-Wankel-Stiftung e.V., housed in the Technoseum in Mannheim, helped to realise it with many photos and rare documents of the Felix Wankel car (Audi 200 automatic with 871 injection engine). Many thanks once again for the great support!

1 Externally, the only difference to the series-production vehicle is the "Wankel" engine emblem and the front spoiler.

2 The engine mounts, the exhaust manifold, the radiator and its pipes were hidden by the front spoiler of an Audi 200.

3 The many (over 1000) hours of labour required for this conversion cannot be seen.

4 Here you can see the K-Jetronic injection system (from BMW and Porsche parts). Depending on the setting of the fuel supply, ignition and exhaust system, the engine has between 190 and 210 hp. The old-fashioned alternator was replaced for nostalgic reasons. (can be seen in old factory photos).



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The conversion work (2016-2023) proved to be particularly difficult, as only a few spare parts for the drive unit were available from normal dealers. The chassis, bodywork and interior were only minimally modified. The vehicle was presented to the TÜV in October 2023 (without defects) and all necessary registrations were made. After the required running-in period of 3000 kilometres (the engine is completely new and the gearbox has only run for around 2000 kilometres), a standard consumption of 11-12 litres of normal petrol per 100 kilometres can be achieved.



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- 5 The engine-transmission unit not yet installed.
6 The "marriage" of body and KKM 871.

Pictures: Guido Rapsch and Heiko Rossnagel



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Alpine trip after six years of standstill

By Klaus Mangold (km@eye.de) - Sometimes you do things that you can only wonder about yourself. This is the case with my NSU Ro 80, which I bought in the summer of 2017. After a first long drive back home, the ignition lock turned out to be extremely sticky and unwilling. Someone had probably tinkered with it before. All right, a replacement was needed. Before I got round to deal with it,



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the car suddenly stopped. Because it wasn't far from my garage, it was towed there and parked "for the time being". This eventually turned into almost 6 years.

What lasts a long time...

The Ro 80 was parked at the very back of the hall that I use with two other classic car enthusiasts. And a car parked there is not something you stumble over all the time. Every time I saw the car, I thought to myself: "Wow, you're going to do that soon!"

But I didn't really get round to it. Something else always got in the way. When one of my other cars was sold in March this year, I finally looked at the Ro 80 again: the battery was, of course, dead as a doornail. Well, at least I can buy a new battery!

Said, done, installed. Poked around a bit at the broken ignition lock and the front part of the ignition lock



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- 1 Bernina
- 2 Bormio in the evening
- 3 Forcola di Livigno
- 4 Foscagno

removed and the engine could actually be started with a screwdriver! That was the decisive impulse.

After the impressive layer of dirt had been removed and a few kilometres had been driven, the decision was made: the car should now finally be made reliably roadworthy!

I then took it to "Staiger-Werkstatt für alte Autos" in Neuffen. A few days later, the faulty ignition lock was repaired, a major service was carried out and the Ro 80 was given a new MOT sticker. The diagnosis of an extensive test drive: "It runs perfectly, nothing will be done to it now!"

Some information about the car

It's strange what the seller reports: Manufactured in 1968, only ever moved with red dealer licence plates until 2017 (was he really the first owner?) and only run just over 30,000 km in this way. That doesn't sound very convincing to me. As the condition is good, no visible defects to be recognised and the price is not unreasonably high, I bought the car in the end despite my slight mistrust.

Now, glacier white is a colour that I find a bit boring for cars from the 60s and 70s, but the colour of a car is not that important to me. And I have to say that I now even think that the white colour looks good on the Ro 80. It has a hint of understatement.

Up the mountain - down the mountain - off you go!

Now the car should finally be driven. I love the mountains and over the last 45 years I have travelled the Alps from Vienna to Nice again and again with great enthusiasm. There certainly aren't many Alpine passes that can be driven without a four-wheel drive that I haven't yet been up. So there was nothing more obvious than to tackle an Alpine tour. The last winter closures had just fallen at the beginning of June 2023, so off we went!

It's actually only a few hours from my home town of Rottenburg am Neckar to South Tyrol. But it was the Wednesday before Corpus Christi and the roads were jam-packed. The first traffic jam was only half an hour into the journey - what a bummer!

From Austria onwards, however, things went a little better. My first overnight stay was in a small town

in the Vinschgau Valley in a side valley just behind the Reschen Pass. The Ro 80 was immediately marvelled at in front of the hotel. NSU meant nothing to the younger Italians. They speculated that it might be a slightly older Lancia. I liked the small hotel and the staff were super nice - a great start.

First highlight: The Stelvio Pass

The next day, we headed up really high. At 2757 metres, the Stelvio Pass is one of the really high Alpine passes. An impressive 48 hairpin bends await alpine riders on the northern ramp. The pass road was built almost 200 years ago



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- 5 Gavia
- 6 Gavia
- 7 Maniva
- 8 Spina
- 9 Spina
- 10 Stelvio Pass



and the route has not changed since then, only the road surface has been tarmaced. Unlike modern passes, the road here has the maximum gradient at each hairpin bend, which makes the Stelvio Pass particularly appealing from a driving perspective.

Although I climbed the almost 2000 metres in altitude (Prad, the entry point to the Stelvio Pass, is only 900 m above sea level), the engine didn't get hot. However, because my Ro 80 was built in '68 and therefore doesn't have an electric petrol pump, after a short break I had to wait at a construction site, vapour bubbles in the carburettor with slight misfires. I now know that a good remedy is to drive with the bonnet unlocked, which I didn't do at the time. But it wasn't a big problem even then.

But the pass is not only beautiful, it is also very popular with motorcyclists. The top of the pass, which has unfortunately been completely built over for many years, was parked up with a huge number of motorbikes. So we just stopped for a cappuccino and continued on our way.

The Umbrail Pass

From the Stelvio Pass, you normally continue on to Bormio. However, as I still had plenty of time, I turned right a few kilometres after the pass to the Umbrail Pass (2501 m), which leads down to Val Müstair in Switzerland.

A few years ago, there was still a short gravelled passage on the Umbrail Pass. In the meantime, everything has been tarmaced and on the day I was travelling along the entire pass the white markings had just been reapplied, which gave off a rather unpleasant odour of solvent - hence only a short stay here too.

Down in Val Müstair, I kept heading west. The weather became increasingly unfriendly, with strong winds and heavy rain. On the Ofen Pass (2149 m), however, it gradually improved again. Despite the notoriously high Swiss prices, it is worth taking a short break at the top of the pass. The rösti with bacon and mountain cheese are excellent and well worth the money!

Bernina Pass

The journey continued via Zernez in the Engadin towards St. Moritz. However, shortly before that I turned off in a south-easterly direction towards the Bernina Pass (2235 m) - the scenery is really beautiful and the road is excellently maintained.

Forcola di Livigno, Passo d'Eira and Foscagno Pass

Shortly after the Bernina Pass, I turned off in the direction of Livigno. The Forcola di Livigno (2315 m) takes you into the duty-free zone, which dates back to Napoleon's time. If you planned accordingly and arrive there with a fairly empty tank then the travel fund will be happy. I paid €1.38 for a litre of Super. I continued over the Passo d'Eira (2210 m) and the Foscagno Pass (2291 m) to Bormio. End of the day's stage.

Bormio is a lovely old town with 4000 inhabitants. Its sulphurous thermal baths were already known to the Romans. I wanted to walk a little way through the old town and then have a nice meal. But no way!

It was Corpus Christi and what I didn't know is, that the Corpus Christi procession takes place there in the evening - with the result that almost all the restaurants were closed and the few that were open were hopelessly overcrowded ("Mi dispiace, siamo completo!"). So I ended up on an involuntary "Corpus Christi fast".

The second highlight: the Gavia Pass

The next day, the Gavia Pass (2618 m) was on the programme. The pass was only tarmaced in the 1990s. I still know it in its old gravel version. Even today, the southern ramp is still very narrow over long stretches and only single-lane. Now, just a few days after the end of the winter closure, it was still pleasantly quiet and there were only a few soft manoeuvring actions. But it's certainly no fun with more traffic!

Following the crash of a military lorry, a particularly narrow passage that used to be completely unsecured is now bypassed by an 800 m long tunnel. A measure according to the motto "well-intentioned is the opposite of well done": the tunnel has several bends, is unlit and also almost without any



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reflectors. There's no joy in that, because when you drive into the tunnel from the strong sunlight, you're as good as blind and anyone who knows the very modest light of my 1968 Ro 80 knows what I mean.

The really high passes were behind me for the time being. But there are also some less high ones that are worth a visit. I had actually set my sights on the Vivione Pass. But as I got closer, the sky towards Vivione was a dark grey and overcast with rain. Of course, that didn't make much sense. I therefore orientated myself further east towards the Passo di Croce Domini (1895 m). But you can't be in a hurry there. A very scenic route with many, many bends and only just two lanes. There was very little going on. But if you want to spare your nerves, don't drive too fast and press the horn from time to time before blind passages (of which there are plenty), just like Italians are used to do. The end of the very enjoyable day's stage was the small town of Bagolino, clinging to the steep mountainside. This is where the Bagoss cheese comes from, a savoury mountain cheese that is only produced regionally.

which gets its special flavour from the addition of saffron and tasted excellent to me. If you ever go there, you should definitely try it!

The Maniva Pass

From Bagolino, a round trip over the Maniva Pass (1665 m) and from there down to Anfo on Lake Idro via the Passo della Spina (1550 m), which is mostly single-track and only gravelled in places. The ride up to the Maniva Pass was pleasant. The winding route is simply fun. Once we reached the top, it started to rain. So we took a short break, had a cappuccino and a delicious cake. After half an hour it cleared up and we continued towards Anfo. I had driven the Passo della Spina over thirty years ago and was really keen to tackle this difficult route. After only 10 kilometres was the end this time due to a small landslide. What a shame, but even if I'd had a shovel with me, it would clearly have been too much work. I therefore drove back to the top of the Maniva Pass and returned



11 Umbrail

to Lake Idro and then back to Bagolino over a long, normal tarmac route.

I didn't fancy Lake Garda. It's very picturesque, of course, but it's far too touristy for me. That's not what I like. I therefore travelled northwest past it to Lake Molveno, where I stayed for another day. The last time I was there was a good ten years ago and I was surprised at how much more tourism has taken hold there now. But it was still a nice stopover.

The Penser Joch

I then travelled home via Bolzano, northwards along the Sarntal valley, up to the Penser Joch (2211 m). I remember a trip over the Penser Joch in autumn. You can admire in the upper Sarntal valley the larch forests coloured golden yellow at this time of year, but now it was only the beginning of June. Northwards from the Penser Joch you reach Sterzing, from where it's then over the Brenner Pass (the top of the pass has been a huge outlet city for several years now) unspectacularly all the way home. It was a very nice, relaxed and enjoyable week! The Ro 80 is a car that is absolutely suitable for everyday use, which I currently also use every day at home.

A few more thoughts

Since the re-activation, I have already driven 6000 kilometres in the Ro 80. It's a comfortable and spacious car in which you don't have to compromise on driving comfort.

The semi-automatic with torque converter can be driven almost like a fully automatic in everyday life.

The Ro 80 is not exactly an economy champion (the lowest consumption on the Alpine tour was 11.2 litres and the highest consumption on a very briskly driven long mountain stage was 16.5 litres), but my 1965 Mercedes 220 S with 110 hp also allows itself 13 to 14 litres in the mountains without power steering and without automatic transmission, so there's not much difference.

Incidentally, I had to get used to the front-wheel drive. Nothing is different at moderate speeds. But as I've only ever driven rear-wheel drive cars for most of my life, typical reactions simply become ingrained.

Especially that you routinely accelerate out of fast bends using the accelerator. The front-wheel driven car does not like that by design. I'm not a racer, but I do like to drive a bit faster on winding country roads. The Ro 80 has quite good-natured behaviour, but I first had to get used to "thinking differently" about the driving behaviour. Of course, nothing bad happens straight away, but I was simply used to the fact that more throttle in a bend tends to push the rear outwards, whereas with front-wheel drive, more throttle produces understeer. Of course, this is particularly noticeable on tight Alpine bends or on gravel. However, this no longer happens to me.

Finally, a word about suitability for the Alps. In terms of performance, it is of course no problem with the 115 hp. I've already mentioned the issue of vapour lock. But it's a minor flaw at most, as long as you don't have the ambition to set new best times. For "wild passes" with gravel, deep ruts or large stones (the Spina Pass would be such a candidate), the Ro 80 is certainly not the first choice because of its not particularly high ground clearance, but if you are careful you don't have to be totally anxious. I did miss the good braking effect of the engine somewhat. On steep downhill gradients, the car pushes quite a bit, so you still have to use the foot brake even in first gear.

My 1961 Ponton 180 D is a completely different story. In short-transmission first gear, you can simply let the little diesel push for a long time, even on steep downhill gradients (for which, however, you are grateful because of the drum brakes without a brake booster). But it is also a completely different vehicle and, as we all know, the "egg-laying woolly milk sow" has still not been invented...

Pictures: Klaus Mangold

Ski-Craft as Water ski towboat

By Walter Graf (ch) - Our club member Kurt Hofstetter is in possession of this unique vehicle from a bygone era. He learnt from Walter Frey that a remaining stock of these water ski towboats had landed in Australia. They were originally built in Germany by the newly founded Ski-Craft company in Hamburg in 1961 and were then probably delivered to America. These Ski-Craft should have come onto the market in the 1960s. The first test runs immediately aroused great interest and curiosity among water sports enthusiasts. The possible appearance of this boat and the scant information about it caused great waves of enthusiasm in the scene. Back then, waterskiing was widespread and more popular than it is today. On Lake Constance, you can still see water skiers here and there, pulled by powerful motorboats, but their numbers are out of all proportion to earlier times.

By the way: almost 50 years ago, the Swiss Peter Lüscher from Romanshorn was the European junior champion in water skiing. He then switched to

the alpine ski circus with increasing success. Learning is learning, he must have told himself, and talent was of course part of it. To his great surprise, he won the overall Alpine World Cup in 1979, ahead of the exceptional skier Stenmark from Sweden.

Over time, the new water-skiing device also became a topic for the press and television. Ralph Edelmann, a well-known German water ski racer, offered to complete the demonstration runs with great success. When the NSU press service went public in 1962 with information on the new Wankel-driven sports equipment, the organisation of German boat builders vehemently opposed the new lightweight ski-craft device. This new type of competition against the more expensive motorised boats that water skiers were towing behind them could not be tolerated. After all, water sports enthusiasts could indulge in their pleasure from any jetty or shore by themselves and under their own control. So every effort was made, including a temporary injunction from the Hamburg Regional Court, to prevent the new sports equipment from entering the market.



Officially, the water sports equipment could not be sold in Germany.

Nevertheless, around 3000 were built between 1963 and 1966. A water-cooled 150 cc NSU Type 61 Wankel engine was used with an output of around 28 hp. With an unladen weight of just under 60 kilograms, speeds of up to 50 kilometres per hour were possible. In fact, the first production-ready Wankel engine was not installed in an automobile for its mobile application. The Ski-Craft with NSU Wankel engine thus went down in history as the first series-produced product. Some of these water ski boats were sold in Europe, but mainly sold to America on the west coast. Everything new could be sold in America, they tried everything in water sports. Even surfing came from there.

It remains unclear how the Ski-Craft towed watercraft came to Australia. In the era of worldwide globalisation, anything is possible. Walter Frey and Kurt Hofstetter are both enthusiastic collectors with their own museums with everything that comes from Mazda or at least has a Wankel engine. Walter Frey told Kurt Hofstetter that this equipment should be acquired in Australia and whether he would join in. If Ulrich Latus from the Spider Club would also join in, there would be three of them. There would be red and yellow versions. An agreement was reached on the price, even if it wasn't quite cheap, until the three pieces of sports equipment could be received in Germany by Walter Frey in Augsburg. For something unique, however, people like to dig a little deeper into their pockets from time to time. The three ordered specimens arrived in a wooden cage and packed in a cardboard box nibbled by mice.

At the next general meeting of the NSU Ro 80 Club of Switzerland, Walter Frey brought the vehicle to Switzerland for Kurt Hofstetter. In the Mazda estate car, the drawbar of the Ski-Craft protruded over the head of the poor passenger and wife Ute. She had to endure the journey to Switzerland with her head bowed. On the way home, however, Ute was able to sit down again and relax.... In the bus he had brought with him, Kurt delivered the individual components such as



drawbar, shell, tank, engine and cables to its workshop in the museum in Vogelsang near Dussnang. It was child's play for the experienced car mechanic to assemble everything correctly. He has never run the engine, as it is water-cooled. He can't try it out on a lake, nor does he want to. It's a pleasure to own something so extraordinary in mint condition, he said to me mischievously.

When the opportunity arises, he likes to show off his vehicle in the classic car scene. With his NSU Ro 80 as a towing vehicle, he has already driven up to a general meeting of the NSU Ro 80 Club of Switzerland in Hurden. The NSU Ro 80 is of course an ideal match for the Ski-Craft. He also drove up to the Arbon Classic on Lake Constance with the towboat.

Nobody really knew what it was. One spectator remarked whether he was driving a UFO on his trailer. Others walked around the trailer and speculated in all directions. He was also present in Friedrichshafen and got talking to many interested people. He likes to go to places where there are lots of people, such as Motorworld in Kemptthal or the popular Hasenstrick classic car event in the Zurich Oberland. Kurt Hofstetter's aim is to take part in meetings here and there with his car and trailer. It doesn't always have to be the same ones. For him, the NSU Ro 80, the trailer and the Ski-Craft are a good combination from a bygone era.

and provides plenty to talk about everywhere.

Incidentally, the tugboat is also in Kurt Hofstetter's Wankel collection
www.wankel-sammlung.ch to marvel at.

Pictures: Kurt Hofstetter (CH)

Reports from the workshop - Clutch release bearing

By Thomas Günther - The removal and repair of the clutch (Fig. 1) is described quite well in the repair manual from page 158 onwards. However, what is not dealt with here is the release bearing. It is this component that has to absorb the entire force of the clutch disc spring when the clutch disengages. You can feel how high this force is when you try to operate the clutch lever by hand. And you are still pulling on the longer arm of the lever!

Once the clutch has been removed (Fig. 2) and (Fig. 3), as described in the manual, the release bearing can be removed. First clean the outside of the bearing with petroleum ether and compressed air (in this order). This is because, in addition to the great force that the bearing has to transmit, it is also subject to clutch wear. If the bearing is clean, you will recognise a snap ring on the back (Fig. 4). This is carefully removed, cleaned and set aside for reuse

(Fig. 5). The release bearing can then be dismantled with light (plastic!) hammer blows (Fig. 6). Now thoroughly clean all individual parts again with petroleum ether and compressed air. The actual ball bearing is designed in such a way that the outer and inner ring, balls and cage cannot be dismantled. The dry bearing can now be inspected. It should run smoothly and without scratching noises under the pressure of your hands.

If it runs out for a relatively long time when rotated without pressure, it is still OK. If ball bearings are pushed dry, without load, a quiet, buzzing noise is produced. If, on the other hand, there is a rattling noise or even "potholes" can be felt in the running surfaces, the release bearing has reached its wear limit and must be replaced. Chipping of the snap ring groove is also a reason not to reuse the bearing. Without removing the gearbox, you will not be able to access the release bearing again! Unfortunately, the clutch release bearing is only available as a used part.



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The following therefore applies: check the used part first, then buy it!

So if our bearing is still in order, the release bearing gets a new grease filling. In order to get the new grease between the balls, a disposable syringe has proved its worth as a "mini grease gun" (Fig. 7). A release bearing treated in this way is ready for installation (Fig. 8) and good for many carefree Ro 80 kilometres. And now comes the recurring phrase: "Reassemble the individual parts in the reverse order of disassembly." Particular care must be taken with the snap ring; it must be seated exactly in its groove and must not be loose. This would mean that it is bent and no longer has any preload. Therefore, always handle circlips with care. Never bend them open so far with the circlip pliers that they are permanently deformed! If this is the case, replacement is unavoidable. If you want to protect the release bearing

when the vehicle is running, leave the neutral position engaged for as short a time as possible. In this position, the neutral gear switch in the transmission energises the servo valve of the automatic clutch and the clutch disengages when the car is idling. It is better to engage the parking lock when the car is stationary and the engine is running, as the clutch will not disengage. Dynamic adjustment of the ignition timing or permanently closed level crossings are such cases.

Pictures: Thomas Günther



5



6

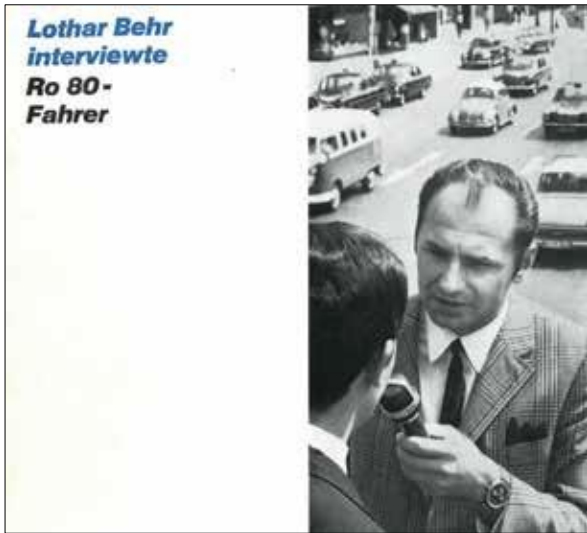


7



8

- 1 Gearbox removed
- 2 Clutch removed
- 3 Clutch disassembled
- 4 Position of the snap ring in the release bearing
- 5 The removed snap ring
- 6 The release bearing in its individual parts
- 7 Greasing the cleaned bearings
- 8 Ready-to-install release bearing



Cover picture

Ro 80 driver interview

The series

By Heiko Rossnagel - In the now established series "Ro 80 drivers interviewed", in this edition the North German director Charley Dühlmeier and the artist and nightclub owner Jens H. Brenke from Hanover have their say. Further interviews will follow in the next issues.

Images: Scans - Andreas Meyer

Charley Dühlmeier

is a television director at Norddeutscher Rundfunk in Hanover. He specialises in documentaries and entertainment features.

For Charley Dühlmeier, who also repeatedly deals with motor vehicles as a television director in the programme 'Mit dem Auto unterwegs' ('On the road by car'), two aspects were decisive in abandoning a car with a conventional piston engine and venturing into new technical territory. His reasons:

"I was attracted by the two-disc NSU Wankel engine, and then I also found the body shape very practical and original!" In the meantime, he has become so fond of the NSU Ro 80 that the second model is already in the garage; this one already has another 25,000 kilometres on the clock. And he is so taken with it that he wants to buy a third Ro 80 in the near future. He has already used his car a few times for television programmes, and word has gradually got around at the NDR radio station in Hanover: Charley and his NSU/ Wankel-Ro, they belong together! In fact: "For a modern man who has both feet firmly on the ground and doesn't exactly turn his back on tried and tested revolutionary inventions, the NSU Ro 80 is tailor-made." That is the verdict of television director Charley Dühlmeier. His car "swallows" an average of 14 to 16 litres and, according to Dühlmeier, that is still extremely economical with his driving style.

With the ro80, I have a modern, spacious saloon that has a wide operating radius, thanks to its large tank and a very roomy boot with plenty of space to stow everything, and customer service you can rely on." Incidentally, Dühlmeier does not have much experience of NSU servicing. Although he is already driving his second Ro 80, he has not had any repairs apart from the usual inspections. Once, the windows rattled a little. But that was fixed straight away. "Stop!" says Dühlmeier, "while we're on the subject of repairs, I didn't want to hide the fact that the lights didn't come on once. But that was also just a one-minute blip. What particularly impresses him about the Ro 80? The excellent roadholding, the already legendary smoothness at high speeds, the high top speed, the enormous acceleration and the driving comfort can only be found in luxury saloons. Dühlmeier emphasises that he already got used to the new driving experience in his first Ro 80, which he no longer wants to do without. With the exception of one very conservative friend, his entire circle of friends has been infected by his enthusiasm for the Ro 80. I have one more question for Mr Dühlmeier: "What does this friend have against your car?" The TV director squints into the sun: "He once spent some time in the back of the car when it was very hot and wasn't entirely happy with the ventilation. He was sweating a bit!"

Jens H. Brenke

A radio, television and record artist, Jens H. Brenke is just as well-known in Hanover as his nightclub, where he appears as a singer and bartender.

Jens H. Brenke sees himself as an individualist, which is particularly evident in his encounters with the world around him. That is why he was one of the first German motorists who decided to buy an NSU Ro 80 without scepticism or hesitation. He has never regretted it. "You can see how much I enjoy the vehicle from the fact that I already have the second Ro 80 on my doorstep today. Nine of his own cars have been in the artist's stable so far. The eighth was already the "big Wankel car" - as the NSU Ro 80 is respectfully called in the vernacular. Brenke recounts in his casual manner: "People have repeatedly asked me how satisfied I am with the vehicle. My answer was always: Why do you think I've already bought my second NSU Ro 80?" Brenke has little to say about the NSU customer service, as he hardly used it apart from the usual inspections. With the first Ro 80, which he bought with 40,000 kilometres on the clock, the shock absorbers were replaced once. That was done in a short time. The artist, whose humorous records have already achieved a considerable circulation, does not necessarily want to call the Ro 80 an "ideal car". But he has a car that fulfils many of his ideal ideas.

"I love life and therefore want to drive a safe car. By that I mean perfect brakes, good road holding, rapid acceleration and a high continuous speed. After all, I'm often on the road in my car." He has been intensively involved with the technology of the NSU Ro 80. Especially the complex braking system. That's why he has complete confidence in the reliability and braking effect. "I've also got used to the fact that the brakes always squeal a little". When he can, Brenke presses the accelerator pedal quite hard and is delighted with the temperament. Another thing that particularly fascinates him: The whispering sound of the engine at high revs. "At first I could hardly believe that you can have a quiet conversation at 170 kilometres per hour." He describes the NSU Ro 80 as an economical car. "Despite my fast driving style, my car only consumes 14 litres of normal petrol." He is currently in the process of convincing his friends of the advantages of the NSU Ro 80 as they are still somewhat sceptical about the vehicle. The result: a friend from the radio station was amazed by the car's insensitivity to crosswinds. Jens H. Brenke has one more wish for the NSU designers: he is waiting for an NSU Wankel car with three discs. That must make a rocket!

Finds from Wankel's treasure chest

From Dankwart Eiermann, Gunter Olsowski (Introduction) - *Last year, our honorary member Dankwart Eiermann gave me a thick folder labelled "Felix Wankel" and other relevant documents for our new office in Lindau. During his professional career at TES Lindau from 1961 onwards, he collected numerous files, documents, letters and photos and filed them in this folder. Some of these were already published in 1996 under the title "From Dankwart Eiermann's photo album" in issue 49 of the then club magazine "Trochoide". But much of it is still unknown and therefore all the more valuable. In the "Wankel's Treasure Chest" section, we present historical artefacts and pictures from this "treasure chest".*

While rummaging through the folders given to me by Dankwart Eiermann, I came across a special letter that was addressed in 1975 to the then Minister Dr Hans Friderichs (Federal Minister of Economics from 1972 to 1975, FDP). The author was the alleged "Free Association of Arab Engineers". A handwritten note by Dankwart Eiermann aroused my curiosity: "Franz Huf - Pamphlet after being sacked by F. Wankel". I asked Dankwart to write me a few lines of explanation, which he thankfully did.

Read the explanation and original letter for yourself.

Comment on the following article from 1975 (by Dankwart Eiermann)

The Israeli company Savkel Ltd. acquired a Wankel licence in 1969 and produced an air-cooled Wankel engine, which had originally been developed by Curtiss-Wright.

This engine was later produced by the U.S. company Wedtech and used for military application in various projects. Contractual assistance from Wankel-R&D GmbH in Lindau was agreed for this purpose.

Among other things, the engine had become known for its installation in the Croco and Rhino vehicles (see pictures 1 and 2). At the beginning of the 1970s, when the Audi-NSU companies were taken over by the VW Group, Saudi Arabia and its allies drew up a so-called "blacklist", which included companies that did business with Israel. These companies were to be denied access to the Arab market. As a consequence, VW ordered the cancellation of the Savkel licence. So much for the facts. Obviously, the author of the following article has used these facts to hang his nonsensical statements on.

Now to the author: He is the former Professor F. Huf, who worked at the state engineering school in Constance and from there established contact with Felix Wankel.



How Franz Huf came to his professorship in Konstanz is not known, but he was known by colleagues and students as Professor "Adabei", because when reporting on an important event or technical development, he would always add: "Do war i adabei!" ("I was there too")

After the Wankel engine became known at the end of 1950, F. Huf was one of the first to try to establish contact with Felix Wankel.

He promised Wankel that he would find suitable engineers for the new TES Institute, as they were urgently needed. I know this because I was one of the first employees at the so-called "new TES"! He also offered Wankel the opportunity to write articles for him about the Wankel engine, of course using F. W.'s documents and with appropriate remuneration from Felix Wankel. F. Huf thus became a frequent guest of Felix Wankel, whom he told about the tragic fate of his wife: as she was of Jewish descent, she was arrested by the Nazis and taken to a concentration camp, where she died! One day, however, a woman came forward with her daughter at Wankel and explained that she was the then wife of F. Huf, she had been left behind in the 3rd Reich and she had to see how she could make ends meet despite her many problems. That was the end of the contact with Huf and he was banned from Wankel.

Huf then tried unsuccessfully to develop an anti-Wankel engine. For example, he had his

engineering students to construct a KA variant (from the Wankel division book) and tried unsuccessfully to offer this to the ZF company. This and all his other attempts failed. Since all his attempts in the new rotary piston area were completely unsuccessful, he now obviously tried to badmouth Felix Wankel and his engine in his frustration. The pamphlet of 13 March 1975 must be read in this light in order to understand the completely nonsensical and hateful statements.
20.10.2023 - Dankwart Eiermann

Pictures: Archive
Dankwart Eiermann



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2nd press report

Geneva, 13 March 1975.
 (German version)

Subject: Alleged boycott by an Arab organisation against the Volkswagonwerk in Wolfsburg and Audi NSU in Neckarsulm.

The "Frankfurter Allgemeine Zeitung" published an article with the code "Wg.HANNOVER, 3 March" on page 9, i.e. in the business section, of its No. 53 of Tuesday, 4 March 1975, reporting on an "alleged boycott by the Arab organisation from Cairo" against the VW plant in the Federal Republic of Germany.

Immediate and thorough research in Cairo revealed the following facts.

This news originates from Lindau on Lake Constance and was launched by Wankel GmbH and spread via skilful detours as if it came from Cairo from the Arab side.

Furthermore, we learnt directly from Cairo that nobody there is thinking of using German licence agreements with any Israeli company, e.g. SAVKEL, as an excuse for a boycott.

We published our technical opinion on the subject of the "WANKEL-MOTOR" in detail in our newsletter (21 April 1974) on the occasion of the 1974 Hanover Fair, and nothing has changed since then. However, we can now add that in the meantime we have carried out extensive research on the whole subject of "WANKEL-MOTOR". We would like to publish a few points here.

The central figure Felix Wankel, born on 3 August 1902 in Lahr (Baden) as the son of a forestry worker. Attended primary school. There is no evidence of further school attendance, in particular no Abitur at a humanistic grammar school in Heidelberg. Apprenticeship as a bookseller is cancelled. Passionate hobbyist who finds faithful financial backers under the NS regime. The Reich Aviation Ministry (Reichsluftfahrtministerium RLM) financed an experimental workshop in Lindau on Lake Constance and

issues a test order for the conversion of a Daimler-Benz Type 601 aircraft engine, replacing the valve control with rotary valves. This engine is not only less powerful than the original production type but also consumes more fuel, but Wankel friend W.D. Bensiger puts the RLM off. The high-ranking Nazi protégé with a low NSDAP party number was immediately arrested by the French in 1945 and his WWV = Wankel test workshops were closed. He is released after a short imprisonment! He tinkered with an old rotary engine, which was to be built jointly with BMW, but had to give it up due to the total hopelessness of the project.

Through the mediation of the former NS state secretary Keppler and others, a connection is made with the former corvette captain and engineer Ernst Höppner, who has developed a new type of rotary piston engine idea.

Höppner's idea was based on the pairing of a kidney curve with its inner envelope curve, whereby Höppner discovered the gas exchange. Wankel offers Höppner the prospect of a share and applies for an original patent together with him, whereby F. Wankel suddenly also appears as one of the two inventors, although the basic idea originated solely from E. Höppner. Wankel had no idea about trochoids at the time, but recognised the enormous value of Höppner's invention with the basic instinct of a hobbyist. The trusting E. Höppner later becomes F. Wankel's employee and more and more people only talk about a Wankel engine, although the good-natured Höppner is still working for F. Wankel.

A co-operation with the NSU engine factory in Neckarsulm, which was already experiencing sales problems, succeeded and again it was only E. Höppner alone who carried out the first basic designs. As a driving force and consistent tactician, the clever Wankel ensured that the co-operation agreement with NSU now only gave the impression of an NSU Wankel engine.

Höppner is now just an employee, who is fobbed off with a few tens of thousands of DM and even forcibly removed from Wankel GmbH around 1967. Dipl. Ing. Ernst Höppner dies of cancer on 27 Nov. 1967 in Lindau. F. Wankel does not even attend the funeral. In the meantime, the new engine has started up thanks solely to the skills of the NSU designers. It has no reciprocating masses and runs like an electric motor. The main credit goes to Dr W. Froede and his team. Its only flaw is the specifically enormous fuel consumption. There were also some initial technical problems. Such as the formation of chatter marks inside the housing, i.e. in the trochoidal inner wall.

Nevertheless, the birth of the first running rotary piston engine at NSU was a success.

The constant driving force F. Wankel works tirelessly to present himself as the great inventor and is supported in this endeavour by his ingenious business partner Ernst Hutzenlaub. Arrangements are made with NSU so that NSU receives 60% of the expected revenue and 20% each goes to F. Wankel and Ernst Hutzenlaub. The Hutzenlaub-Wankel group has a 50% say in all contracts concluded. Hutzenlaub is the sole external representative.

Hutzenlaub developed worldwide sales activities via NSU Wankel licences. Thanks to an equally skilful advertising campaign plus an outstanding public relations team, the sole salesman Ernst Hutzenlaub was able to form a crown of superlatives around the Wankel engine.

The tricky autodidact Felix Wankel not only supplemented the worldwide dominance of this first rotary internal combustion engine with ever new and fantastic success stories about alleged technical miracles, but also very skilfully and constantly over bluffed the world press by means of bought press treatises

Each engine company was systematically pressurised into concluding contracts and the negotiations were conducted so skilfully that failure to conclude an option or even a licence agreement was tantamount to hostility to progress and intellectual retardation.

Time and again, the addresses of the newly added followers were published and supplemented with alleged additional progress also achieved by these licence holders.

There was only one thing that the inventor juggler Felix Wankel and all his conscious or unconscious followers could not conjure up - namely a high-compression and equally highly effective energy converter, regardless of whether it was an ordinary gas engine (called a petrol engine in Germany) or even a diesel engine.

In the case of the diesel engine, option and licence agreements were initially issued in droves to all bona fide German diesel engine manufacturers and carefully prohibited by clever blocking clauses so that the captured companies could see nothing else. Faithful followers were ensnared, for example at Daimler-Benz the late director Dipl. Ing. Wolf-Dieter Bensinger, who even became a professor at the Technical University of Stuttgart shortly before his death. A series engine was never built at DB!

When the dieselisation in Germany did not succeed, the world-famous Rolls-Royce company was snapped up by a cleverly devised state financing scheme and an attempt was made to achieve the total lack of high compression with a two-stage system. The result was also zero! Only now did it become apparent that the combination of the selected basic geometric curves, in this case the kidney curve as the inner housing boundary and the inner envelope curves as the piston shape, were unsuitable. Ernst Höppner's basic concept, which has been turned into a veritable shower of gold by the hobbyist Felix Wankel and the sales genius Ernst Hutzenlaub for two decades, is completely unsuitable for an internal combustion engine.

It makes no difference whether only a low-compression gas or petrol engine is to be built, or just a simple gas pump. All pump designs built to date, especially by the Borsig company in Berlin, have failed completely.

And then came the worldwide petrol shortage at the end of 1973 and with it the disillusionment of even the most pre-drilled Wankel followers.

On Wednesday, 24 October 1973, the Frankfurter Allgemeine Zeitung published an article on page 35 entitled

"Wankelherz und Säuferseele"

(Wankel heart and drunkard's soul).

Sophisticated but incredibly thirsty rotary engine from Japan.

This was referring to the Mazda RX-3 small car. This essay revealed the despicable brutality with which the sole big earners Felix Wankel and Ernst Hutzenlaub have done business to date.

These two contemporaries were and are completely indifferent to fuel worries or even the waste of raw materials. Only if they earn.

The fact that with every Wankel engine the fuel comes out at the back almost unbothered in the form of petrol vapour did not bother the devious beneficiaries in Lindau in the slightest. A virtue was made of necessity and a so-called exhaust gas decontamination system was fitted to the exhaust.

Now the unused fuel behind the engine was wasted by an afterburner, here at the expense of the poor car owner!

Whether this was a waste of crude oil was of no interest, because this unscrupulous method has now become commonplace throughout the USA, with hypocritical references to the terribly toxic exhaust fumes.

Nobody thought of better engines with a higher effective efficiency and thus without the currently annoying CO and CH emissions in the exhaust gases. For Wankel, this development was initially the lifeline.

Then came the enormous rise in fuel prices and with it the realisation, even among the simplest of drivers, that a car is only interesting if it remains economical. Neither the AUDI-NSU-RO-80 nor the Mazda RX-3 are as economical as the cheapest piston car.

The typical Wankel exaggeration that such cars jerk terribly and have a nasty hammer mechanism = the valve drive, is of no interest to any driver.

The fact that all Wankel cars must also have an exhaust gas afterburner, the ongoing maintenance of which not only costs a lot of time but also a lot of money every 1000 kilometres, is shamelessly concealed. According to the tricky master, this system and its maintenance is called "maintenance of the emission control system".

The small group of beneficiaries around F. Wankel do not talk about the uselessly wasted and never recoverable raw material "crude oil". Principle: "Everything that could do harm is trivialised without limit and everything that could be good, no matter how insignificant, is glorified just as limitlessly as unique technical progress.

A special chapter in the life of this brutal rotary piston dictator F. Wankel is the subject of competitive developments. We remember the essays in Der Spiegel, launched directly by Wankel and his clique.

However, the fact that this servile Wankel-group has the unmitigated cheek to want to use the Middle Eastern tragedy of humanity for further blackmail of AUDI-NSU shows the whole depravity of these so-called greatest inventors and most ingenious licence sellers.

We Arab engineers are not willing to be talked into a boycott of any country, and certainly not of Germany. For us and all honest fellow human beings, Germany is still the country of ingenious inventors, poets and thinkers, but unfortunately also the country of the most gullible yes-men when it comes to other things, such as technology. Nowhere else is it so easy to create guilt and to feign the terrible consequences of this alleged guilt as in Germany.

"The probably half-Pole F. Wankel knows his countrymen and his fellow travellers have now tried to frighten the VW management via the evil Arabs. It was the pox of these international rags that Wolfsburg is also in the red.

It has been clear for a long time that the Neckarsulm plant production of the RO-80 would leave only red figures at the bottom line. The initial shower of gold from scammed option and licence fees has slowly dried up. There never was and never can be any real profit from the sale of RO-80 cars. The car's engine is simply too bad - it doesn't convert petrol into road kilometres, but instead turns the fuel into uselessly wasted clouds of petrol vapour behind the car.

We Arab engineers announced all these facts in our press release of 21 April 1974 on the occasion of the Hanover Fair. Unfortunately, the otherwise so attentive world press remained shamefully silent.

Now we learn again from the Frankfurter Allgemeine that the number of the stupid and seduced is still growing today. The cunning trio of Wankel-Hutzenlaub-Curtiss has succeeded in snapping up the world's biggest car company, General Motors.

This time we Arab engineers will not remain silent. We share responsibility for the sensible utilisation of the raw material "crude oil" due to the very large deposits in our Arab states.

Here there is no muzzling of the press by the dictator F. Wankel and here there is no fear of any threat. We are determined to prevent any waste of the vital raw material "oil" by all means known to us free Arabs.

We will not be fooled by F. Wankel and Ernst Hutzenlaub when these two contemporaries declare that they have sold everything to Lonrho Ltd. and have had nothing more to do with Wankel GmbH since 1971.

They can tell this fairy tale to the Finance Minister of the Federal Republic of Germany and use it to evade taxes - only facts apply here. Lonrho belongs to the Wankel-Hutzenlaub duo, does the German tax authorities know this?

It goes without saying that this press release is not intended to threaten GM or anyone else, nor to announce a boycott. We must warn against undesirable developments in good time. We also want a smooth-running combustion engine, but never a fuel waster.

If people in Germany today, and especially in Neckarsulm, are complaining that no cars can be sold, this is not the result of any boycott, but merely the fact that the AUDI NSU-R0-80 with its petrol-wasting engine is no longer being bought. It is too expensive and too bad for what it can do. Its resale price is also very low. Germany, as a centre of many and constantly new inventions, should develop an economical rotary piston engine without the influence of an egocentric autocrat Felix Wankel, but quite simply and modestly, an economical engine.

The constant fuss about this supposedly boundlessly great invention and the equally constant references to it in the German trade journals, especially in the old magazine MTZ, is not only undignified, but a new and this time even more despicable personality cult around a juggler and never around a great German inventor.

A person who was a great Nazi dignitary yesterday and today declares, I vote for Willi Brandt and a person who claims inventions that he himself never made, but even accepts an honorary doctorate from the Technical University of Munich for it, is untrue.

You can't link a car factory with such people for better or worse and then try to deflect the blame onto Arabs.

The factory management of AUDI-NSU must have the courage to tell the truth, even if it means admitting the failure of former bosses.

Likewise, the mayor of Neckarsulm and the finance minister, as well as all other responsible people in Germany, must finally say how they were able to sell fewer and fewer AUDI-NSU-R0-80 cars and immediately publish real sales figures.

This engine, or rather its basic design system, is so miserably bad that it has totally failed even as a model toy engine. The Swabian company Graupner in Kirchheim-Teck can publish new sales figures about it. There are enough honest and modest inventors in Germany who can develop an economical rotary piston engine and who don't have to tell the whole world fairy tales about the great inventor Felix Wankel every day in newspaper and magazine articles.

This about the chapter "NSU-Wankel-Moter", or the end of a worldwide legend.

The Geneva Motor Show: Here too, unfortunately, in addition to many new and this time healthy new vehicles, such as the Peugeot 604 and Renault 30, the Japanese company M A Z D A made an unbelievable attempt to offer the RX-3. Here the Japanese, with their characteristic tenacity, once again offered the Wankel bluff engine, although the German FAZ newspaper of 24th X. 1973 on page 35 branded this very car in detail as a boundless waste of oil and an unscrupulous pretence of false facts in the article "Wankelherz und Säuferseele" (Wankel heart and drunkard's soul) mentioned at the beginning.

MAZDA is hereby asked once again not to act against the conscience of the world. Oil is currently still being extracted in abundance in all parts of the world, but how much longer, we ask?

Japan is exclusively dependent on the import of foreign raw materials. It should therefore be particularly aware that a deliberate waste of raw materials cannot be accepted by the rest of the world in the long term. We solemnly appeal here to the noble samurai spirit of all decent Japanese and to the Japanese government, build something better, like the Wankel boozer engine! Japanese engineers have proven that they can build the best cameras, and it was Japanese shipyards that built the supertanker, build economical internal combustion engines too!

Finally, we refer to our press releases in the world press on the current topics of the "energy industry". We do not need to emphasise that we fully support the wishes of the US government for a worldwide 40% reduction trend in oil consumption.

This year's Geneva Motor Show has not yet revealed this trend. But we are hoping for common sense, especially from the responsible statesmen. We expect strict economy laws in all cultural states, starting with the raw material "OIL" and sensible recycling of all waste materials.
Geneva, 13 March 1975.
A.L.I.A.

Driving report Mazda MX-30 e-Skyactive R-EV

From Roland Hildebrandt (WWW.Motor1.com) - Felix Wankel was not one to keep his opinions to himself. His statement became famous when NSU changed its original engine concept to the rotary piston engine, which conquered the world millions of times over. Wankel described this kinematic transformation of his idea with the words: "You have turned my racehorse into a plough horse." NSU CEO von Heydekampf, on the other hand, countered: "If only we already had the plough horse!" But as fascinating as the horse stable developed over the decades (from the NSU/Wankel Spider to the Ro 80 and Mazda RX-7 to the RX-8), the problems were just as varied: Sealing strips, durability (both solved later), high fuel and oil consumption and the need for precise manufacturing on in-house production lines. In short: Fascinating, but economically questionable. And so the Mazda RX-8 was the last car to be powered by a Wankel engine. Until now. Because the engine has one undeniable advantage. It is compact. A miniature horse, so to speak, to stick with the introduction. Now they have

made a new engine in Hiroshima called 8C from the Renesis Wankel of the RX-8.

A slice of Wankel, please!

It is a newly developed single-disc rotary piston engine with a chamber volume of 830 cc. It has a maximum output of 55 kW/75 hp and works with direct fuel injection and a high compression ratio of 11.9:1 - both of which significantly improve the engine's efficiency, according to Mazda.

In addition, numerous measures were implemented to reduce friction losses. An exhaust gas recirculation system (EGR) is also used to further increase efficiency. The exhaust gases are almost completely freed of gaseous and solid pollutants by a regulated three-way catalytic converter and a particle filter located behind it. As a result, it easily fulfils the currently most stringent Euro 6d-ISC-FCM emissions standard, including the real emissions test (RDE) on the road.

With a rotor radius of 120 mm (the trochoidal curve of the rotor movement) and a rotor width of 76 mm, the compact



design means that the rotary engine can be arranged in the engine compartment in a row with the electric motor, the engine and the generator. With an overall width of less than 840 mm, this unit fits into the same body structure as the all-electric Mazda MX-30. Wait a minute! MX-30? Fully electric? Exactly. The Wankel engine becomes a well-behaved plough horse and serves as a range extender in an electric car. In the Mazda MX-30 e-Skyactiv R-EV, as the rather long official name suggests, the battery has been reduced from 35.5 to 17.8 kWh. And at the same time the rotating combustion engine has been implemented with a 50-litre tank. This makes the MX-30 (130 kg heavier) a R-EV serial plug-in hybrid. The Wankel does not drive the wheels directly, but generates electrical energy as a generator.

Interior and space

Where the all-electric MX-30 was finished after a good 200 kilometres, the R-EV goes much further. 85 kilometres electrically, but up to 680 kilometres in total. We started our test drive with a battery charge level of 92 per cent and a total range of just over 600 kilometres.

There is a choice of three operating modes: "Charge" allows you to select a battery charge level below which the battery should not fall. "EV" means electric driving down to zero. And in "Normal", the Wankel engine starts working when there is around 40 per cent power left in the battery. Sounds complicated, but it's not in everyday life. Let's first take a quick look at the interior of the 4.39 metre long MX-30 R-EV. The RX-8-style doors that open in opposite directions are striking. Access to the rear is however still not all that comfortable, and the space available there is generally rather manageable. Plus point: the front doors open at an almost 90-degree angle. In the front, on the other hand, you sit comfortably and look out over a tidy dashboard with a successful material mix of fabric, leather, chrome and cork. Mazda has nicely opted for classic instruments and lots of real buttons; the rotary/pushbutton control on the centre console is reminiscent of the blissful BMW days.

How does it drive?

Now let's go! Let's hear it, Wankel! Puff cake. At first you hear nothing. But then the battery is sufficiently drained or you kick



full throttle. There it is at last, the revving piston is finally there, with a small Wankel symbol next to the speedometer. You can hear it, but not obtrusively. Slightly grumpy, the noise is reminiscent of a bathroom fan. At the latest at higher speeds on the motorway wind noise eclipses the Wankel sound to the background. Let's not get the wrong idea: It always remains quiet in the MX-30 R-EV, unfortunately it stops at speedometer 144. There may be several reasons for the somewhat humming note: Two discs would have more mass balance. In addition, the one disc of the 8C runs in a constant speed window to keep fuel consumption within limits. 117 Nm maximum torque at 4,000 rpm, maximum power at 4,500 rpm. We liked the power delivery in the Mazda better than in the PHEV models from Toyota, which can never completely shed the "rubber band effect" due to their CVT transmissions. The MX-30 R-EV moves forwards with little vibration, complemented by well-balanced steering. The suspension is also well tuned, albeit with a slightly firmer feel. Recuperation is possible in several steps, the highest of which does not allow

One-pedal driving, but delays still pleasantly.

Consumption and price

A word about the charging power via CCS: we achieved 27 to 33 kW. Not famous, but enough to bring the small battery from 40 to 80 per cent in a good ten minutes. But there's no range anxiety in this car. Our test route was twice around 100 kilometres with country roads, some motorway and some city driving.

At the destination, the battery still showed 48 percent, the power consumption was between 14.2 and 14.7 kWh according to the on-board computer, and the petrol consumption was between 4.0 and 5.2 litres.

And what will the new Wankel car cost on the German market from November 2023? 35,990 euros for the basic version called Prime Line. The equipment here is already quite good and includes 18-inch aluminium wheels, 2-zone automatic air conditioning, sat nav, reversing camera, full LED headlights and a head-up display. Too bad: heated seats only available from "Advantage" upwards for 38,490 euros, but then a 230 V socket in the boot is also included.



with up to 1,500 W of power and other extras as standard. The R-EV is currently only eligible for state subsidies in the form of lower company car tax. What could be considered as competition? Technically, the Mazda is unique, but in terms of PHEV, for example, the Kia Niro. Cost point: from 38,690 euros. So the chances are not bad that the target of 650 MX-30 R-EVs for 2023 in Germany and 2,500 units in 2024 can be achieved.

Conclusion: 8/10

Mazda is not mainstream. That's what they say themselves. And indeed, you first have to come up with the idea of a Wankel plug-in hybrid. But the realisation is really successful. Would the MX-30 R-EV have appealed to Felix Wankel? During his life he held the Mazda engineers in high esteem.

He would probably welcome such quiet and innovative mobility. The main thing there is finally new blood in the stable.

Pictures: Mazda Press Service





Technical data

Technical data Mazda MX-30 e-Skyactiv R-EV	
	Mazda MX-30 e-SKYACTIV R-EV
Body type	Hatchback, self-supporting Skyactiv body, all-steel body with four doors (Freestyle Door System) and tailgate
Available equipment	PRIME-LINE, EXCEUSIVE-1, INE, MAKOTO, ADVANTAGE, EDITION R
Number of seats	5
Drive type	Standard plug-in hybrid drive Mazda e-Skyactiv R-EV with AC synchronous motor, rotary piston motor, generator and lithium-ion battery
Max. Power (kW / PS)	125 / 170
At 1 / min	9.000
Continuous power 30 minutes (kW / PS)	60 / 82
Max. Torque (Nm)	260
At 1 / min	0 - 4.481
Maximum recuperation power (kW)	not yet available
Battery capacity (kWh)	17,8
Battery voltage (V)	355
Battery weight (kg)	188
Battery charging	DC charging via CCS connection AC charging (three-phase) via type 2 connection, charging power max. 11 kW
Battery charging time DC (fast charging; at 25° C battery / ambient temperature)	State of charge 20-80 %: in 25 min' at a DC fast charging station with at least 36 kW
Battery charging time AC	State of charge 0-100 %: 1 h 30 min' at AC charging station/ wallbox three-phase with at least 11 kW
Internal combustion engine	Single-disc rotary piston motor with lateral motor housings made of aluminium
Chamber volume (cm³)	830
Trochoid dimensions: e: Eccentricity; R: trochoidal curve; b: wide rotor housing (mm)	e: 17.5; R 120; b: 76
Max. Power (kW / PS)	55 / 75
At 1 / min	4.500
Max. Torque (Nm)	117
With 1/mIn	4.000
Compression ratio	11,9:1
Mixture preparation	Petrol direct injection
Inlet and outlet control	Two side inlet openings, two side outlet openings
Exhaust gas cleaning system	Controlled three-way catalytic converter, electronically controlled exhaust gas recirculation, petrol particulate filter, OBD system
Front wheel suspension	Skyactiv chassis with lower wishbone, MacPherson struts, anti-roll bar
Rear wheel suspension	Skyactiv chassis with twist beam rear axle, lateral stabilisation via torsion profile
Gear ratio motor-drive axle	11,236
Drive	Front-wheel drive with AC synchronous motor with electronic torque control
Rim size	7.0Jx18
Tyre size	215/55 R18
Brake system	Front: Internally ventilated disc brakes rear: disc brakes Brake-by-wire control with adjustable recuperation, Electronic brake assist, electronic ABS with electronically controlled brake force
Brake disc diameter	326 0 mm front 303 0 mm rear
Steering system	Rack and pinion steering with speed-dependent electric servo assistance

Mazda ICONIC SP with electric drive and twin- disc rotary motor



By Mazda Press Service - A compact sports car for a new era: Mazda unveiled the MAZDA ICONIC SP at the Japan Mobility Show 2023. The concept car combines a twin-disc rotary engine with an electric vehicle platform - a further development of the approach that the company recently introduced with the new Mazda MX-30 e-Skyactiv R-EV.

Like the Mazda MX-5 2024, which was also presented at the show, the MAZDA ICONIC SP embodies the company's continuous endeavour to develop products that fulfil the love of cars and driving. The low centre of gravity of the MAZDA ICONIC SP ensures excellent driving characteristics. The lightweight and compact rotary engine unit has been integrated in the centre of the vehicle, resulting in unique vehicle proportions with a particularly flat bonnet.

The presented two-disc rotary motor EV system is a highly scalable drive with a flexible layout. In addition, the rotary engine offers the

ability to utilise a variety of different fuels, including green hydrogen or other carbon-neutral liquid fuels. This makes the system a unique Mazda technology that is ideal for sports car use. And when the battery is charged with electricity from renewable sources, CO₂-neutral driving is possible.

"We love the Mazda MX-5, the world loves the MX-5, and we want to keep the joy of driving that this model embodies alive in the age of electrification," said Mazda President and CEO Masahiro Moro at the unveiling of the concept car at the Japan Mobility Show in Tokyo. "The EV powertrain of the MAZDA ICONIC SP with its two-disc rotary engine driving a generator is our dream solution. A dream that we will work hard to realise. Mazda will always build vehicles that remind people that cars bring pure joy and are an indispensable part of their lives."



Video of the presentation of the Mazda Iconic SP at the Japan Mobility Show (formerly Tokyo Motor Show). Scan the QR code with a mobile device or go to www.youtube.com following Search term enter: "World Premiere of the New MAZDA ICONIC SP - Next-Gen Miata MX-5"

MAZDA ICONIC SP* - Technical data:

Length / width / height (mm)	4.180 / 1.850 / 1.150
Wheelbase (mm)	2.590
Weight (kg)	1.450
Power (kW/hp)	272/370
Power-to-weight ratio (kg/hp)	3,9

*=Concept vehicle - not for commercial purchase

Pictures: Mazda Press Service



“Wankelmut” (Fickleness) is good this time!

The founder of the AUTOVISION Museum, Horst Schultz, created the world's largest Wankel exhibition and the most comprehensive book on the topic of Wankel engines



By Museum Autovision - Christoph Seller - The AUTOVISION Museum in Altlussheim am Rheinbogen in northern Baden attracted a great deal of attention from many enthusiasts of rotary engine technology as early as 2002, the year it opened.

Even back then, museum founder Horst Schultz was by no means a blank slate when it came to the "Wankel collection". But what he now presented with this museum left many a Wankel fan speechless more than 20 years ago. But Horst Schultz, true to his entrepreneurial drive until today never threw up his hands in his lap. On the contrary: the Wankel exhibition in his special museum with five additional exhibition areas continued to grow. In addition, he recently wrote a richly illustrated book on the subject with over five hundred pages, which is now regarded as an almost complete standard reference work and a must for every fan of the rotary engine.

Special exhibition concept with teaching assignment

At the presentation of the Wankel exhibits, many of which he has restored himself, Horst Schultz from the very beginning attached great importance to provide visitors with interesting background knowledge about their function or even their historical significance in an educational form.

"After all, as a recognised extracurricular educational exhibition with our foundation, we have a duty to be more than just a collection," explains Horst Schultz. And in doing so, he is following the actual sense of the term "museum", which comes from the Latin for "place of learned occupation". No sooner said than done: in addition to numerous large displays and cutting motors, there are even haptic stations and an information centre in the middle of the Wankel exhibition that convey "rotary piston know-how" in an easily understandable form.

The cult of relics and visions of the future

Die-hard Wankel enthusiasts will immediately recognise at the Wankel exhibition at AUTOVISION,

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which rare, sometimes unique exhibits are on display here. For example, you can marvel at the original trade fair cutaway model of the NSU Ro 80, which caused great amazement at all major motor shows at the end of the 1960s. And even the study of inventor Felix Wankel has found a worthy place here. The rustic looking oak desk from today's perspective, the grandfather clock and even a drawing board look as being staged by the museum team as if it were still serving the pioneering work of the inventor and technical maverick.

However, the AUTOVISION museum is not just for "backward-looking" enthusiasts of rotary technology. As the Wankel engine is very compact and also has good properties in terms of hydrogen hot combustion, he is increasingly being given a great future is when it comes to climate-neutral drive technologies in private transport. A few years ago, a Wankel range extender was also part of the Audi A1 e-tron concept car, although it never went into series production in this configuration. For some time now, however, this electric car with range extender is on display in the Wankel exhibition at AUTOVISION. It is on kind loan from Audi AG. In the "Mobility of the future" exhibition area, visitors can also learn a lot of interesting facts about the Wankel engine as a hydrogen hot burner.

Anyone who believes that the Wankel engine in the Audi AG had already been shelved since the 1970s can be proven wrong at the AUTOVISION Museum: In 1983, a hydrogen test engine based on the NSU KKM 871 was put to the test there (Fig. 5).

This Audi A1 e-tron (Fig. 6) then caused quite a stir in the press for the first time at the 2010 Geneva Motor Show. Due to the small space requirement, a Wankel range extender found its place at that time in the concept vehicle. At Mazda (JP), a very similar vehicle, the Mx30 R-EV, went into series production in 2023. Thanks to a 1-disc Wankel range extender, the electric vehicle has a range of around 600 km compared to the almost identical, but purely battery-electric version with a range of only 170 km.

Forgotten or concealed universal application possibilities?

For some time now, the Wankel engine has been no longer part of the curriculum at technical universities. And since the combustion engine is generally considered to be "counted out" in the context of the climate, one should assume at this point that the Wankel motor, which is considered to be very energy-hungry



will soon be completely forgotten. Unfortunately, however, the fact that Wankel engines have not only been used in vehicles ever since is all too often overlooked. Visitors to the galleries of the Wankel exhibition at AUTOVISION will realise just how many different "derivatives" there have been over the past decades. From lawnmowers and chainsaws to core drills, the exhibits here are full of items with a "Wankel heart". Even belt tighteners or torpedoes, which can be used with the valveless

Explanations to the pictures

1. As soon as you enter the entrance area of the Wankel exhibition at the AUTOVISION Museum, you quickly realise that much more than just "a few exhibits" await visitors here.
2. At the touch of a button, the cutaway model of a 2-disc rotary engine can be "set in motion".
3. An information centre provides visitors with an incredible amount of background information on Wankel technology, divided into the sections "On land, on water and in the air".
4. In the exhibition dedicated to him, Felix Wankel's original study looks as if he had just left it.
5. Hydrogen test engine
6. Audi A1 e-tron
7. Many Wankel concepts never went into series production. Sometimes there was not even a test series. This was also the case with the Wieland engine exhibited here, which was made of sheet steel. To this day, this example is the first and only Wankel engine of its kind ever built.
8. and
9. rotary engines and their multiple applications: The Wankel engine found its place particularly where low weight and maximum space savings were required. Many such applications can be seen in the Wankel exhibition at the AUTOVISION Museum.
10. The permanent Wankel exhibition at the AUTO- VISION Museum has dedicated a corresponding interior to the Mercedes C 111 cutaway car with Wankel engine. It is up to you to decide which perspective is worth seeing of the observer: those interested in design are more likely to take in the bodywork side, while the technically minded rotary engine fan will devote themselves to the "open half". This is where you can marvel at the three-disc Wankel engine housed in the rear up close.
11. In his exhibition concepts, museum founder and foundation director Horst Schultz always attaches great importance to providing visitors with as much technical background knowledge as possible. Ideally, original cutaway vehicles are shown. The fact that you can now even look "under the bonnet" of a Mercedes C 111 is unique in the world and will not only make every Wankel heart beat faster!
12. "The big Wankel book" by Horst Schultz

Wankel-technology can be seen here - but of course without their explosive cargo!

A myth in halved form is twice as worth seeing

The Mercedes C111 with Wankel engine was at that time a concept car full of superlatives, which was originally developed to replace the luxury-class 300 SL gullwing. Unfortunately, however, this development fell victim to the oil crisis of the time, as rotary technology was rumoured to have enormous fuel consumption long since.

Nevertheless, this sports car, which never went into series production, still has a very large fan base today, half a century later.

When the AUTOVISION Museum opened in 2002, Horst Schultz felt it was his duty to include this Mercedes C 111 with Wankel engine in the world's only permanent exhibition on the subject for the sake of completeness. At the time, he actually managed to obtain one of the vehicles, which is still owned by Daimler AG, on loan. For years, the Gullwing with its GRP bodywork was a highlight of the AUTOVISION, until the loan agreement was no longer extended by MB and the vehicle was finally brought to its own museum in Stuttgart. This naturally tore a deep hole in the exhibition, so Horst Schultz finally decided to build a C 111 himself - but this time as a cutaway model. This was the first time you could see why the sports car with the extravagant "white autumn paint" takes its place here, according to the museum founder. From then on, the rotary engine housed in the rear would no longer remain hidden from the visitor thanks to a halved body. Almost at the same time with the publication of his book "Das große Wankelbuch - Chronologie einer Entwicklung", the time had come: a Mercedes C111 with a 3-disc Wankel engine, which was built under the direction of Horst Schultz, moved into the Wankel exhibition at AUTOVISION. Naturally, the special cutaway vehicle was given a place of honour there, accompanied by large displays, video shows and various models on the subject of the "C111 myth".

The preservation of an engine principle that is increasingly being forgotten

Since the Wankel engine has long since ceased to exist part of technology lessons in schools, it is hardly surprising that most young people have never heard of this rotary machine from the last century. Nevertheless, as an entrepreneur and engineer, Horst Schultz is unreservedly convinced of the potential

of rotary piston technology. He still sees great opportunities for the Wankel engine, particularly in future mobility with a possible hydrogen infrastructure, but also in the comfort heating sector, for example as an air conditioning compressor, and perhaps even a renaissance. "Only those who are familiar with the technical milestones of the past, with all their highs and lows, can build on this experience to create new, contemporary technologies for the future - but also to avoid old mistakes, he explains with a grin. This is why he has put so much energy and enthusiasm into setting up the AUTO- VISION Museum with the world's only Wankel exhibition. He has now immortalised all his knowledge in printed form in his 520-page book on the subject. (Picture 12)

Museum info:

Museum AUTOVISION - the technology arena
 Hauptstraße 154, D-68804 Altlußheim
 Phone +49(0)6205-307661
 E-Mail:post@autovision-tradition.de
 Internet: www.museum-autovision.de
 Opening hours: Thurs., Fri. & Sun. 10:00-17:00, Sat. 13:00-17:00,
 Admission prices: Adults € 10,- (Reduced € 8,-), pupils / students € 5,-, family ticket € 20,-

Pictures: Museum Autovision -
 Christoph Seiler



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BUCH-TIPP:

DAS GROSSE WANKELBUCH
 (Horst Schultz)
 ISBN Nr. 978-3-00-073511-0
 (520 Seiten, gebunden) € 59,90

ALLE BUCHTITEL VON HORST SCHULTZ (MUSEUM AUTOVISION) SIND BEQUEM PER QR-CODE ODER E-MAIL DIREKT BEI UNS BESTELLBAR: post@autovision-tradition.de

WWW.MUSEUM-AUTOVISION.DE

Requirements for articles and contributions

By Heiko Rossnagel - In the last issue of the Wankel Journal, I explained the requirements for future covers. Today I would like to discuss the requirements for articles and contributions to the Wankel Journal. For me, this topic is similar to the situation faced by Phil Connors (played by Bill Murray) in the classic film "Groundhog Day" of 1993. There, the misanthropic weatherman for a television station finds himself in a situation in which he has to relive a day over and over again. The basic idea of this film was also the template for the "Tatort" with Ro 80 participation "Murot und das Murmeltier".

For almost 10 years now, in which I have been working as editor of the Wankel Journal, I have found myself in a similar situation.

I have answered the same questions countless times, "complained" about material sent to me and tried to trick our graphic designer and the printer into supplying the required material in the appropriate quality. For this reason, I would like to take this opportunity to briefly summarise all the relevant points relating to this topic.

Point 1

Text and images must always be sent separately!

Point 2

Texts can be sent as unformatted continuous text in the following three variants: as a Word file, as an OpenOffice file or simply as text in an e-mail.

Point 3

Please send pictures in full resolution (minimum file size must be 1 MB!) as JPEG or PNG file! Other formats will not be accepted!

Please use WeTransfer or Dropbox for transfer. Alternatively, it is also possible to send by e-mail. However, only a limited amount of data can be sent by e-mail. If you need to send more than three emails, please use one of the two options mentioned above!

Point 4

The last and most important point:

PLEASE DO NOT USE YOUR OWN LAYOUTS!!!

Creating your own layouts is a waste of time for both sides! For you as the author, it takes up a lot of time and for us they are not usable at all, as our graphics programme is divided into a special grid system into which a finished layout cannot be inserted and also does not correspond to our corporate design. Furthermore, when images are inserted into writing and text programmes, they are automatically reduced in size for better processing so that they are no longer suitable for printing. Even if they may appear large enough on your screen!

Extra point for overachievers

The dream for us is when the image files are simply numbered consecutively (1, 2, 3, 4, 5, etc.) and no longer bear the file name assigned by the device.

You are welcome to mention the consecutive numbers you have assigned as a reference in the text, or alternatively name the files accordingly (e.g. "1 - Departure at the hotel", "2 - Ro 80 in front of an impressive panorama", "3 - Cosy round in the restaurant", etc.).

These few and simple points will make things easier for both you and us (editors, graphic designers and printers). We would be delighted to break the "groundhog loop" with this article and look forward to many new articles and contributions for our club magazine!

Flounder with gullwing doors, icon of car construction - the history of the legendary C 111

The multi-award-winning standard work on the experimental vehicle and record hunter of the 60s and 70s is now available in an updated, greatly expanded edition

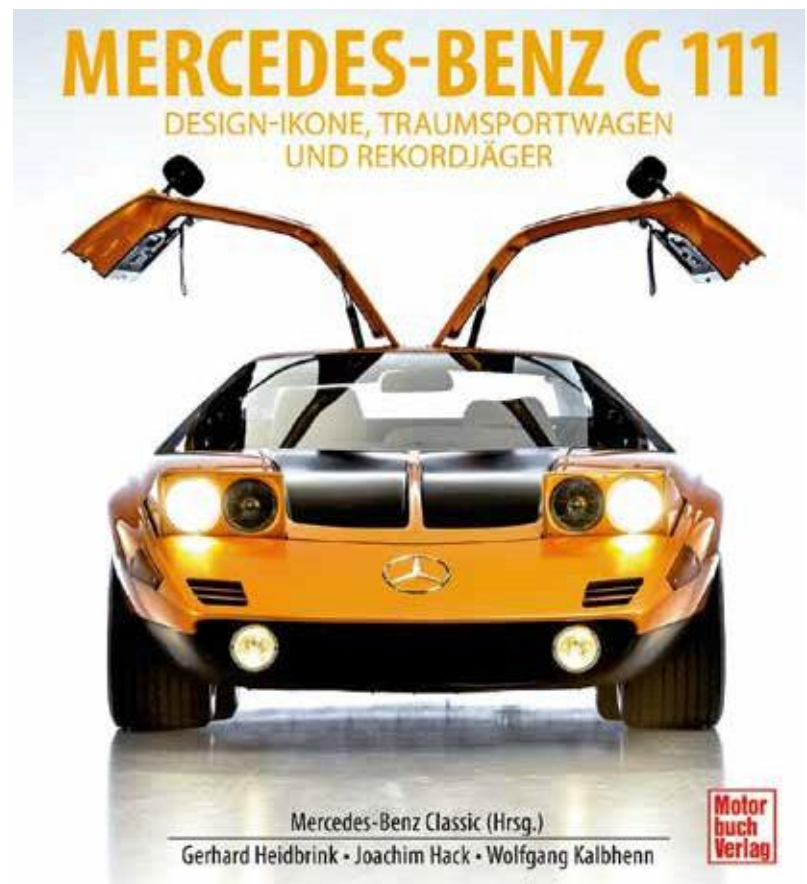
By Paul Pietsch Publishers / Motor Buch Verlag - With a wealth of unpublished information and more than 1100 illustrations, the authors present the fascinating history of the dream sports car and record-breaking C 111, which is still one of the most prominent vehicles in automotive history, in great detail based on the extensive holdings of the Mercedes-Benz Group Archive.

The significantly expanded and extensively updated new edition of the celebrated illustrated book also covers the cutting-edge Vision One-Eleven sports car study, which progressively reinterprets the design icon from 1970. This multi-award-winning reference work belongs in the bookcase of every Mercedes-Benz enthusiast.

The first edition of the book was honoured with the prestigious Cugnot Award from the American Society of Automotive Historians for the best foreign-language publication on automotive history and the Motorworld Book Prize.

ISBN: 978-3-613-04482-1
520 pages, 1000 pictures
230mm x 265mm
Price: 89,00 €

Pictures: Paul Pietsch Publishers / Motor Buch Verlag



Milestone for Mazda

Over two million vehicles with rotary engines produced

By Mazda Press Service - A well-rounded affair: Mazda Motor Corporation has produced over two million vehicles with a rotary engine. The car manufacturer from Hiroshima is the only car manufacturer in the world to have successfully produced and sold millions of this engine concept for over 45 years.

In a rotary engine, rotating pistons or discs replace the up and down movement of the pistons in a reciprocating engine. This enables exceptionally smooth running, minimal noise emissions, a space-saving design and low weight. The first vehicle in which Mazda used this special drive was the Mazda Cosmo Sport 110 S, which was launched in 1967. Since then, Mazda has optimised the technology and performance of its rotary engines and is still the only car manufacturer to use them in series production today.

After production of the last vehicle to date with a rotary engine - the Mazda RX-8 - was discontinued in 2012, Mazda

relaunched it in June 2023 for the first time in eleven years. With the sales launch of the Mazda MX-30 e-Skyactiv R-EV in autumn 2023, the rotary engine is now celebrating its rebirth. "The rotary engine is a special part of Mazda's history and is a perfect symbol of our 'Never Stop Challenging' spirit," says Takeshi Mukai, Director and Senior Managing Executive Officer at Mazda. "The rotary engine was very popular with customers around the world and we are delighted to resume production and look forward to the engine's comeback. I would like to thank everyone who has supported us on this journey - especially the many customers who have purchased rotary engine vehicles, our rotary engine fans and all our business partners who have been involved in the development and production. In the future, we will continue to take on new challenges with Mazda's typical mentality and offer attractive products that provide our customers with an exciting driving experience even in the age of electrification."

The history of the Mazda rotary engine began in 1961, when the manufacturer was faced with the difficult decision of how best to express an independent character in order to preserve its independence.

Tsuneji Matsuda, then President of Toyo Kogyo (today's Mazda), travelled to West Germany in person to visit the headquarters of NSU-Motorenwerke AG. He signed a technical cooperation agreement with the developers of the rotary engine, also known as the Wankel engine because of its inventor Felix Wankel. The aim was to commercialise an unknown new technology, to make it to a wide audience - and to present itself as a company with a high level of technical expertise. The challenge was an opportunity for Mazda to establish itself as a unique and independent car manufacturer.

On 30 May 1967, Mazda unveiled the Cosmo Sport - the world's first production car with a twin-disc rotary engine. The very next year, the Cosmo Sport took part in the 1968 Marathon de la Route, an 84-hour race on the





Nürburgring. And it was highly successful: after three and a half days, it finished fourth in the overall classification, proving that the rotary engine not only enabled excellent driving performance, but was also extremely reliable and durable.

Following the launch of the Cosmo Sport in 1967, Mazda introduced further vehicles with rotary engines, including the Familia Rotary, the Luce Rotary Coupe, the Capella Rotary (Mazda RX-2 outside Japan) and the Savanna (Mazda RX-3). In 1978, Mazda launched a real success with the RX-7 sports car. Prior to this, Mazda had succeeded in achieving a significant reduction in fuel consumption as part of the so-called Phoenix project.

The Mazda RX-7 gained fame on the racetrack by impressing with a combination of performance, reliability and efficiency. Subsequently, Mazda continued to push the development of engine technology. The introduction of turbocharging and a three-disc version, as well as other advances, were also based on the knowledge Mazda had gained through its involvement in motorsport. This in turn reached an absolute high point in the company's history in 1991: the 700 hp Mazda 787, powered by a four-disc rotary engine was the first Japanese car to win the 24 Hours of Le Mans.

In 2003, the new Renesis rotary engine made its debut in the four-door, four-seater Mazda RX-8 sports coupé. As a new generation of engine, it took the typical rotary engine combination of compact size, low weight and high performance



To a new level. The lightweight and compact engine had

Timeline Mazda rotary engines

July 1961	Technical merger with NSU and Felix Wankel
1963	First rotary engine is announced and engine prototypes are shown
May 1967	Mazda Cosmo Sport debuts worldwide as the first vehicle with a twin-disc rotary engine (engine type 10A)
July 1968	Introduction Familia Rotary Coupe (Mazda R100 Coupé)
Oct. 1969	Introduction Luce Rotary Coupe (Mazda R130 Coupé) (engine type 13A)
May 1970	Introduction of Mazda RX-2 (Capella Rotary) (engine type 12A)
Sept. 1971	Launch of Mazda RX-3 (Savanna), from 1973 first Mazda in Germany with rotary engine
Nov. 1972	Introduction Mazda RX-4 (2nd generation of the Luce Rotary series)
June 1973	Total production of 500,000 vehicles with rotary engines
April 1974	Launch of Mazda Rotary Pickup (REPU) in North America
July 1974	Launch Mazda Parkway Rotary
26 April 1975	Launch Mazda Roadpacer AP
Oct. 1975	Introduction of Mazda RX-5 (Cosmo AP) with "Anti-pollution" rotary engine (engine type 13B)
Oct. 1977	Introduction 3rd generation Mazda Luce (Mazda 929L)
March 1978	Introduction RX-7 (Mazda Savanna RX-7) (motor type 13B)
Nov. 1978	Total production of one million vehicles with rotary piston engines
Nov. 1981	Introduction of 3rd generation Mazda Cosmo and 4th Generation Luce Rotary Series (Mazda 929)
Oct. 1985	Introduction of the 2nd generation RX-7 (engine type 13B with turbocharging)
April 1986	Total production of 1.5 million vehicles with rotary piston engines
Sept. 1986	Introduction of 5th generation Mazda Luce (Mazda 929)
April 1990	Introduction of the 4th generation Mazda Cosmo (Eunos Cosmo), for the first time with a three-disc rotary engine
June 1991	Mazda 787B with a four-disc rotary engine wins 24-hour race at Le Mans
Dec. 1991	Introduction of the 3rd generation Mazda RX-7 (engine type 13B with bi-turbocharging)
April 2002	Launch of Mazda RX-7 Spirit R as the last RX-7 model
April 2003	Launch of Mazda RX-8 (engine type 13B Renesis)
Nov. 2011	Launch of Mazda RX-8 Spirit R as the last RX-8 model
June 2012	End of production Mazda RX-8
June 2023	Start of production Mazda MX-30 e-Skyactiv R-EV
Oct. 2023	Total production of two million vehicles with rotary motor

a decisive role in the balanced 50:50 weight distribution between the front and rear axles and the particularly low centre of gravity. Around eleven years after the end of production of the Mazda RX-8, the rotary engine now has a new role in the Mazda MX-30 e-Skyactiv R-EV. In this serial plug-in hybrid drive, the wheels are driven exclusively by a 125 kW/170 hp electric motor, while a newly developed single disc engine with a chamber volume of 830 cm³ and an output of 55 kW/75 hp enables a total range of up to 680 kilometres without charging or refuelling stops.

Pictures: Mazda Press Service



Visiting the Mazda Cosmo Owners Club in Japan

From Mazda Classic - Automobil Museum Frey - Walter and Joachim Frey spent some interesting and exciting days in Japan at the end of October as part of a round trip. On the first stop of their visit, they were guests at the Mazda Cosmo Owners Club near Tokyo.

This illustrious circle of owners of the legendary sports car invited to the annual general meeting, which father and son did not want to miss. After all, the Frey family is closely associated with the club and holds honorary membership. And Walter Frey was the first European to be accepted into the club, which is actually a distinctly Japanese affair. Because hardly any of the 1,176 Wankel legends built between 1967 and 1972 were sold abroad. The Cosmo Sport only made the leap to Germany as a classic car. The Freys, with their large Mazda Classic collection, own two of the less than 300 remaining Cosmo examples and, on their initiative, an international meeting was organised in 2009 with a total of 19 of the rare vehicles. At that time, 14 of the 19 classic cars were specially transported by ship from Japan to Antwerp and on to Germany.

During the meeting, Takao Kijima - responsible for the chassis development of the first generation of the first generation of the Mazda MX-5 and later programme manager of the second and third MX-5 generation - presented the lucky guests from Germany with a framed picture of a Cosmo cutaway model, which will of course find a place of honour in the museum.

The joyful reunion with the "Cosmonauts" - the last time they met in such a large international group was in summer 2018 during a visit to the museum in Augsburg - culminated last Sunday with a trip to the motorsport racetrack in Suzuka. Over 30 examples of the Wankel icon took to the start line of the 5.807 km circuit and Joachim Frey was allowed to drive one of the models around the course - a very demanding one in terms of driving, as it contains many changes of direction and types of bends.

Pictures: Mazda Classic -
Automobile Museum Frey





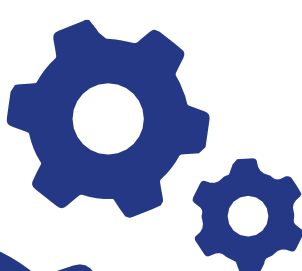
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REPAIRS

Restoration,
Engine overhaul, gearbox, bodywork,
Paintwork, saddlery, etc.



Am Kreisel 12, 97714 Oerlenbach



Tel. 0 97 25 / 704 700

kfzservicemohr@t-online.de

Club service

Extract from our spare parts programme	
Ceramic sealing strip set (3 mouldings incl. corners)	449,00 €
Set of trochoids newly coated incl. ceramic sealing strips, 1-core	2.750,00 €
Set of trochoids newly coated incl. ceramic sealing strips, ^{2-ceramic1}	2.990,00 €
Cooling water moulded hose	
Thermostat/water pump	25,00 €
Diaphragm vacuum pump	30,00 €
Clutch disc AT	125,00 €
Front or rear brake discs, all versions	210,00 €/set
Front shock absorber insert (set) Bilstein, old or new version	490,00 €
Rear shock absorber (set) Bilstein	455,00 €
Bellows strut, rear	32,00 €
Door sealing frame, all doors	78,00 €/pc.
Clip for bonnet bar, reproduction, all ^{versions2}	9,00 €
Radiator grille new version, reproduction	160,00 €
Parcel shelf, reproduction	190,00 €
Mirror interior light, ^{reproduction3}	37,50 €
Black or silver trim strips, reproduction (complete set) ⁵	149,00 €

Literature (reprints are marked with *)	
Repair manual 1973*	39,00 €
Notes for practical use - ^{Transmission} repair*6 - NEW!	5,00 €
Supplements to the repair manual*	20,00 €
Spare parts catalogue*	22,00 €
Solex carburettor 18/32HHD Functional description*	3,00 €
Solex carburettor 32DDITS Functional description*	3,00 €
Sachs semi-automatic Functional description*	5,00 €
Buying advice	3,00 €

Clubshop	
Polo shirt dark blue "Ro 80 Club International"	35,00 €
Sweatshirt dark blue "Ro 80 Club International"	39,00 €
Wiking anniversary model "50 years Ro 80", colour: Sepia-metallic	15,00 €
Baseball cap dark blue "Ro 80 Club International"	12,00 €
DVD Clubfilm "Ro 80 - The legend lives"	5,00 €
Anniversary magazine "Ro 80 Homage"	15,00 €
Softshell jacket dark blue "Ro 80 Club International" ⁴	50,00 €

Here you will find our latest reproductions and an excerpt from our spare parts programme



1



2



3

SOFTSHELL-JACKET
dark blue
"Ro 80 Club International"
50,00 €



5



6

Events & Dates

09.-12.02.2024

- Winter meeting in the Black Forest

26.-28.04.2024

- Spring meeting with annual general meeting on the Moselle

06.-09.06.2024

- 42nd International NSU Meeting in Fieberbrunn (A) *Registration for the meeting via the website of the Ro 80 Club International e.V.*

27.-29.09.2024

- Autumn meeting Spreewald/Cottbus

This is just a selection of all the dates. A complete overview, detailed information and registration forms for all club events can be found at: www.ro80club.org www.nsu80.ch

Please remember your reservations for all meetings! reservations!



Cover & back cover

Frank Obrist is the owner of the black Ro 80 from 1972.

This rare colour combination (black lacquer/red velour) was first delivered in Italy. The pictures were taken in front of the original TES by Felix Wankel. This building now belongs to the owner of the title model and has since been renamed the "Obrist Tech Centre-OTC" and is the headquarters of OBRIST DE.

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The Wankel Journal is the magazine for all friends of the Ro 80, other rotary piston vehicles and all Wankel technology.

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