

# LAVERDA RACING TEAM KONSTANZ

## DAS LAVERDA-PARADIES

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## SPRING NEWSLETTER 2012 geschrieben von Andy

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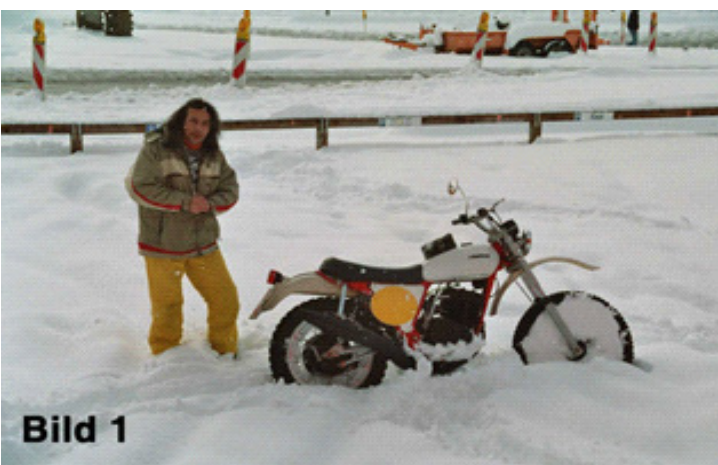
Dear Laverda friends,

There was no newsletter in spring 2011 although its draft had already been very close to completion. Lack of time – as so often in the past – had kept me from bringing it to the end. It takes about 40-50 hours to edit this kind of newsletter, therefore only now, one year later, I took it up again and finally accomplished it. So here is what I wrote for you during the time from January 2011 to January 2012.

- Riding a Laverda is absolutely awesome, and yep, awesome, fantastic, great really are the right words for it!!
- never talked about it before but another thing we are doing at Laverda Paradise is working with teenagers and we were constructing a "Fliewatüüt"
- also never mentioned before and now disclosed to you my third secret love apart from my girlfriend Heike and the Laverdas: Old mechanical calculating machines with a hand crank
- Manufacturing Laverda parts together with teenagers

(written in January 2011)

Unlike the previous years, this winter we have a lot of snow over here in Konstanz. Occasionally I benefit from this by riding my 250 Chott Laverda through the virgin snow in the early mornings. I tell you, that's pleasure pure and I view it as a kind of early morning workout – some people like jogging round the block and I prefer to take a ride through the snow on my winter Laverda (**siehe Bild 1 aus dem Jahr 2006**).



Crashes? I wouldn't exactly say crashes but some slip-ups are surely part of it if you exaggerate it. For next winter, I plan to put together some spike tires for testing purposes. Here in Germany, we recently got a new law regarding the use of certain types of tires to be used winter. According to that motorbikes, too, are obliged to use winter tires but so far such tires do not even exist. I am looking forward to my first winter police control and to see how the policeman will be dealing with this. I just can't survive a whole winter without riding on my Laverda bikes. Even in winter it is great fun, but not longer than one hour. After that, even the padded 3-finger-gloves won't be able to protect you from stiff fingers. In the end again, nothing beats summer time!

<sup>1)</sup>The name Fliewatüüt originates from a children's TV film with four serials „Robbi, Tobbi und das Fliewatüüt“. Robbi is a robot, Tobbi a small boy and Fliewatüüt a real cool amphibious vehicle that can also fly.



This year (2011) I just only made around 8000 kms on Laverda. It rained during the entire 1<sup>st</sup> May rally to Italy and eventually I did not waste much time to return back home early. Quite contrary to the Pastis rally which spoils us rotten with 10 days of top weather. From about 35 participants we attended with three Laverdas, Heike with her Laverda 500, Kerstin with her 750, albeit as a pillion co-driver, because her friend Peze rode, and my Laverda 1000. This combination was quite nice to look at as you can see (**siehe Bild 2**).

For September, I had planned a ride to France together with my girlfriend Heike. But first of all to Italy, Mandello del Lario at Lake Como, for a private party. Then countryside and uncountable mountain roads across to France where we wanted to look up a friend.

The internet weather forecast had promised top weather for an entire full week. So, as always we were sleeping outdoors, one day next to a river, the other day in an olive grove mounting uphill.

Exactly there, on this lovely place in between the olive trees (**siehe Bild 3**) it crushed down on us, Heike and me.

I was obvious that a small tempest was moving towards us. Thoroughly we fastened the 4x5 m sheets over the two Laverdas, leaving a comfortable sleeping place in between the two bikes. Of course not without taking into consideration all relevant factors to allow for a good drain of the rainfall which we expected to come and that the drainage would lead the water downhill to keep our bedroom dry.

At around 20:00h the thunderstorm was still far away. It came closer around 21:00h and it started to dribble quietly.

All of a sudden, at 21.30h sharp, it started. The rain was pouring down onto our sheet roof, monsoon-like torrential rain, non-stop. I was now busy to dig ditches on the higher end of our sleeping ground and to pile up the soil building dikes which were supposed to channel the water around our sleeping ground and to keep not only our sleeping bags and the iso-mats underneath us dry but also all our other belongings. I assumed it would take maybe an hour or so until the thunderstorm moved on, but I was fatally wrong.

The entire night until early dawn it was bucketing down - sometimes more, sometimes less. For 10 hours I was busy keeping the ditches open, digging them deeper and deeper and use the newly won soil to stabilize my dikes (**siehe Bild 4**).

Here and then during calmer moments Heike fell asleep. When she woke up again and watched me from her sleeping bag she asked: „Andy, could it be that you loved building sand castles when you were a child?“ and when I answered: “Yes” she said: „Yes, it shows, you are really good at it!“

Yes and indeed, I had done a good job here. When it was finally all over at an early 7:30h, the first thing we did was to remove the sheet as we needed to pack up our sleeping bags and our belongings. Unbelievable, but our sleeping place had stayed completely dry.



Years of expert experience were now paying off! A well-chosen sleeping place and a precisely stretched sheet are better than any tent. At least, this is my opinion.

There was only one thing which I had neither considered nor expected – and it was good for a moment of great shock when cleaning up our sleeping place in the morning. I can rest my Laverda 1000 on the side stand only. I had put something underneath the side stand to prevent it from sinking into the soft ground and to avoid the machine's falling over, that's why the bike stood relatively upright. What I had not considered was the fact that the soil would become increasingly softer. The tire started to sink in and eventually the heavy 1000 lifted up almost vertically and finally toppled inwards towards us. But you can't beat a good reaction in life – such as here.

Out of the corner of my eye I had noticed that the bike was moving. Fast as a lightning I threw myself against the bike to stop it from falling onto us while we were on our knees rolling up the sleeping bags. In that position, it was extremely difficult to hold against it. The handlebar of the Laverda dug into my shoulder and sat there painfully. Fortunately, Heike was there seconds later and helped me to stabilize the bike into a safer position as I still sat there on my knees trying to put all the body weight I have against the bike. What a struggle after a night like this, without any sleep and no breakfast.

Even if it is hard to believe but in spite of this we had a lot of fun. As we heard later, there had been weather warnings for this region already around lunchtime the day before. Campsites located directly on creeks or near the river Ardèche had been evacuated and the entire civil protection as well as the military had been on standby. In the end, it had been rough but fortunately not as rough as the local media had announced. However, better safe than sorry.

That night's lesson is clear: We had staid dry, and I had had it far worse on other occasions.

For the rest of the holidays we enjoyed brilliant sunshine and when we were home, my Laverda had made 2434kms and Heike's Laverda 500 even had 2754kms, as she is living near Böblingen which means an extra ca. 2 x 160 km to ride. A truly fantastic holiday for both of us.

There is always a lesson to be learnt:

1. In future, I will check on local weather forecasts thoroughly which is possible in every village pub. Just take a look into the daily newspaper, so no internet needed.

Nothing against a 1-2 hour thunderstorm when sleeping outdoors. But torrential rains can be a threat to your life.

Thinking back to the thunderstorm in Italy, Genova – La Spezia in October 2011 where we always visit the 1st May rally. 500 liters rain per m<sup>2</sup> came down within a few hours. In comparison to that: In Germany there are about 700 liters/m<sup>2</sup> in a whole year. We were really lucky.

2. Never lie down at that side of your bike where the side stand is! If it is sinking in, the bike may fall on top of you while you are asleep. I am taking this to heart since I took my motorcycle test at the age of 18 years and normally outdoors I always sleep next to my bike. But this was new to me: I learnt that during heavy rains not only the side stand but also the tires may sink in. It was the first time I experienced this problem during the past 29 years.

Moreover, occasionally it does happen that a side stand breaks.

Side stands breaking? Yes, it could happen! I had always considered this possibility as an exaggeration. But during the 1<sup>st</sup> May rally to Italy 2011 when I lay next to my Laverda 1000 as usual its side stand broke in the middle of the night. Just like that! The bike fell over but fortunately to the other side, away from me. Fortunately, and above all nothing happened to me. And fair enough nothing had happened to the Laverda as she had fallen on soft grass.

Better be safe than sorry! I had learnt this when I was a youngster. And because I had always remembered this I rarely get myself into trouble.

Fort the first time in many years I made less than 10.000 kms in 2011. Some extraordinary time consuming projects did not leave me much time. Apart from the construction of specific spare parts there's something else I would like to tell you.

(written in January 2012)

Every year we take on several teenagers here at Laverda-Paradies to work with us for a few days and sometimes even 1-5 weeks. Some of them come out of their own motivation, others because they were encouraged to come by their schools.

And we are not talking of letting them clean up the workshop. We are talking of teaching them real work. For that purpose I always have some special jobs on hand.

The first job that everyone is allowed to do is to disassemble a decommissioned Laverda 3-cylinder carburetor battery and then put it together again. The only support is an exploded assembly drawing of the assembly group and an explanation regarding the purpose of an exploded assembly drawing, how to read it, interpret it and to associate it with the work piece in such a way that the assembly drawing can be of help in the first place if any at all. In all those years there had not been a single one of them who had ever seen an exploded assembly drawing at the age of 16 not to speak of knowing how to handle it. Just to clarify that one you can calculate 2 – 3 hours.

Moreover, I give them the clear information that exactly here, right in front of them they find all the tools needed to disassemble the carburetors. I want them to think for themselves and to develop their own thoughts and they are not allowed to ask anybody. Of course, I come to see them every hour or so but my presence, some compliments and praises are the only help they get. Fair enough, all of them had handled it after 6 to 8 hours at latest. And it is hard to believe, but most of them manage to put it together again in only half the time they needed to put it to pieces. They have to practise this until they are really good at it. And then there is the contest. Students against me, who can do it faster.

And here, too, I am very often surprised how much enthusiasm, understanding and devotion put into this and I do loose the contest often. Something which causes a huge grin on their faces and a great sense of achievement for the young people. The youngest of them who put this carburetor entirely to pieces and then together again was a youngster barely 8 years old. Past all belief! I've never seen a more switched on and brighter kid than this one. Neither TV nor computer at home none of this constant playing around with a mobile phone. Seems taking a positive effect onto his personal development. Anyways, after this job which can easily take 2 – 3 days the young people grow in confidence and are now motivated to assist with other tasks. Mind you and sadly enough two of three of those young people simply get the chop due to sluggishness and lack of interest.



**Bild 5**

In summer 2010 two 16-year old girls wanted to spend 5 weeks of their holidays in our workshop. Not only 5 weeks but also 2 persons at a time. That meant a lot of work to me as I did want them to do something meaningful. I remembered my old Hako sweeper machine, 35 years of age, which I had bought at the Veterama, Europe's largest oldtimer market in Mannheim many years ago.

To be honest, it did not sweep properly any more for quite some time as the sweeping brush was long bygone. But apart from that it functioned impeccably. Here (siehe Bild 5) you can see Michel taking a stroll, that's how the Hako model once looked like. Spare parts are no more available, not even the special twin fan belts which are an important part of the engine. For the time being the two ladies (siehe Bild 6) were assigned to solve the carburetor challenge together. When they had mastered it after only 1 ½ days I showed them their task. The Hako sweeping machine. Unsuspectingly they steered it round the inner yard and thought that this was absolutely hilarious.

Then I announced what I expected them to do:

- 1) First of all, remove everything that has anything to do with sweeping
  - 2) Just leave the basic chassis with the motor and the engine for the wheels as well as the seat and the steering.
- Instead of the filter box on the back construct a transport surface.



**Bild 6**

Johanna

Julia

In order to get there hundreds of rusty screws needed to be loosened or more precisely cut off. As a next thing they would have to weld a new construction, then cut and shape tin sheet to create a new body for the vehicle. When I had finished the description of the job the two ladies were up to there was a shocked silence, then a Good Lord!

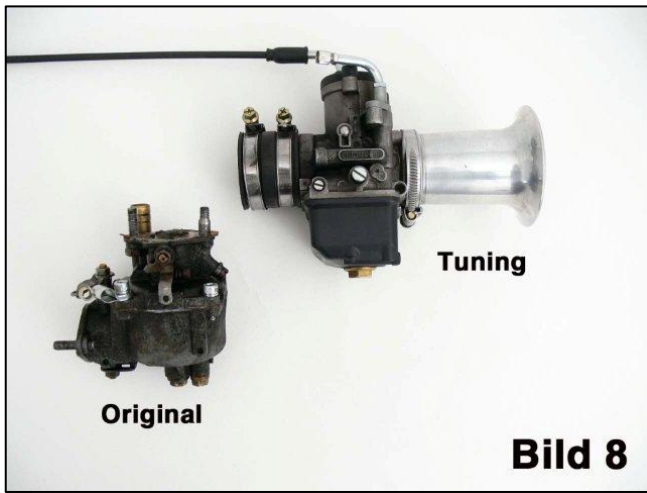
In the beginning they did not even know that you unscrew a bolt by turning it to the left and that you fasten it by turning to the right. Just as little did they know how to drill holes into thin sheet and how to cut threads or saw down a steel pipe by hand. Moreover, I showed them how to work with a heat sealer as there were lots of jobs that required welding. As an exercise they had welded all sorts of interesting figures using old metal scraps from the lemon. After 4 weeks of hard work the skeleton of the redesigned vehicle was ready to start. Take a look at the intermediate result (Bild 7)! You can watch the very first trial run of the two ladies with their vehicle skeleton on a small film which I placed on YouTube:

<http://www.youtube.com/watch?v=gJSI9vLuHJU>

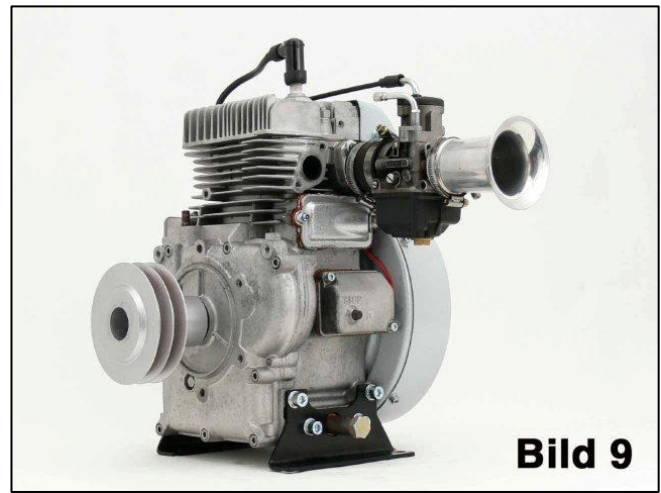


**Bild 7**

Really complicated jobs, of course, were completed by myself or I prepared them in a way that the ladies could get on with the rest.

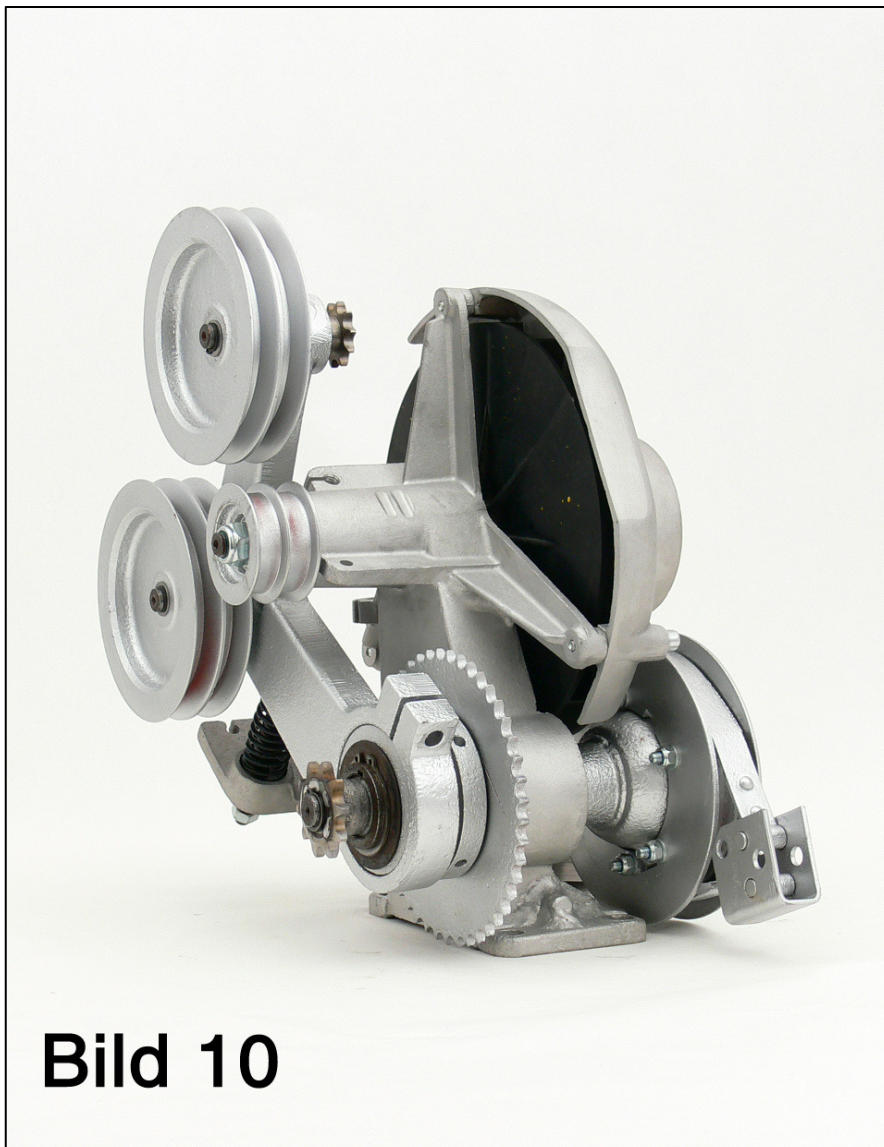


**Bild 8**



**Bild 9**

What I did do entirely on my own was e.g. the reconstruction of the original carburetor (**siehe Bild 8** unten links) which had a rather questionable function. For many years I had a left over 28mm Dellorto carburetor on stock (**siehe Bild 8** oben rechts). I turned a suction support to be able to place the carburetor onto the 250cm<sup>3</sup> four-cycle Lombordo stationary engine (**siehe Bild 9**).

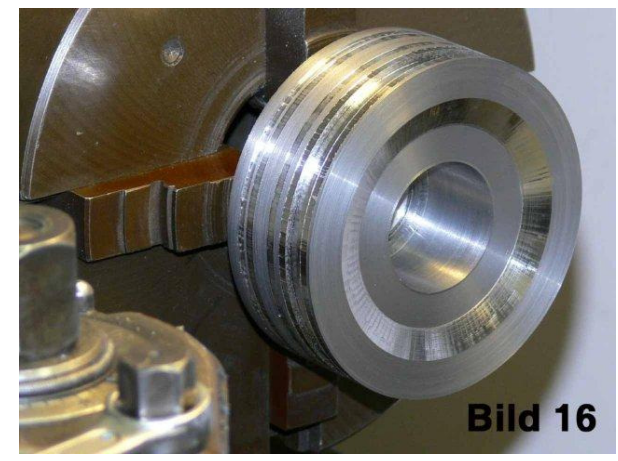
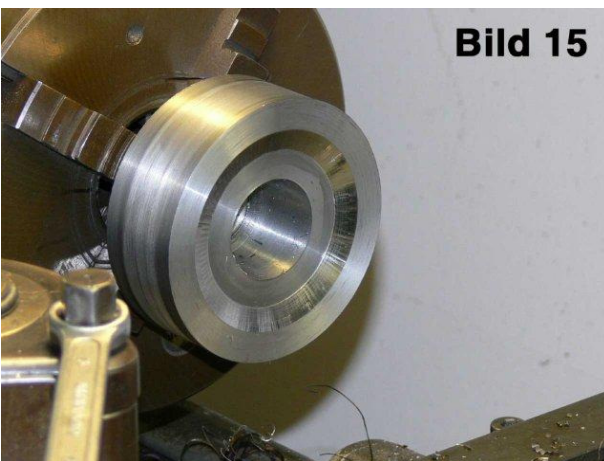
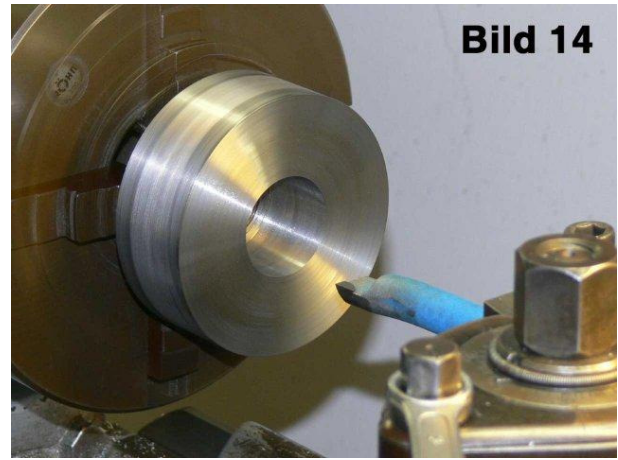
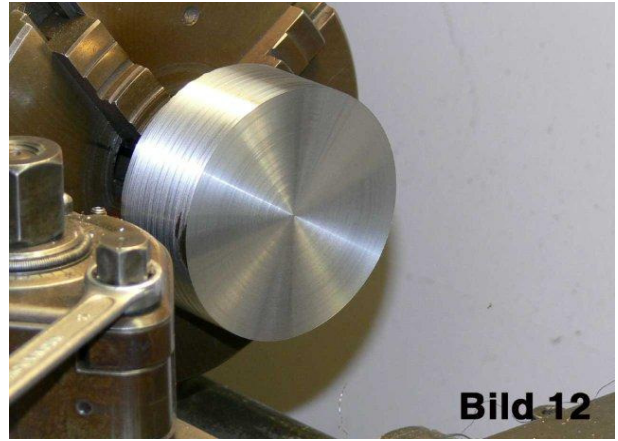
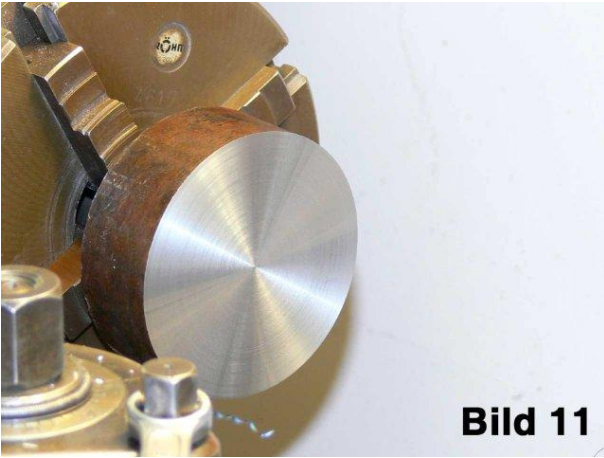


**Bild 10**

I also took the belt drive entirely to pieces including its countless ball bearings, all of them entirely rotten and I professionally restored the whole lot. (**siehe Bild 10**)

The biggest problem of all, however, was the power transmission from the motor to the belt drive of photo number 10. To get the power transmission going you need a twin fan belt which is nowhere available anymore these days. Twin fan belt, not because there are two parallel belts but because the belt is conical on both front and back side. In this way the belt can activate the drive train from the top as well as from the bottom. That's the way how driving forward or backwards works.

But then I remembered a very good Laverda customer of us who owns a company specialized on drive engineering for transport lines and everything else to do with this subject. I even knew the name by heart. Therefore, a quick look into our address data file and a fast phone call! Mind you, Walle Reinhard could not get hold of the exact length of the twin belt I needed, but he did manage to come up with one, even though it was about 20cm longer. As the two ladies had previously taken out the lower sweeping drive there was enough space which could be used to install an additional return shaft. In that way I could install and stretch the belt even though it was far too long. It took me about 5 hours' time, a whole Sunday afternoon to turn the return shaft from one piece of iron (**siehe Bild 11 bis 18**).



After this first maiden test drive there were still some small improvements to be done here and there. Then the entire vehicle had to be put apart again in order to get prepared for a new coat of paint. But first of all the old paint had to come down. This was done by the two ladies using our sandblasting gear. The paint on some parts was so adamant that it had to be stripped with chemical strippers. It took us a full week until all parts were refurbished and until I could finally accompany the ladies to the powder-coating workshop where the two explained to the responsible gentleman in detail – this of course under my supervision - what exactly we wanted to be done with the parts. Which was that certain parts had to be powder-coated in black and again others in orange...

Up to this day five weeks had passed by and the ladies had to return back to school. Therefore, when the parts were ready I had put them together on my own. But because the two ladies had prepared this in such a thorough way and delicate details had been even documented with digital photos I was able to complete this job in two days. I needed one more day for the elaborate electrical works.

Basically everything had been taken care of. Front lights, back lights, ignition and ignition cut-off. Starter motor and light engine by original Bosch Dynostarter. Important – a yellow flash light is needed to make it a legal 6 km/h vehicle – no need for registration. Having said this, in that case do not switch on the blue underbody and the red motor LED illumination lights as they are not admitted on the roads. For me personally those 5 weeks were pretty tough. Practically I was busy all day to supervise the project. In addition to that there were my Laverda phone times from 15:00h – 18:00h and my daily routine work at Laverda-Paradies from 18:00h until 1:00 a.m. in the morning.

But looking at the result, every minute spent on that project was worth it.

In a second film under <http://www.youtube.com/watch?v=BVvE1csxR6g> you can witness how the sweeping machine (Fliwatüüt) is coming back to shape bit by bit. Just think how much you can contribute to the life of interested young people and what lessons for life you can show them during 5 weeks! So I think that my approx. 200 hours of tutorship were extremely well invested. Personally I do believe that one of the reasons for the lack of motivation in many young people is that nobody takes time for them or shows any interest and that any curiosity is suffocated with those well-known instructions like Stop it! Don't touch it! Don't break it!

The best of all is that the whole project did not cost all that much. At least not if you take into consideration on what kind of garbage many other people spend sums of money. In this case, we created a unique vehicle of a kind which surely taught two young people one or the other lesson for life. And for me it's just a terrific vehicle.

Costs according to below list were:

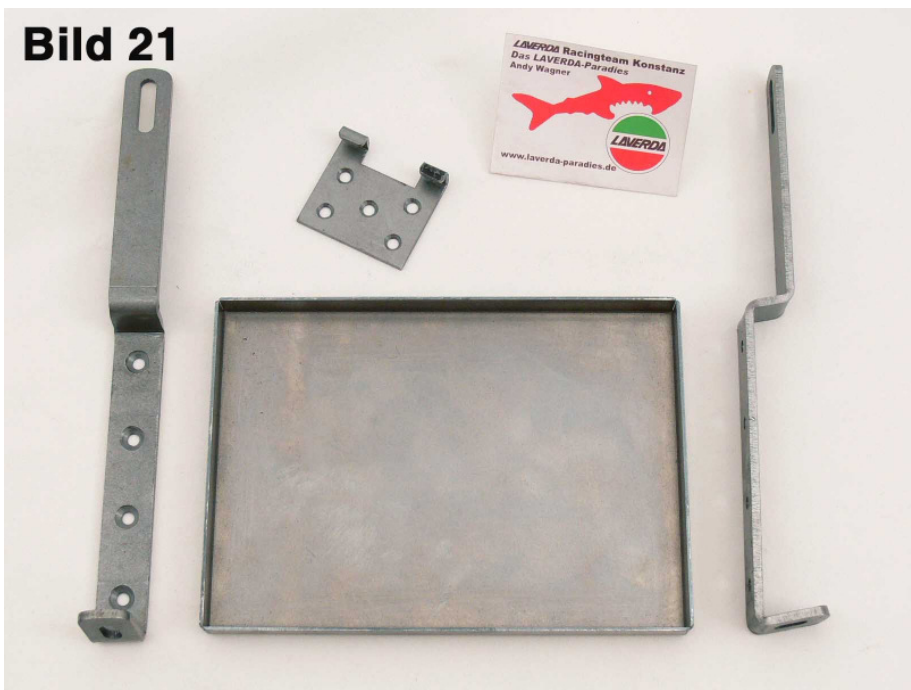
- new tractor seat from the internet incl. despatch	56,00 €
- free of charge metal pipes, angle irons and tin sheets from a locksmith's shop	
- Perforated metal plate for motor cover	150,00 €
- 27 bearings, different rings for bearings e.g. for wheels and belt drive	300,00 €
- Illumination elements, moped accessories from the internet	80,00 €
- twin belt drive and various other small materials	150,00 €
- 2 cans of chemical stripper	80,00 €
- black and orange powder-coating of the body parts	650,00 €
- other material like carburetor, headlights, etc., from Laverda-Paradise stock	
<b>TOTAL</b>	<b>1.466,00 €</b>

Fliwatüüt, the ex-sweeping machine, had its first big performance on the Veterama 2010 in Mannheim, Europe's largest Oldtimer market. During the first three days it made that many runs that the profile of the set of drive wheel tyres were completely run down. And not only our Veterama Laverda team (**siehe Bild 19**) had lots of fun with it. Also 12-year old Nico (**siehe Bild 20**) whom I meet there once a year got a tremendous kick out of it.

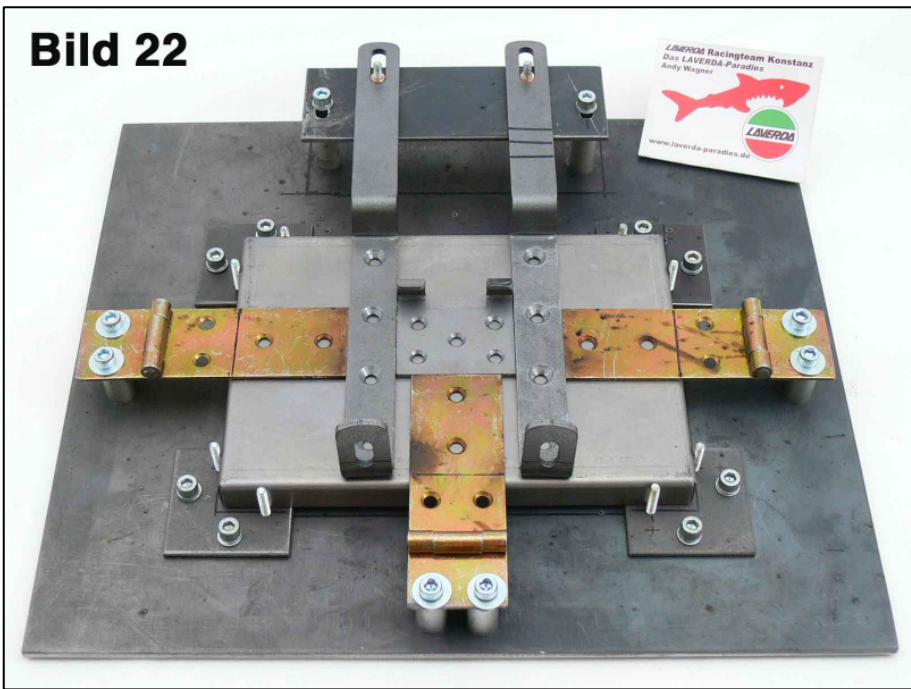


In the meantime I can move Fliewatüüt with its 6 km/h sign legally on all public roads and I do this regularly, for example when I transport motor parts to Alfred or doing other important small transports. Explore the slowness. It's coming close to meditation and it is very relaxing. Many people who see me like that look surprised and end up smiling from ear to ear.

Yes, there is always a lot to do at Laverda-Paradies and also there is a lot of fun. As you can see from the Fliewatüüt project.



I'll give you another impressive example of juvenile commitment: the battery box of the 750 SF 1-3 Laverda. Our stock of originals was running out and because of this we had to produce new ones. Julia who had participated in the construction of the Fliewatüüt had decided to stay with us for some more time. Her new task: Draw the original battery box with all measures, construct and then also draw a welding appliance which could hold the individual 4 parts exactly in place (**siehe Bild 21**) to connect them together with the MIG-welder. Julia had a brilliant idea using folding hinges which truly impressed me.



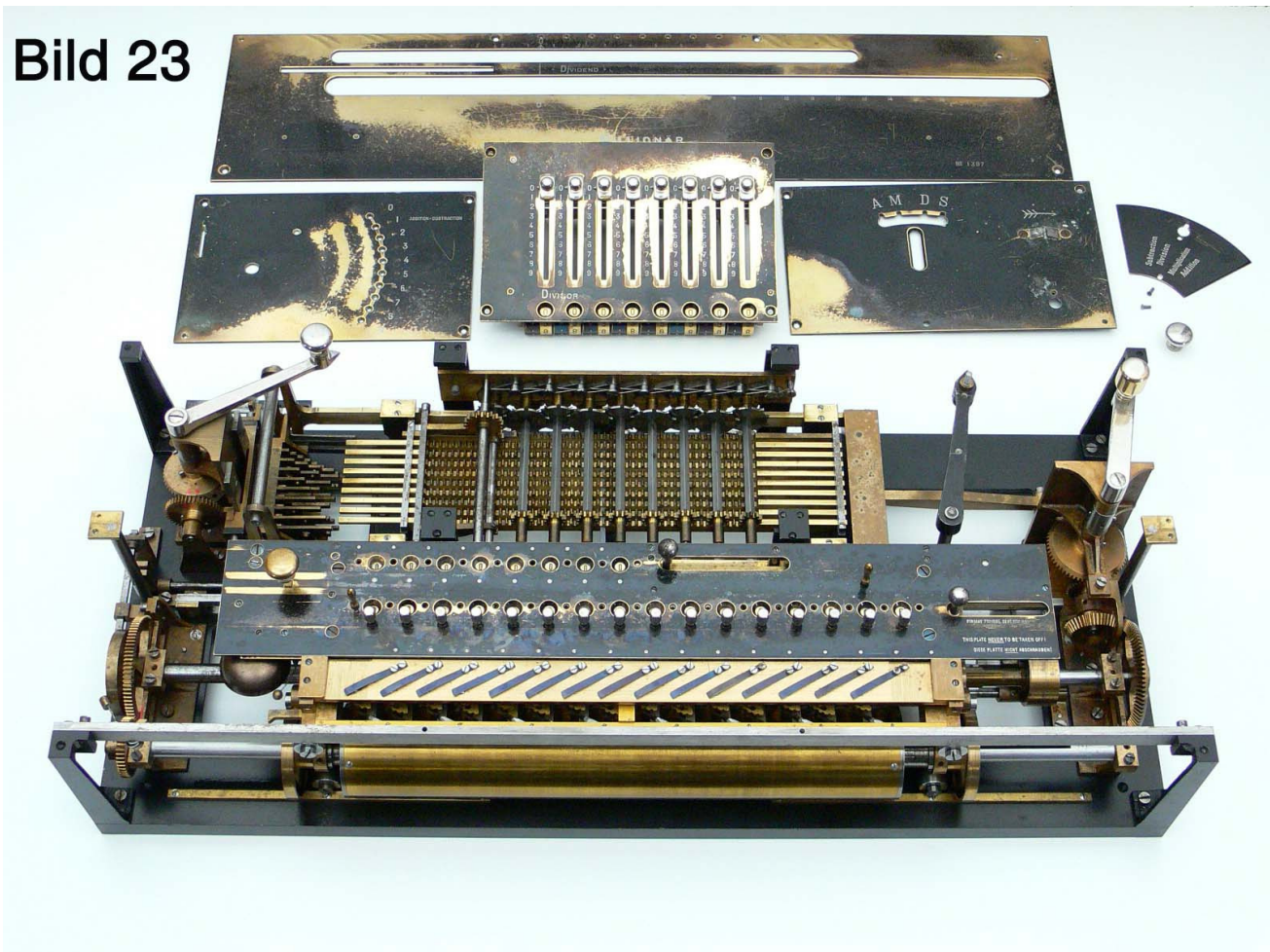
Julia had even started to build the welding appliance together (**siehe Bild 22**) by drilling the holes and cutting threads. Very regrettably she then lost interest – sadly enough a very common problem in our society – especially with young people. It's not enough just to plan something but you also need to go ahead and do it and persevere.

To continue with additional peculiarities I will now talk about something entirely different: My third love - next to my girlfriend Heike and the Laverdas – are mechanical calculators with a hand crank.

Not only do I own a collection of approx. 30 Laverdas dating from the year 1954 up to 1985 and 49 up to 1200 cm<sup>3</sup> but also have more than a hundred old mechanical calculators with a hand crank.

The oldest specimen of my collection is a Millionär calculator from the year 1895. This calculator was the first of its kind which was produced industrially and it was built in Switzerland. On the photo (**siehe Bild 23**) you can see this calculator without walnut tree encasing and without the screwed off cover. According to the engraved stamp it was built as model no. 1397 during the period of 7th May 1895 to 17th September 1895. I got this machine from other persons with the same hobby. At that time it was not working and it was in a terrible condition. The calculator including the walnut tree case measures 67x31x20 cm und weighs 31 kg. The machine itself consists of 368 individual parts I disassembled including springs and without screws 220 additional parts which I had not disassembled as it was not necessary for the restoration 465 small screws holding it all together as well as 33 taper pins and somehow you can do the 4 basic arithmetic operations with it plus und minus as well as multiplications with the help of a multiplication lever and divisions in an abbreviated method using the multiplication lever and a supporting table located in the lid of the encasing. Moreover, it is possible to do the rule of three, % -age as well as determining square roots, and all of this mechanically. A real miracle.

**Bild 23**



There are far more sophisticated calculators in my collection but the Millionär has a lovely design and the parts are neatly arranged owing to their size and proportions. From the first moment I saw this very desolate looking machine it was clear to me that I had to restore it immediately. I took off the encasing and spent many many hours trying to understand its functions. How did it manage to calculate in the first place? What happens why, where and in which way when doing the basic arithmetic operations?

It took me about 7 hours until I caught on to its basic functions and only then I could start to take it to pieces. You are all on your own here as for machines of this kind you will never have a building or repair instruction leaflets whatsoever to help you. Whatever part you touch, first of all you need to understand what it is doing there, what drives it and why it is located at the exact position where it is right now. As every ledger, every gearwheel and every transmission roller will only work within the exact adjustment in relation to the other parts. And only if all this is taken care of it will be able to come to the proper results of all arithmetic operations and possible combinations of calculating methods.

Whenever I thought it was necessary I documented the part and wrote down in which way it had to be put together after the disassembly. Nowadays it is a great help to have a digital camera to take pictures of this.

As this is a truly extraordinary calculating machine another colleague who is also a keen collector gave me the idea to take down a step to step documentation of the reassembly of all parts. For this purpose I fixed a reversed tripod on the sealing allowing taking photos from the same position at all times. As a result, there are 380 photos as well as short film sequences. Step by step you can follow how the first components are preassembled. In fast motion you can then witness the entire process of putting together the machine (**siehe Bild 24**). I started to produce this film, unfortunately couldn't finish the project due to time issues though. I'll include the link in a later newsletter for the technology fans.

Including the restoration of the walnut tree encasing as well as the photo documentation I had to invest approx. 170 working hours. 170 hours of fun, game, excitement, thinking and pondering – that's exactly what I like. I have to admit this calculator is one of the reasons why there was no newsletter in 2011.

I hope the subjects of this newsletter inspired you and I do hope that you enjoyed reading it.

For the start of the season I wish all the best and a great year 2012.

With my best Laverda Greetings,  
Andy Wagner and the team

## Bild 24



**Millionär Rechenmaschine**  
Erbaut 7. Mai 1895 bis 17. September 1895, Serien Nr. 1397  
Bestehend aus:  
588 Teile von denen 368 zerlegt wurden incl. Federn  
465 Schrauben und 33 Kegelstifte

Länge: 67 cm  
Breite: 31 cm  
Höhe: 19 cm  
Gewicht: 33 kg

Restauriert in ca. 170 Stunden incl. Nussbaumholzkasten in 2011 von Andy Wagner  
[www.rechenmaschinen-paradies.de](http://www.rechenmaschinen-paradies.de)