



In the Palstek edition 1/2010 we presented a new Cleaning- and Regeneration process for Dacron sails, that caused quite some sensation. It is supposed to clean sails faultlessly and regenerate at the same time the profiling. Jan Kuffel has followed a set of test sails over the full season and draws a balance.

To test how the PRO-2 Sail Regeneration performs in practice, the main sail, a Genoa and a jib, made of Dacron, with all marks of a 20 years life time of a Dehler Varianta have been chosen. Meanwhile the sails profiles had moved far away from their ideal position – what manifested particularly in strong winds –; the maximum profile depth had moved clearly over the sails centerline towards the aft; the leaches had a lot of sag between the battens and where only controllable by a strong tension on the leach line. The cloth was feeling floppy and was covered partly with moulds and mildew. On top there were rust stains, particularly in the jib.

The condition was documented on photographs, before the sails were handed in at the closest RED GULL sales point. Here the sails were checked carefully – smaller damages in stitchings and batten pockets were registered for an repair offer. Thereafter the sails went on their journey to Finland. The estimated delivery time was indicated

at four to five weeks, because at this time of the year the capacities of the RED GULL plants in Finland and Holland were at their limits. Those who need their sails back early should supply the sails for treatment early enough, best in autumn immediately after storing the boat for winter. The delivery of our sails was delayed for a week, what was still acceptable to us. The bigger was our eagerness, when the desired package from Finland finally arrived.

Visually as new

In order to come to the point straight away: The sails did not have anything anymore in common with the mildew covered, scruffy old cloth, that went on the voyage. They presented perfectly white – even the rust stains in the jib had disappeared. Same thing for the mildew affection in the main, even though the RED GULL sales partner would not guarantee earlier this would disappear completely. Likewise the haptics of



The main was obviously worn out during the last twenty years of use. Rust stains, stretched leeches and a bad shape are the result.

the sail had changed – especially in the jib and the main sail you can feel an obvious difference. Over the years they went soft – almost fluffy -, now after treatment, they felt stiff and firm. The cloth was crackling and sizzling when folded – not as intensively as new cloth – but coming close to that haptics. The effect appeared also on the Genoa, but less pronounced. This sail was in a really bad shape before the treatment. It came from a „no-name-production“ and was probably made

of a lower quality cloth.

After these first positive impressions the question arose, how the regenerated sails would stand the practical test in matters of keeping profile and their proper standing. To find out about this, the sails were used in the typical cruising way – meaning during approximately 10 weekends and a two weeks holiday trip. As testing area the dutch IJsselmeer and the Frisian lakes were chosen. The handling of the sails was very normal



The profile of the jib was distorted along the battens, the leech was loose and the cloth had become way too soft. Rust stains were visual shortcomings.

praxis, they were reefed in time or the genoa was changed for the jib. After sailing the main was as always rolled on the boom and covered at night time. The headsails went – when dry – to their bags. Occasionally a headsail was tied to the guard rail, when the trip was continued the next day.

Much better performance

We were taken by a first surprise, when the main was reattached: In the past it was hard to pull the foot and the luff in the boom and mast grooves because the rope in the luff and foot tapes permanently got stuck in the opening of the feeder – now with the stiffer cloth, the sail was less easily plying. A bit difficult was the coverage with the boom cover. Since the stiffer mainsail could not anymore stored away as flat as before.

The first attempts on the water we had to do at very light winds. Already under these light conditions, the sails showed a much more harmonic profile as before the treatment. The position of the highest profile depth could be influenced perfectly again by the luff tension. Even in short gusts the bally did not move backwards again. Generally the sails fell within a slightest puff nicely into their profiles and generated overall an excellent impression.

Now we were really interested how these sails would behave with a little stronger winds. The chance to find out we had the next weekend. Choppy force 4 – 5 and a long beat over the IJsselmeer were on our programme. We first sailed the small battened jib and the main sail without reef. Also under these conditions the sails could be trimmed excellently flat and kept their profile acc. the conditions well enough. The beating from the leeches between the battens had almost disappeared, a little correction on the leachline made it disappear fully, without causing an extra ply to the leach. Later on we still put a reef into the main – the trim of the sail was furthermore good. A shortcoming that continued existing also after the treatment was a pretty pronounced ply running at the end of the batten bags in the mainsail. This we got later solved by changing to softer battens.

So the conclusions from our first prac-



It could be clearly seen that the sails had become flatter, with the profiles being proper again. Main and jib can be trimmed easily and stay in shape even in stronger windspeeds.

tical testings had to be by all means judged as good.

Still there was the question, how long would this last? To find out, we shot pictures over the season of the profiles and compared them later on. Summarized we can say that the jib and the mainsail did not loose remarkably from their new gained qualities - even on their last trip in autumn the sails still produced an impeccable and nicely controllable profile. Also the rigidity in the cloth did not loose significantly. A

little different, the Genoa suffered from the sailing season: She still showed a proper profile, however the stiffness in the cloth had vanished significantly compared to the two other sails.

Conclusion

Summarizing it can be said, that by the PRO-2 treatment old rags can really be turned back into functional sails – not only visually but also in respect of their performance. Off course they did not



The deepest profile is now placed well forward, the leech is straight and undistorted. The jib performs well and allows high pointing.



The shape of the main has improved impressively as well, the profile is flatter and responds well on trimming via luff- and outhaul-tension.

really go „like new“ - in visual quality impression, haptics and performance they went like sails that have eventually been 4 – 5 years in usage and not the real twenty years, they had been used. The costs for the treatment were in total at 360,- € , an investment worth doing acc. the author and the owner of the boat. Especially considering, that the purchase of a new set of sails can be postponed for some seasons.

However also the PRO-2 treatment cannot

spin „dung“ into gold., as the test approved. The jib and the mainsail, made of good quality and closely woven Dacron fabrics, performed well in the test. These responded well to the treatment, while the effect on the Genoa, that was from the beginning a inferior quality sail, was less strong and lasted shorter.

Under normal conditions, the tested sails would have been disposed. Also the boat owner had planned the investment for a new sail wardrobe within the refit of his

boat. So these sails can be considered under realistic conditions, as extreme cases, generally the sails on normal cruising yacht will be in much better condition. Acc. Feedbacks from boat owners, that had their sails treated at RED GULL within the regeneration process, the effects are much stronger when the sail is not fully worn out. Even good Dacrons have lost after 3-4 years parts of their form stability, which is due to spilling, kinks and simple eroding, weakening the effectivity of the coating in a Dacron sail, that makes the structural rigidity of the fabric decrease. The sail will distort more and more, till the fibres reach the end of their elasticity – ending with a break of the fibres in a higher load. Because of these facts, it appears rather wise to undergo at this pretty early state a regeneration of the sails. This „chemical shrinking“ of the fibres is tightening the woven structure of the fabric, reapplies new resins to the sail – what next to the stabilizing effect strengthens the „defense mechanisms“ against mildew contamination, UV-exposure and pollutions. Regularly applied, not only the sails performance can be ameliorated, it will be less vulnerable to every days environmental exposure and thereby will most probably last longer.

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While the leech had to be controlled by a hard tensioned leechline before the treatment, now it can be left loose without spilling. The distortions in the cloth have disappeared as well.