



CURRENT



Pic. 1 Over 1500 companies have participated in the PST

PST IS GROWING UP AND BECOMING MULTILINGUAL

Our innovative Premium Sanding Technology (PST) increasingly sets its course internationally. More than 1500 companies have participated in the PST-

seminars. Our instructors speak German, English, French, Spanish, Italian, Russian, Polish, Arabic ...

PST - INNOVATIVE SCHOOLING/TRAINING

The Premium Sanding Technology builds the basis for our customers' projects. We regularly use the PST on LÄGLER® floors to check feasibility, quality and to further develop its efficiency in the field.

COURSE OF THE PST-TRAINING

The seminar's content is the practice of our machines HUMMEL®, TRIO and FLIP®, along with LÄGLER® sanding materials. Over 1500 companies have already been trained and were convinced by the excellent quality of the finished surfaces.

PST in theory

- Company history
- Machines setup, maintenance
- Safety at work
- Grit sequence and sanding materials
- Sanding techniques
- The new concept for PREMIUM surfaces



Pic. 2 Theory



Pic. 3 Practice

PST in practice

- Analysis of the state of the floor
- FAQ's for HUMMEL®, TRIO, FLIP®
- How to use the machines
- Practical application of LÄGLER® sanding materials
- The **PST** concept in real life

PST's use in daily life

During a **PST** seminar we provide theoretical and practical basics for floor sanding. The goal is to give you a means to safely calculate, predict quality and help with your time management. The system is applicable on all hardwood floors, no matter what kind of wood, layout or whether it is a new installation or a refinishing job.

PST - application - Video



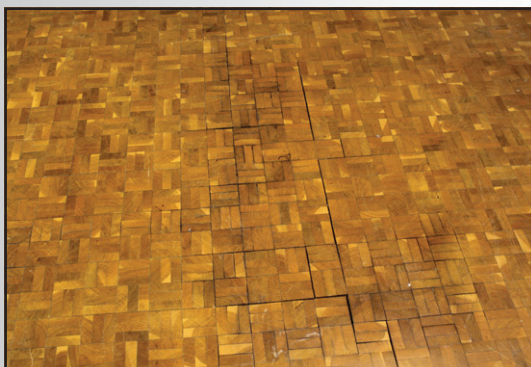
Pic. 4 Using the SINGLE

REPORT OFFICE RENOVATION

All our offices have hardwood floors. Because of high traffic within these rooms, the hardwood floors have to be refinished/renewed every couple years. This gives us an excellent testing ground for PST.

ANALYSIS OF THE STATE OF THE FLOOR

After many decades the hardwood floor in one of our old offices has loosened itself from the subfloor in several places. Therefore, we had to act. Firstly we checked for loose pieces.



Pic. 5 Old oak-end grain parquet

End grain oak parquet

Its high durability makes it ideal for offices, commercial buildings or any highly frequented areas. End grain is much harder than other regular parquet.

Cause expansion in hardwood floors with the grain is much lower than crossgrain, the choice of the adhesive for end grain is critical. Over the lifespan of the floor, the adhesive has to stay elastic.

Examination of the hardwood floor

The result of the examination was: 30% of the original floor was damaged beyond repair. Therefore we decided for a complete new floor. The room's measurements are approx. 34 m² (300 sq feet).



Pic. 6 Testing for loose pieces



Pic. 7 Loose pieces of floor with old adhesive

Old layers of adhesive

25 years ago, those products were not available. As you can see in our case, delamination from either the wood or the subfloor was the result. Therefore, the decision was to renew the complete floor. Colour and structure indicated, that a synthetic resin adhesive was used originally.

SUBFLOOR PREPARATION

After the evaluation and the removal of the old floor and subfloor prep started. We decided on new end grain parquet, as its high robustness and long durability were significant criteria.

PREPARATION AND INSTALLATION

We used the SINGLE to prepare the subfloor. As the adhesive remains had little to no connection to the subfloor, they were easy to remove. A decoupling matting was laid between the end grain parquet and the subfloor. This matting balances the shrinkage and absorbs vibrations.



Pic. 8 Universal disc with a 24 grit sanding ring

Sanding the subfloor with the SINGLE

We decided to use universal disc with a sanding ring 24 grit instead of a milling disc on the SINGLE. Afterwards, the surface was cleaned with an vacuum filter class H. The subfloor was level, even and clean, which is necessary for a good adhesion and saves time with the floor sanding. Uneven subfloor translates into uneven hardwood floor and therefore more sanding.

Buildup for installation of a new floor

The grip between subfloor and adhesive is ameliorated by a polyurethane pre-coat applied by a microfiber roller. After it had dried, it was time to add the decoupling matting. We decided on a durable-elastic polymeric adhesive.

We had stored the new end grain wood in the room for two weeks so that it could acclimate.



Pic. 9 Quality check-up



Pic. 10 Laying the new hardwood floor

Gluing down the new hardwood floor

The laying of the end grain parquet on the decoupling matting was easy. Following the recommendation of the producer, we used the same adhesive that we used on the decoupling matting. After it had dried, the surface was thoroughly examined. Measurement of the overwood is the main criteria for the starting level of grit for the first cut.

SANDING OF THE NEW END GRAIN PARQUET

After having examined the dried parquet floor, we decided to start with a HUMMEL® 60 grit and continue according to PST in order to achieve the best possible end result for a surface in PREMIUM quality according to LÄGLER® standards. Before each cut it is mandatory to vacuum the floor!

SANDING WITH HUMMEL® AND TRIO

The starting point depends on evenness, overwood/underwood, the kind of the wood as well as the pattern of the floor. In addition to that, the surface quality and coating depends on the request of the customer. The beauty of **PST** is its flexibility. It is adjustable to any hardwood floor and any requirements. The optimal approach is taught in practice at the **PST**-training.

Rough sanding with the HUMMEL® 60 grit belt

We decided to do the first cut with the HUMMEL®, with 60 grit as a **cross cut diagonally**. Because the new hardwood floor barely showed any overwood/underwood and it was extremely level thanks to our good preparation. After a **successful test-sanding**, we proceeded with the aforementioned grit.

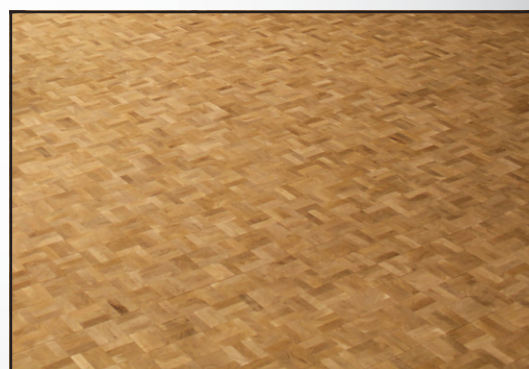
HUMMEL® - Video



Pic. 12 First cut with the HUMMEL®

Finishing with the TRIO

After the filling we continued sanding with the TRIO, doing a 60 grit cut with doughnuts followed by 80 and 100 grit. According to **PST**, we finished with a 100 grit cut with screen on the TRIO. Since we had decided on an oil as a coating instead of varnish, we had to do the additional cut. Inbetween the cuts with the TRIO we did the edging.



Pic. 11 Installed floor

Hardplating with the TRIO and filling

According to **PST**, TRIO, 60 grit in a crosscut, without doughnuts, always follows the HUMMEL® 60 grit in order to make a basis for the following cuts.

For filling, we used a solution from epoxide resin basis and the wood dust from the 60 grit cut with the TRIO.

TRIO - Video



Pic. 13 Fine sanding with the TRIO

SANDING THE EDGES

The sanding of the edges was done in between the TRIO-cuts with the corresponding grit. The edges have to blend into the mainfloor, otherwise in conjunction with the oil, there will be a picture frame.

EDGING WITH THE FLIP®

The office's rectangular shape made edging easy. Only the areas around the heating pipes and the two door frames added to the expenditure of time.



Pic. 14 Edging with the FLIP®

Sanding the edges

For edging we did use FLIP® with short attachment. Edging was always done before sanding the main floor. We did follow the grit sequence 60, 80, 100 according to the big machines.

[FLIP® - Video \(Edges\)](#)

Sanding the corners

For the corners and all inaccessible areas, we did use Flip® with corner attachment. The small diameter of the sanding disc and it's high rpm made sanding around the heating pipes and the door frames a breeze. Grit levels were chosen accordingly.

[FLIP® - Video \(Corner\)](#)



Pic. 15 FLIP® with corner attachment

THE FINAL RESULT



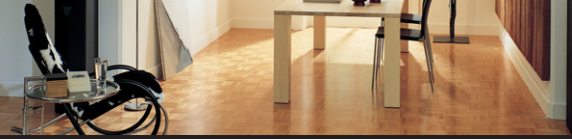
Pic. 16 End grain parquet does not only belong in workshops

END GRAIN IN PERFECTION

Just like after each sanding round's completion, an evaluation followed the final round. The surface was clean and faultless so that a good end result was expected after the oiling. We proceeded with the application of two-component oil. After we waited out the time recommended by the producer we worked the oil into the surface using a SINGLE and a pad.

The end result is great: The end grain parquet makes a lively impression; it is expressive and lies absolutely flat.

[Want to learn more?](#)



NEWS

TRIO cable support

Upon having received many requests about handling the extension cord on the TRIO, we modified the HUMMEL® principle so that it would fit the TRIO. After a test phase in our **PST** seminars, this equipment for the TRIO is now available.

By using the cable support, you keep the cable out of your work area, which allows you to work more comfortably. The easy maneuverability prevents the cable from being in the way when changes of direction are in order. This makes the handling much easier especially in small rooms.

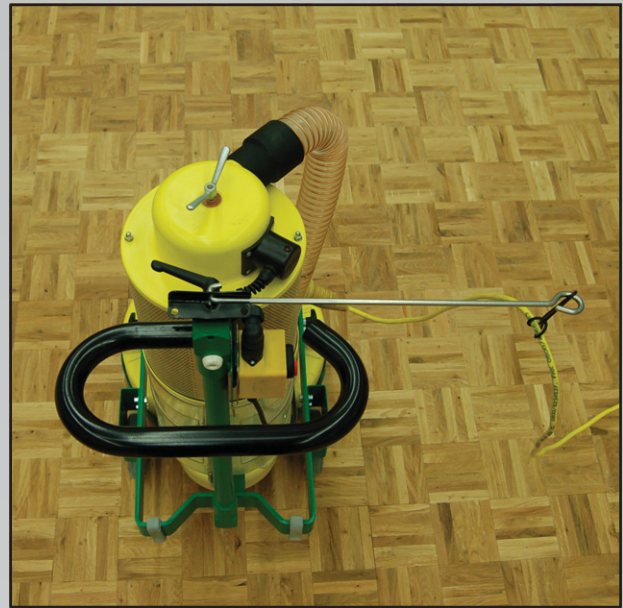


Fig. 17 New cable support for TRIO

IMPORTANT EXHIBITIONS

Events

In this edition of the LÄGLER®-DIREKT issue two interesting fairs are taking place. Our German readers are invited to visit our booth at the LIGNA in Hannover (May 6th to 10th). If needed we can provide you with two free tickets per company.

Telephone: 0049-7135-9890-0



NWFA - Wood Flooring EXPO

The Wood Flooring EXPO of the American National Wood Flooring Association (NWFA) is exclusively about wood floors and their conditioning. The most important fair of the American wood flooring market takes place at the beginning of April 2013 in Dallas/Texas.

LIGNA

06.05. – 10.05.2013 · HANNOVER · GERMANY

LÄGLER in hall 15 / booth #A06

LIGNA Hannover 2013

This year's LIGNA takes place at the beginning of May. Current themes are for example innovative methods and uses of wood and wood material.

