



DIREKT
No. 3 / 2014

PST® ALWAYS WORKS!



Pic. 1 Test surface; white oak strip flooring installed on plywood over sleepers before the re-sand. The subfloor and flooring were installed per NWFA Guidelines.

The sanding of different species of wood creates a challenge for the craftsman. It's extremely important to use the best sequence of machines, sand paper and application.

In this LÄGLER® DIREKT we show three different wood floors that were sanded with the use of the PST®. Regardless of the species and pattern, a high quality result is possible.

PST® WORKS ON A VARIETY OF DIFFERENT WOOD FLOORS

The goal of our extensive research was to apply a standard process on many different wood species using the Premium-Sanding-Technology PST®. We show that the same high quality result is achieved on each floor using the same procedure (no matter if it's a new installation or a re-sand).



Pic. 2 Check the condition and determine the necessary work steps of the PST®.

Course of action

PST® sets no fixed pattern in which a floor has to be sanded. Rather, the course of action can be adapted to the desired end result and the starting point. Using this flexibility every floor can be sanded successfully.

The grit for the first cut (rough sanding) is chosen and a test cut is performed, if needed. Depending on the desired quality and finish type (natural oil, polyurethane, water base etc.) the necessary work steps are determined and followed.

Requirements

To be able to adapt the work steps to the desired final result, the correct interaction of the three machines HUMMEL®, TRIO and FLIP® is important.

In addition to the right machines, the use of high quality abrasives is required for a good result. LÄGLER® recommends the use of LÄGLER® zirconia-corundum abrasives.



Pic. 3 Perform a test cut if needed.

Advantages

- Different customer requirements can be met.
- PST® works on new installations and re-sands of any species, also on engineered wooden floors.
- Tremendous time savings.
- The risk of errors is greatly reduced.
- If used properly, a high quality surface will be achieved.
- More exact job cost calculations and better quotes.
- Easier post calculation.

CHOSEN WOOD FLOOR AND STARTING POINT

White oak strip flooring installed on plywood over sleepers

Oak is similar to beech and maple, very popular and very robust, but less problematic in sanding. Because oak is different in appearance and structure from beech or maple, this species has been selected.

Another challenge was the installation of strip flooring on a vibrating/bouncing sub-structure. The floor was finished with natural oil.



Pic. 4 White oak strip flooring on a wooden sub-structure.

Steamed beech mosaic parquet

In Germany beech has always been a very popular species for wood floors. One of the main reasons is that beech is abundant in Europe. In addition to the large capacity, beech also has disadvantages such as the strong response to changes in humidity.

Therefore it was interesting to compare this species with the others.

The beech floor for our sanding test was flat and natural oil was the finish product.



Pic. 5 Beech floor before the re-sand.

Bright sycamore maple parquet flooring

Bright surfaces are much more sensitive to dirt than dark surfaces. More importantly sanding mistakes and damages are more visible. Therefore we picked this light species.

The maple floor installed in a cube (mosaic) pattern looked very bright compared with the reddish look of the beech floor which was installed besides.

To compare the final results we used the same natural oil as finish as on the other floors.



Pic. 6 Maple parquet floor before the re-sand.

PST® PERFORMED ON OAK, BEECH AND MAPLE

Course of action according to PST®:

Machine	To consider:	Grit
HUMMEL®		60
FLIP®	Edge sanding	60
TRIO	Criss cross sanding	60
Filling the gaps		
TRIO	Using flexible Velcro ring	60
TRIO	Using flexible Velcro ring	80
FLIP®	Edge sanding	100
TRIO	Using flexible Velcro ring	100
TRIO	Using screens	100
Water popping		
Apply the oil		

Always vacuum between each cut!

Course of action on the three different floors

With little over/under wood we decided to begin the PST® starting with the HUMMEL® 60 grit. The finish being used was natural oil. Therefore the TRIO at 100 grit screen was planned for the last cut.

These two factors determine the workflow according to the PST®. The steps in-between are the same for each floor. All the steps are listed in the work plan Pic. 7.

After each step was completed, we checked the floor for scratches and sanding marks before continuing.

The final result of each floor exceeded our high expectations.

Pic. 7 Course of action along with grits used.

Advantages of the proposed process

Compared to the standard sanding method with the HUMMEL® using grit sequence grit 36 / 60 / 100 a lot of time was saved by using the PST® on all three floors. By not using grit 36 less sanding marks need to be removed and less abrasion of the wood is caused.



Pic. 8 Sanding of the oak floor.

White oak strip flooring installed on plywood over sleepers

By building a sub-structure made of wood, vibrations while sanding the oak were expected. Even with this added potential problem the same work plan was used Pic. 7.

To avoid chatter marks and waves, the HUMMEL® cut was done at a slight angle to the grains direction. The early use of the TRIO prevented waves caused by vibrations.

For this very reason the three disc sanding machine TRIO should generally be used on all wood floors installed on vibrating/bouncing sub-structures.

Click Pic. 8, to see the sanding video of the oak floor.

PST® PERFORMED ON OAK, BEECH AND MAPLE

Steamed beech parquet flooring

Due to the fact that this floor also had very little over/under wood the first cut was also performed by using the HUMMEL® at grit 60 (Course of action Pic. 7). By using the TRIO up to 100 grit sanding screens, the floor was perfect for the natural oil finish.

Click Pic. 9, to see the sanding video of the beech floor.



Pic. 9 Course of action of the beech floor.

Sycamore maple parquet flooring

Because the demands were the same, exactly the same procedure as on the white oak and beech were used on the maple.

As expected the surface quality also exceeded our high expectations.

Using a natural oil the maple floor seemed particularly noble.

Click Pic. 10, to see the sanding video of the maple floor.



Pic. 10 Course of action of the maple floor.

THE CONCLUSION

The final results of all three floors have shown that an excellent quality surface is achieved by sanding according to the PST® even on different species and installation methods, but with the same starting position and the same surface treatment.

Do you have more detailed questions? Are you seeking solutions to basic problems? Would you like to upgrade your skills?

Check out www.laegler.com click on "SEMINARS" and apply for a PST® training.

Click here!

[To the PST® seminar registration](#)

DETAILS OF THE PRODUCTS USED



Pic. 11 Link to the HUMMEL®-details.



Pic. 12 Link to the TRIO-details.



Pic. 13 Link to the FLIP®-details.



Pic. 14 Link to the LÄGLER® DIREKT 12 / 2012.

The HUMMEL® - perfect start

The HUMMEL® used inside the PST® concept is used to create a clean and level surface. After the HUMMEL® 60 grit cut we switch to the TRIO with the same grit. Changing to the TRIO at this grit makes the perfect switch from rough to finish sanding.

You will find more detailed information on the HUMMEL® at our website (Click Pic. 11).

The TRIO - saving time on the surface

Using the TRIO earlier in the sanding process considerable time can be saved. In addition you can work with the TRIO on vibrating/bouncing subfloors without having sanding marks.

The results on the floor confirms the TRIO has no equal.

You will find more detailed information on the TRIO at our website (Click Pic. 12).

The FLIP® - high quality edging in the shortest time possible.

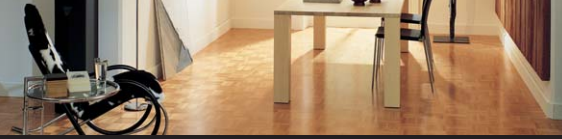
Sanding edges, precise guidance of the machine is important to align the edge optimally to the surface (avoid picture frames). Ergonomic design and the perfect balance of the FLIP® promotes good handling and fatigue-free use. The powerful motor helps to remove over/under wood faster.

You will find more detailed information on the FLIP® at our website (Click Pic. 13).

LÄGLER® ABRASIVES - for a premium surface

Our extensive testing has shown that only with high-quality abrasives and the right grit-sequence an optimum result can be achieved.

Check out our abrasive comparison in LÄGLER® DIREKT 12 / 2012 (Click Pic. 14).



EXHIBITION ANNOUNCEMENT



Hanover,
17th - 20th January 2015

LÄGLER® at the DOMOTEX

With approx. 45,000 visitors from more than 80 countries the **DOMOTEX** is the world leading exhibition for floor coverings. From January 17th - 20th 2015 in Hanover / Germany you can find out more about LÄGLER® and the latest products of the worldwide leading suppliers of floor coverings and machines dedicated to the industry. Visit us at our booth in **hall 7, booth B 43/1**.

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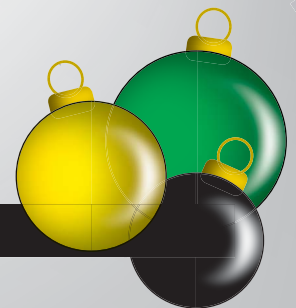
St. Louis (Missouri - USA),
28th April - 1st May 2015

Congratulations NWFA!

Internationally important and focusing on wood floors the **NWFA Wood Flooring Expo**, taking place April 28th - May 1st 2015 in St. Louis, Missouri, USA. This year the NWFA celebrates its 30th anniversary.

LÄGLER® is proud to have exhibited for more than 25 years along with our longtime North American partner Palo Duro Hardwoods.

Congratulations to the NWFA and thank you for your great support of the wood flooring industry.



MERRY X-MAS!

As we say: New Year, New Luck!

All of us at LÄGLER® would like to thank you for a great 2014. We look forward to working with you next year. We wish you and your family a nice, restful Christmas as well as all the best, health, happiness and business success in 2015!

Karl Lägler with family and staff



Donation to Amnesty International

On behalf of our employees and customers in lieu of traditional holiday gifts we have donated to support the organization of human rights, Amnesty International.

www.laegler.com

We are on vacation
December 20th 2014 to
January 6th 2015