

Lascaux Restoration Tools and Equipment

In 1983 Lascaux Restauro came out with the Lascaux Low Pressure Table which proved to be an essential tool in paper and textile conservation. This low pressure table is equipped with a bottom-plate and a water outlet; thus, cleaning involving water and solvents is possible.

The Use of the Lascaux Low Pressure Table

To ensure safe and proper work with the low pressure table, good lighting is essential, e.g. a light source from above and raking light. It is important to work in a room free of dust and dirt, as the object will act as a filter and thus stains might appear on the object after a prolonged treatment on the table.

The first step is to relax the object for flattening by means of a humidification chamber or using the method of floating washing. The object is then set down on either a blotter, a filter paper or a felt mat on the low pressure table and the vacuum pump is turned on. Cockles or creases on the object have to be flattened out before complete buildup of the vacuum.

Make sure that the paper is porous enough and check the impact the solvent might have on the colours. For further drying the object has to be covered with a filter paper as a protection from air borne dirt.

Cleaning (stain removal)

In the process of stain removal on the low pressure table, the conservator has to deal with several problems. The appropriate solvent which can be applied and removed from the object without penetrating the entire sheet through capillary attraction, thus damaging the colours, has to be found. By regulating the vacuum, the diffusion of the solvents into the paper can be controlled more or less.

The moisterized and relaxed object is placed on the humidified support on the low pressure table. Hostaphan (Melinex) or latex strips are brought up to the edges of the object and, if necessary, areas which don't need to be treated can be covered as well, in order to concentrate the air flow onto the stains or spots. After a repeated treatment by means of water, steam or the application of an appropriate blend of solvents, most of the spots or water stains will disappear.

If only local cleaning is required or objects with delicate surfaces have to be treated, the low pressure table has to be covered completely with a Hostaphan sheet (Melinex). The spots on the object requiring treatment are marked and cut out of the Hostaphan sheet. After the object has been placed on the sheet, solvent can be applied to the spots and the dissolved dirt is absorbed by the underlying filter paper. The advantage of this method is that the solvent is pulled through the object very quickly; thus, water stains can be avoided.

Flattening

The object is first humidified and then placed on the low pressure table. The table is then covered up to the edges

of the object with Hostaphan or latex and the vacuum turned on. If a complete expansion of the paper is not achieved during humidification, cockling and creases might be the result. They can be removed by additional wetting, pressure, heat and careful manipulation of the object. A filter paper or a filter cover is placed on the object to protect it from dirt. The drying time depends on the nature of the the paper. Using minimal pressure, this method allows natural shrinking and drying of the object, which regains its original flexibility.

Lining of fragments

A japanese paper is pasted out and placed on the prepared low pressure table. Hostaphan or latex strips are placed around the japanese paper. The humidified fragments are then laid on the japanese paper and assembled like a puzzle. Once the fragments are in their correct position, a filter paper is placed on the fragments and on top of this, a sheet of Hostaphan. The vacuum is turned on. After about five minutes, a hole is made in the Hostaphan film and peeled back in spiral movements to make a circular opening. Repeat at intervals within an hour until the object is totally uncovered. The filter paper is usually removed after the lining has been accomplished, but can also be changed during this procedure if necessary. The assembled object can remain under pressure on the table until it is completely dry or can be flattened between blotters under light pressure. The advantage of this method is that the manipulation of the fragments can be reduced as much as possible.

Numerous objects like prints, water colours, gouaches, charcoals and pastels, all of them on porous paper, were treated successfully with these methods.

There is no doubt that many treatments can be performed more gently using the low pressure table than by means of traditional methods. The treatments described are not meant to represent a complete enumeration of the possibilities the low pressure table offers. Experience and improvisation will refine and widen the range of possible applications.

Cleaning the Lascaux Low Pressure Table

Regular cleaning (approx. every 6 months) of the table is required to ensure perfect working conditions.

1. Remove the adhesive tape and the perforated aluminium sheet
2. Remove the aluminium grid (cut the plastic brackets with a knife)
3. Clean the inside of the table carefully with warm water and soap
4. Subsequently replace the grid and the perforated aluminium sheet in the table and secure it with regular adhesive tape

Please note that after use, the table should not be covered in order to ensure good drying of any residual humidity.

References

- M.K. Weidner: "The Suction Table: Ten year review of its development" (AIC preprints, Los Angeles 1984)
- K.M. Keyes: "Alternatives to conventional methods of reducing discoloration in works of art on paper" (Preprints, Cambridge 1980, Conference of the Conservation of Library and Archives Materials)
- R. Futernick: "Leaf casting on the suction table" (Journal AIC, p. 82-90, 1983)
- S. Michalski: "Suction table, history and behaviour" (Ottawa)
- S. Michalski: "The Suction Table: a physical model" (AIC Preprints, Los Angeles 1984)
- P.M. Laursen: "Trockene Pergament- und Papier-anfaserungen" (Maltechnik-Restauro, Vol. 91, Nr. 4, 1985)

Disclaimer:

The information provided above is given to the best of our knowledge and is based on our current research and experience. It does not absolve the user from the responsibility of first testing the suitability of our products for the specific use conditions he or she has in mind. This technical sheet will become invalid with any revised edition. The latest update is always found on our website.