Lascaux
the spirit of colours

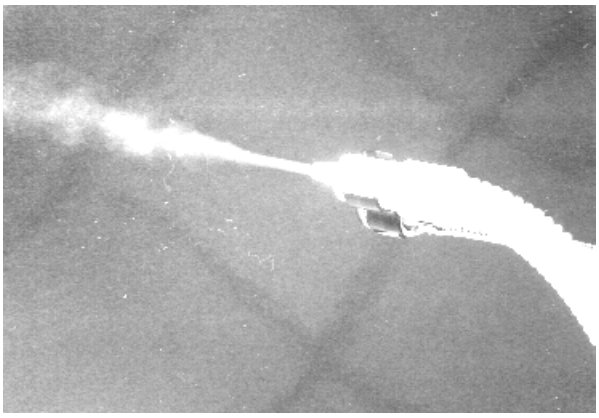
Lascaux Restoration Tools and Equipment

AGS 2000

System for homogeneous dosage and dispersion of consolidant solutions. The so called aerosols - created by an ultrasonic mister - are well known in the field of conservation. The development of the new Aerosol-Generating System AGS 2000 HS, in cooperation with the Academy of Fine Arts Stuttgart, presents new possibilities.
Besides the misting of demineralized water, the AGS 2000 HS also enables the misting of aqueous consolidant or deacidifying solutions.
The size of the fine particles of aerosols created by means of an ultrasonic mister is in µm range. Decisive advantages are attained when consolidating matter, powdery and flaking paint layers. The AGS 2000 HS enables homogeneous dosage and fine distribution of the consolidant solution, without touching the object.
In contrary to traditionally used application techniques, the formation of tidelines, change in colour density, the displacement of pigment particles, and the formation of surface gloss can be avoided by use of the AGS 2000 HS.

Specifications

- Ultrasonic mister with infinitely variable vapour and airflow dosage.
- Non-contact fixation of pigment particles.
- Easy-to-handle and comfortable operation.
- Vapour chamber with automatic cut-off if lack of fluid.
- Easy refill of fluid.
- Quick adjustment of supporting arm for flexible tube.
- Use of high quality material (glass, stainless-steel, special plastics) for optimum hygienic conditions and maintenance.



Technical data

Radius of operation:	1 m
Quantity of vapour:	0-2 ml/min
Temperatur of vapour:	35° C - 40° C (heated)
Particle size:	1 - 6 µm; depending on the density and surface tension of fluid
Air volume:	0 - 2 l/min adjustable
Particle filter:	efficiency 99.99 %
Power supply:	230/110 V, 50/60 Hz

Example of application

The consolidation of 19th century gouache paintings on paper, which were treated during a final project at the Academy of Fine Arts in Stuttgart, was carried out under the follow-ing conditions: Prior to consolidation treatment the gouaches were moistened for 3 to 4 hours at a relative humidity of about 90%. The formation of tidelines thus was avoided and penetration of the paintlayer improved.
Methylcellulose as described below, was used as consolidation media with the addition of 10% isopropanol to improve the penetration of the paintlayer.

Mixtures of consolidation solutions, for use with the Aerosol:

Methylcellulose (Methocel A4C):	0.25 - 0.4% in demineralized water
Gelatine:	1% in demineralized water
Funori/JunFunori®:	about 0.75% in demineralized water
Isinglass:	about 2% in demineralized water

These are details of consolidation solutions currently used. Other solutions may be misted as well.

Literature

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