



*Stehlin Hostag Ink U.K. Ltd
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Stehlin Hostag Environmental Policy

The increase in environmental awareness over recent years has not influenced Stehlin Hostag's philosophy. Switzerland has always been at the forefront of environmental issues for many years and is ahead of most other countries in its approach to this problem.

Careful consideration is taken concerning the influence of any operation carried out by Stehlin Hostag on the environment during the manufacture, distribution and of our printing inks.

1. Manufacture

The majority of our manufacturing is conducted in our factory in Lachen just outside of Zurich. In the last four years, over 34m Swiss Francs have been invested in the automation of this high-tech production plant. We are confident that it is the most technically advanced lithographic printing ink manufacturing facility in Europe.

All manner of environmental issues have been taken into consideration with the design of this new facility. Detailed below are some of the areas that have been considered and addressed:-

a) Energy Consumption

All the energy created throughout the whole manufacturing process is carefully monitored and recycled. This recycled energy is used to heat the factory and is also used in certain stages of the production process. This has obvious benefits from an environmental point of view, as well as making the production plant more cost effective.



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b) Packaging

Due to its investment in revolutionary silos for dry pigments, Stehlin Hostag has reduced packaging by 80% over the past two years. The old style method of handling dry pigment has been virtually eliminated and now all pigment is pumped from silos to the various production batches.

Varnishes, oils and solvents are stored in main tanks and pumped from the storage facility to the production area. Other heat generated in the process is recycled and used to heat the storage areas to ensure that all materials are of a viscosity which can be pumped easily and effectively.

c) Factory Design

Stehlin Hostag's production plant is situated in a very picturesque area of Lachen in Switzerland and so it was very important to ensure that any design changes or expansion on the site were in keeping with the visual appearance of the area. At great expense, to enable high storage areas to be incorporated in the factory, Stehlin Hostag carried out excavations to ensure the building did not exceed a height which would have interfered with the aesthetics of the surrounding area.

Also many safety features have been built into the design of the factory and the delivery area of raw materials to ensure that if there are any spillages, these can be quickly and easily contained to make sure that they do not contaminate the drainage system or nearby rivers and streams.

In conclusion, we feel that our main manufacturing site has been designed and constructed with the environment being a major consideration. Although we are pleased with the progress we have made, we are continually reviewing and assessing how we can improve on our current environmental performance.

2. This philosophy from Switzerland is maintained in our operations in the United Kingdom. All efforts are made to limit energy consumption, the use of recycled packaging materials where possible, to ensure that we fully conform to all environmental legislation currently in place.



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We have undergone a rigorous environmental assessment which has resulted in us achieving ISO 14001.

3. Another important environmental consideration is the type of raw materials used to formulate the inks. Again this is an area where we have for many years regarded as a high priority to ensure that we use environmentally friendly materials in all our printing ink formulations.

There are no toxic materials used in any of our formulations and in recent times, special attention has been paid to heavy metals such as cadmium, hexavalent chromium, mercury and lead. These materials have been virtually eliminated from all of our printing ink products. There are very few exceptions where there are trace elements of these materials.

However, the inclusion of these products in some inks as trace elements is technically unavoidable. These levels are far below the 100ppm level which is well within current legislation.

4. Another area of concern is the VOC (volatile organic compound) content of ink. All our sheetfed inks contain the highest possible level of non volatile vegetable oil based type materials. However, some solvents are required to help with certain formulation characteristics. The types used have a very low environmental impact and are carefully selected and monitored throughout our rigorous raw material testing procedures in place at all of our production plants.

Research and development into this area is obviously continuing as a high priority for Stehlin Hostag and the Huber Group. At present we are well within all the European legislation concerning this subject, but we will continue to strive to ensure we achieve the optimum environmental formulations.

5. Disposal of Waste Inks and Waste Generated during the Production Process

Because Stehlin Hostag have an automated pumping and dispensing system, which is computer controlled to ensure accurate weighing of bulk production and subsequent additions is achieved, wastage factors have been dramatically reduced. From all the production conducted throughout all our plants, the wastage factor is estimated to be well below 1%.



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Stehlin Hostag dispose of any waste that is generated through the correct registered disposal companies who conform to all current legislation in respect of these matters.

We have extended this service as a responsible supplier, to our customers and we are currently in the process of implementing our Waste Care Scheme. This will ensure our customers are conforming to all Special Waste Regulations as well as disposing of all waste products in a responsible manner.

We are also considering how we can limit the amount of packaging generated within the printing ink industry. We already supply many pumping systems using large format containers with plastic liners to help reduce the amount of packaging generated in sheetfed customers. The majority of our heatset customers already use 1,000kg reusable containers.

However, in the near future we will be launching a new packaging concept which will consist of a recyclable polypropylene plastic cartridge which is fitted to a press and when empty can be shredded and fully recycled. We feel this is a major step forward to limit this specific problem.

Concerning redundant ink stocks, we can offer a recycling option which will entail a full assessment to be conducted of any redundant ink stocks retained by our customers. We can utilise these inks for specific formulations eg. for export to the Far East and other types of applications where a lower quality ink is required. As you can see, this is a very cost effective solution to the problem of higher levels of surplus ink stock.

To limit this problem, Stehlin Hostag offer the unique 24 hour service which helps customers reorder smaller batches to ensure over-ordering is kept to an absolute minimum. This also has a direct impact on the accumulation of these redundant ink stocks.

This policy statement details Stehlin Hostag's commitment to all environmental issues. It is a major consideration throughout the whole of our company to ensure we are operating effectively and efficiently to limit detrimental impact on our environment.