

Ladies and Gentlemen,

Please find here below and take into account our contribution to the topic European Mercury Ban which we agree to be published in the context of this initiative.

We are a screen-printing company from Hungary: Serima Press Kft. We are national-wide considered the second most famous company in our field of activity thanks to our capacity, quality and flexibility. We offer finishing solutions for printing houses which want to upgrade their product through thermo-laminating, hot stamping and UV varnishing.

We have seven employees who work in two shifts and we serve the biggest printing factories here in Hungary since 2004 as well as a few customers from abroad. Indeed, one of our main customers is the Romanian production site of a Belgian company. Their finished products are delivered to all the Benelux countries.

Question 1a):

The wording should be retained, and an extension should be requested at least for the next 10 years to grant thousands of companies to go ahead with their activity.

Question 1b):

We use UV lamps for the following applications:

As I mentioned above, we are using screen printing technology for UV varnishing because this attractive appearance and gloss on the printed goods can be achieved only through this technology. Two years ago, we invested in a new screen printer line that is now fully running. This line has three UV stations (width 1250 mm) and ensures that the varnish hardens on the substrate. Without these UV lamps, production would stop putting at serious risk our activity.

At the present state of technical development there is no equivalent substitute for UV curing lamps offering the same characteristics and affordable costs. The availability of mercury-containing UV lamps is crucial for our company.

Question 2a)

There are other mercury-free types of discharge lamps and other light sources like UV-LEDs available, which can, to some extent, be used for similar processes.

There are, however, some very severe limitations:

- Direct replacement (exchanging only the lamp) is in most cases technologically not possible
- Replacement of existing machines/processes with alternative light sources (if available) usually requires additional steps, which may include:

- replacement of power supplies and peripheral electrical components
- replacement or alteration of inks and varnishes
- use of other substrates
- necessity for (other) pre-treatment technology
- necessity for inert production environments (expensive use of nitrogen or carbon dioxide)
- change of UV measurement equipment (different spectral sensitivity)
- change of process speeds (usually substantial speed and productivity decrease)
- heavy redesign of machine equipment
- complications like cross-sensitivity to daylight and/or artificial lighting

Question 2b)

According to our experience, replacement of existing UV Lamp Systems with alternatives such as UV LED leads to a variety of problems including quality issues, process downtime, productivity decrease, high investment costs, higher overall operational costs.

Question 2c)

We are not in the position to draft a roadmap for the complete substitution of mercury-based discharge lamps in our fields of application. We know that there are other technologies available (UV LED) which might justify investment into new machines and which might gain market share in the next years with respect to

conventional UV applications. But for practically all existing machines/processes/applications, there is no reasonable replacement.

Question 3)

Since 100% replacement on existing installations is not possible, there is also no comparable product or device available with comparable features and performance.

Question 4a)

We do not know exact numbers but we can refer to the study which VDMA has mentioned in their report. We are using UV Lamps on a daily basis and we would really struggle to invest in new technology which is known to be extremely costly (including the inks) than the conventional UV systems.

Question 4b)

Most existing machines on the market using mercury discharge lamps would become unusable becoming additional waste. In many cases, it is economically and/or technologically not feasible to retrofit existing equipment with alternative light sources. If UV lamps are no longer available, as an immediate impact on our company the majority of our staff members, especially in the production area, will lose their jobs as our core business depends on the use of UV Lamps. This will be translated into a huge negative social impact. Stored UV materials, replacement lamps and machineries of a value of hundreds of thousands of EURO would have to be scrapped.

Question 4c)

Most employers of mercury-based UV technology would be confronted with a professional ban, leading to huge amount of unemployment and loss of products and productivity. Many companies and factories would stop existing.

We don't have exact figure and can only state to the best of our knowledge that thousands of companies exist only in the EU that employ UV Technology based on mercury lamps. Some of them rely to up to 100% on the availability of mercury lamps. The missing renewal of the exemption would ultimately threaten the survival of our company.

Question 4d)

Unemployment costs for thousands of personnel.

Heavy investment costs for companies into new machineries/equipment, at the same time costs for disposal of no longer usable machines and equipment

Loss of product diversity since no longer all products can be produced for technological and/or economic reasons. Our business would cease to exist.

Question 5)

We would like to strongly encourage policy makers to invest their effort into a well-organised recycling system including increasing the public awareness on the necessity of actively participating in the recycling loop. This is a win-win situation for all involved parties to the best outcome of having the best technologies available for the specific needs and without banning certain products, machines, technologies or markets for "the worse".

We agree that this above statement can be published within the context of this consultation.

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