Perfumes are not only bottled in simple containers, Stoelzle Flaconnage uses flacons which have a finishing of special decor techniques or coatings. A carbon infrared oven from Heraeus Noblelight has helped Stoelzle Flaconnage to achieve significantly faster curing of organic paint sprayed onto to highly decorative perfume bottles. Its installation has also saved valuable space compared with an alternative hot air oven.

Stoelzle Flaconnage supplies decorated glass bottles for prestige spirits, perfumes and cosmetics. When it was decided to adapt a mothballed ceramics spraying machine to provide much needed additional organic paint spraying capacity to meet the requirements of a large contract, it was realised that there was insufficient space to accommodate a conventional hot air oven. At the same time, Stoelzle engineers required that paint drying times should be reduced to match increased production line speeds. After speaking to their specialist paint supplier, Performance Paints, of Tewkesbury, they contacted Heraeus and tests were carried out at the Heraeus Application Centre. These demonstrated that, using carbon infrared, coatings on glass containers delivered at a line speed of 4.4m/min, could be cured in 90 seconds as opposed to the 25 minutes required in a hot air oven.

As a result, a five zone oven was installed at the Knottingley site. This sits over the existing conveyor system. The emitters have a very fast response time of less than 2 seconds, so that the oven can be quickly switched off when there are gaps in the line or in the event of unanticipated line stoppage. “Apart from meeting our requirements for space saving and faster curing times, the new oven has also allowed us greater control over paint curing,” explains Shayne Carr, project engineer at Stoelzle. “It is also more energy efficient than the hot air alternative and the emitter controllability means that we can quickly adapt to changes in bottle size.”

Features
- Faster drying of organic paint on glass bottles
- Space and time savings
- Oven can be adjusted to different bottle sizes
- Process of curing paint is better controllable

Technical Data
- Production line speed of 4m/min
- Curing within 90 sec
- Oven with 5 zones, each zone consists of two side infrared modules and one top module.
- Each side module contains four, 7.35kW, twin tube carbon infrared emitters
- Fast response times