

Problem solution from Leister sales and service partner

## Paper cup production with air heaters from Leister

Instant meals like soup, noodle or rice dishes are enjoying increasing popularity. This type of catering has become especially prominent in Asian countries, where people eat a lot of small meals each day. An enormous industry has grown up around the production and sale of the most diverse dishes. A huge market has also developed for the paper cups and paper bowls needed for this. Tai Bao Paper Co. Ltd. in Chongqing is this sector's largest company in Western China. It supplies China's most important producer of instant noodles, Master Kong Food Group. Besides this though, Tai Bao also produces for the international market.

### 160 paper cups a minute

The paper carton is formed into the correct shape and the base shrunk on using high-capacity production lines. Reliability and economic reliability are the crucial factors behind this process. Tai Bao has six production lines originally made in Korea. These are equipped with two Leister air heaters of the type LE 10 000 S and one of the type LE 5000. The total of 18 externally controlled air heaters work around the clock. The throughput per production line and minute is an impressive 160 paper cups.

### Insurmountable problems

Besides the six production lines imported from Korea and equipped with Leister air heaters, three other lines made by a Chinese manufacturer were also in service at the beginning. These were accompanied by difficulties with



Production line with two LE 10 000 S and one LE 5000.

the heat distribution and temperature control from the very start. The energy consumption was also excessively high. The problems with the local devices defied any form of solution.

### Effective measure

Initially, there were also start-up difficulties associated with the six lines equipped with Leister air heaters. The heating elements of the air heaters, otherwise actually reliable, had burned out after only two months and had to be replaced. The Leister sales and service partner responsible for Tai Bao, Digital Steel Welding Equipments Ltd., found out the cause. An analysis on-site led the experts to ascertain that the compressed air supplied was extremely moist. They recommended installing an air dehumidifier between the compressor and air heater. This has produced lasting results: The six production lines have been operating without problems since the air dehumidifiers were installed. In fact, the service life of the heating elements has been greatly extended by this measure.



View of the production hall of Tai Bao Paper Co Ltd.

**After-sales service is important**

The importance of having a device supplier close at hand has been shown once more. Thanks to the worldwide Leister sales network, it was possible to provide customer support in China as well. This could be ensured despite the fact that the production lines were made in Korea. The Leister sales and service partner Digital Steel was able to utilise its technical expertise to find the right solution, thus providing clear evidence of its competence. The customer Tai Bao is more than satisfied with the Leister devices and support and has consequently entered a long-term agreement with Digital Steel.

*Two examples of the Tai Bao production..*



*The older air heaters used at Tai Bao LE 5000 and LE 10 000 S....*



*...and the successors LHS 40 PREMIUM (2 – 4 kW power) and LHS 60 PREMIUM (5 – 16 kW).*

**Customer:****Device supplier:****Sales and service partner:**

Tai Bao Paper Co. Ltd., Chongqing, China

Leister Process Technologies

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