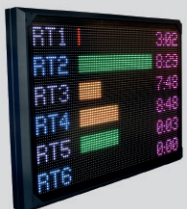




LED as hard as steel: can easily withstand heat in the hot rolling mill

Digital display technology replaces analogue clocks

In Königswinter (NRW), a rolling mill that is unique in Europe produces wide flat steel up to 20 metres long. The rolling mill in Königswinter (WW-K, Warmwalzwerk Königswinter GmbH) was established back in the 1950s. Today more than ever on a growth course, in Königswinter they have always known how to move with the times. So it was only logical that analogue pointer displays had to give way to their digital counterparts in production.



Advantages at a glance

- Durable, maintenance-free system, even in dusty and dirty environments
- Bright, high-contrast LED technology for optimum readability
- Just-in-time information thanks to flexible LED visualisation

To create real added value when switching from analogue to digital technology, WW-K opted for an LED solution from the system electronics provider microSYST from Bavaria. „In the end, the display simply had to meet our needs, given the challenging basic conditions in the rolling mill,“ says Bernd Görres, Head of Maintenance and Design at WW-K, summarising the desire for a customised solution.

Not possible without: Necessary adjustments against heat and dust development

The supplied display itself can do everything that LED visualisation in an industrial environment should be able to do: Eight-colour spectrum, Profinet interface, high contrast and luminosity with a low installation depth ensure ease of use. Positioned directly on the production line in the hot rolling mill, however, the display solution not only has to be bright, but also and above all tough: High temperatures on the rolling mill are just as unavoidable as the increased dust and dirt load. The migra display supplied by microSYST, which measures 108 x 70 cm, utilises a fanless, completely dust-tight housing. In order to meet the requirements of extreme operating temperatures, a plexiglass pane was installed and a modified housing design optimises the display cooling. Adapted seals and adhesives, for example in the area of the front screen, can cope with high temperature ranges just as easily as the newly designed power supply units.

From sketch to go-live within 10 weeks

Equipped in this way, the LED display runs reliably even at peak times and always remains perfectly and precisely legible. The display is not „just“ digital, but can be configured as required at any time - helpful, for example, when switching the production line to new orders with changed steel product parameters. „Satisfied all round“ is Görre's summary of the digital LED display solution, which has been in continuous 24/7 operation since the fourth quarter of 2023. Incidentally, microSYST only needed ten weeks from the first sketch to live use - including in-depth consultation in advance, technical sketches showing various display solutions, intensive coordination with those responsible at WW-K, customised production - and customer-specific software configuration of the display.

Alongside the new LED technology, analogue displays still run on Europe's unique rolling mill in Königswinter - nostalgia? Perhaps it's just a question of time before the digital version becomes completely established ...