



Infrared tube ovens temper plastic tubes quickly and efficiently

At SIMONA AG's plant in Ringsheim, thermoplastic pipes are manufactured for use in a wide range of applications, including within the chemical process industry, infrastructure, and water management. To ensure consistently high quality, the pipes are tempered during production by a targeted heating process, with controlled infrared heat from Excelitas.

Infrared emitters transfer energy without contact and only generate heat in the material. As a result, the heating can take place evenly and no material sticks to the heating source. The targeted and controllable heat prevents thermal damage or unsightly pressure marks.

At SIMONA, plastic pipes are extruded, cooled and then tempered using controlled, moderate heat. The aim is to reduce stresses in the material. For this purpose, tube ovens with circularly installed infrared emitters are used, which aim the heat directly at materials passing through. This arrangement enables efficient heating processes for endless materials in a continuous process. In contrast to a time-consuming treatment with hot air, the pipes can thus be successfully tempered by infrared heat in a short time after extrusion. Compared to conventional methods, infrared heat saves a considerable amount of space and ensures consistently high product quality.

The tube ovens at SIMONA's incorporate fast medium-wave infrared emitters, which combine rapid response times with efficient medium-wave heating. Plastics can be heated particularly well using medium-wave infrared radiation. The tube ovens are both small and compact in design and can therefore be easily integrated into production lines where a temper process is required.



Features

- Tempering of thermoplastic pipes in a continuous process
- Optimized process control
- Flexible application possibilities in different production lines

Technical Data

- Fast response medium-wave infrared emitters, with reaction times in the range of seconds
- Mobile and compact tube ovens

Excelitas

Infrared Process Technology
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