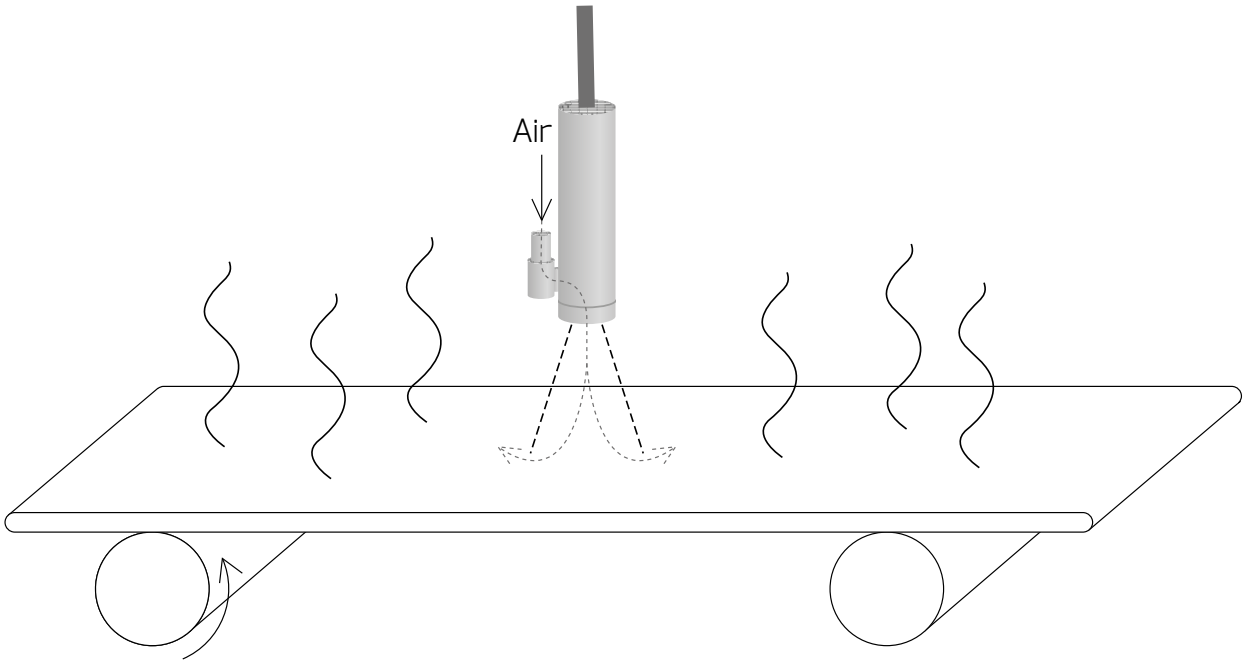
Technote #05

Temperature measurements in steaming environments

A common problem in the processing of paper and other material is measuring temperature in an area where steam (water) is used. In the process of heating/cooling, the resulting steam vapor makes it very difficult to use non-contact infrared devices. Since steam vapor is opaque to common infrared wavelengths, incorrect temperatures are often reported. In addition, condensing steam vapor on the sensor lens can render the IRt/c completely blind to infrared wavelengths. This problem is solved by the IRt/c air purge models in a simple and cost-efficient fashion. The air jet from the built-in air purge clears a path to the target material by replacing the steam vapor in the optical path with dry air: effectively blowing it away. Care is required in establishing the distance to the target, and the air pressure employed, to prevent cooling of the target area by the air jet.



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