Coal Conveyor Belt Monitoring
Germany

AP Sensing’s Linear Heat Series solution was chosen to provide quick and reliable fire
detection along a coal conveyor belt at a coking plant in Germany. The entire conveyor
system consists of two sections, perpendicularly connected, with a total length of
approximately 400 meters.

The N4387A is located in a tower at a safe distance from the conveyor; only the passive
optical sensor cable is exposed to the hazardous area along the conveyors and in the two
towers. The sensor cable is installed in a closed loop (dual-end), ensuring complete
redundancy coverage in case of a fiber break. Because the conveyors are outdoors,
temperature changes along with the seasons (between -15 and 35°C).

- AP Sensing’s low power laser (17mW
  average optical power, meets Laser
  Class 1M) enables safe operation even in
  hazardous areas.
- AP Sensing’s sensor cable, designed for
  continuous measurement from -40 to
  +85°C is optimally suited for outdoor
  applications with a large temperature
differential between summer and winter.