

Curiosity Thread: What Does a Straight Line Promise?

Curiosity Reading | CheAI Research Inc.

Manufacturers often use calibration models when a sensor signal stands in for a material property, such as the thickness of a coating. A line can make that translation repeatable within the tested range, but a straight fit does not automatically explain the material behavior or justify extending the model to a new range.

Pick a residual from the worksheet. Is the point above or below the line? Then ask what one more check could clarify without inventing a cause. The manufacturing connection is illustrative only; all signals and calibration values in this packet are original fictional data, and no instrument use is implied.