

GREASE CONSISTENCY–PREDICTED IN REAL TIME

Accumulates entropy generation turns routine production signals into a live predictor of finished–batch consistency.

Lijesh Kootaparambil | Roger A. Miller | Andrew Sanford | Jim Carroll | M.M. Khonsari
Roger A. Miller – SenseTech LLC

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INDUSTRIAL BATCHES

5,000 kg

COMERCIAL KETTLE

$R^2 = 0.98$

AGE–PENETRATION FIT

HOW THE METHOD WORKS

1 MEASURE

Motor current + voltage
Grease temperature
Ingredient weight

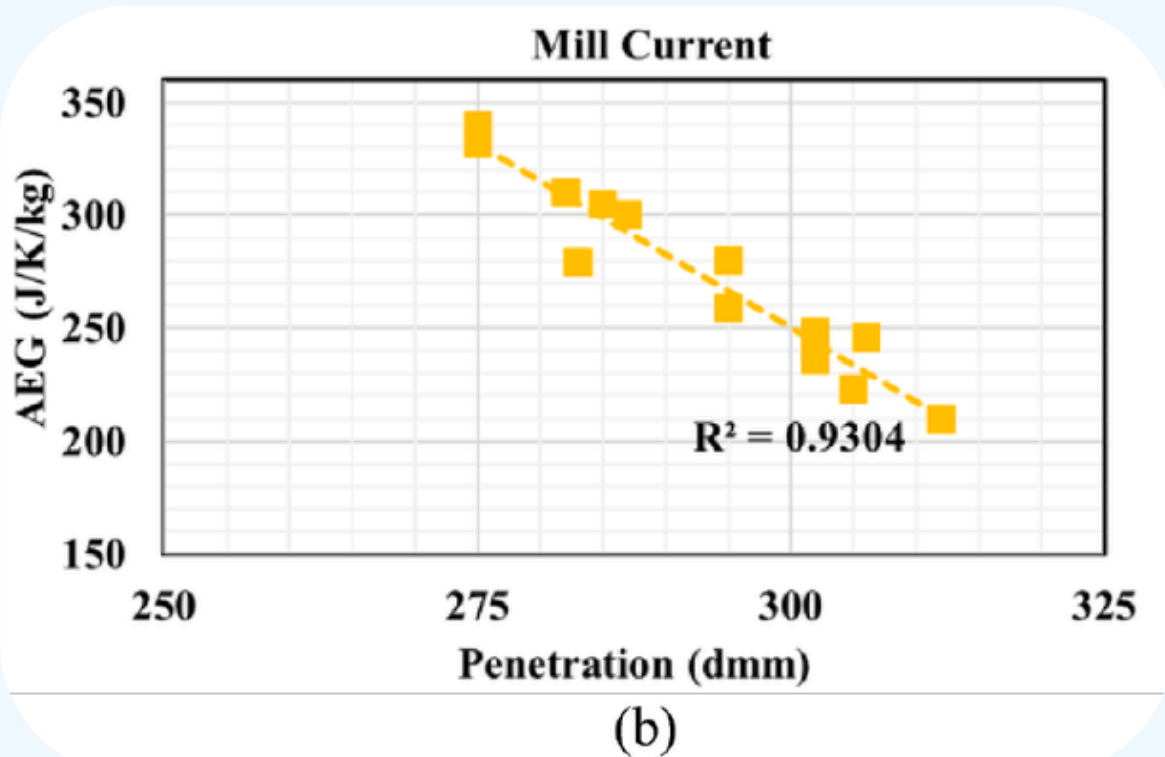
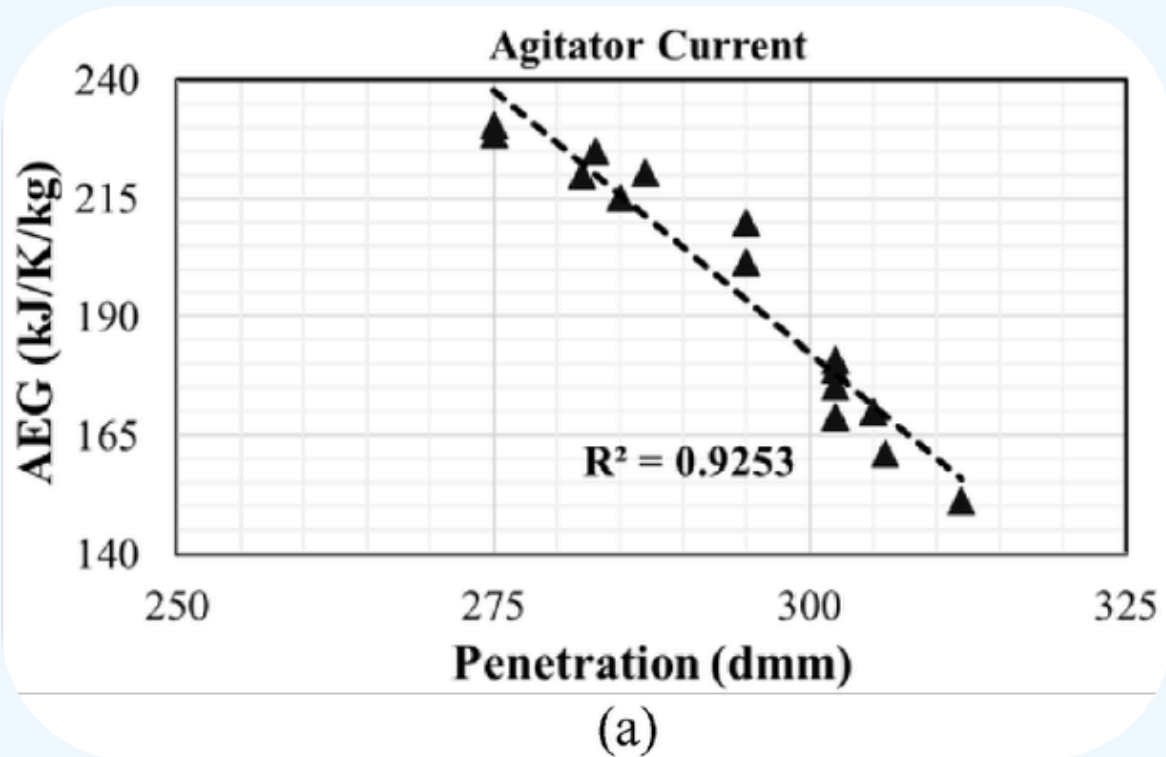
2 CALCULATE

Integrate entropy generated
by agitator and mill drives,
and thermal sources
throughout the process.

3 ACT

Compare the accumulated
oatch entropy trend to the
standard entropy trends. Take
action based on the results.

THE EVIDENCE Higher AEG → lower penetration → firmer grease



Published Fig. 6 AEG reported per unit mass; penetration in dmm

FIELD RESULT

Accumulated batch entropy calculations correlate strongly to final penetration results. For each product and manufacturing process, standard entropy curves can be established to act as guides to final batch penetration results.

WHY IT MATTERS?

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