

Know a tyre's rolling resistance before you build it.

AIRR learns the relationship between your own tread designs and your own measured rolling resistance, then predicts an untested design in seconds — so the rig tests the few candidates worth testing.

THE PROBLEM IT SOLVES

Rig time is the bottleneck

A rolling-resistance measurement costs money and weeks of scheduling, so most tread concepts are discarded on judgement rather than evidence. AIRR puts a number against every concept first, using the tyres you have already tested.

1 Enter the tyres you have measured

Non-skid depth, land ratio, tread compound $\tan \delta$, and the tread pattern — read straight from a pitch drawing. Thirty tyres is the working minimum.

2 AIRR derives the relationship

On the thirtieth tyre it fits the model itself and measures its own accuracy by predicting each tyre from the other twenty-nine.

3 Predict, and work backwards from a target

Enter a new design for an immediate figure with its expected range — or set a target RRC and see which changes reach it.

±4.4%

Typical accuracy on an untested tyre, cross-validated. Your own figure is measured from your own tyres.

30

Measured tyres to start. Accuracy tightens as more are added.

Seconds

From tread drawing to a predicted RRC, against weeks for a rig booking.

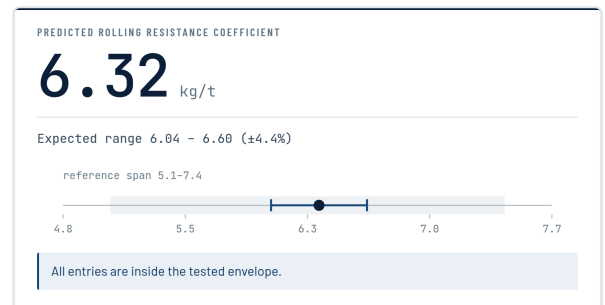
Zero

Network connections. Nothing leaves the machine it runs on.

What AIRR does not do

It models rolling resistance only — not wear, grip or noise. It narrows the field before rig testing; it does not replace the measurement.

THE ANSWER, WITH ITS UNCERTAINTY



Every prediction carries the range it is expected to fall in, and a warning when a design sits outside the tyres the model was built on.

TREAD PATTERN, MEASURED AUTOMATICALLY



Drop in a pitch drawing and AIRR finds every tread block and measures it. No tracing, no scale to set.

Your designs never leave your network

AIRR opens no network connections of any kind. It installs and runs on an isolated design network without modification — no tread geometry, pitch image or measurement is ever transmitted.

PLATFORM

Windows 10 and 11, 64-bit.
Installer or portable.

CATEGORIES

Truck & bus radial and
passenger car radial,
modelled separately.

INPUTS

NSD, land ratio, $\tan \delta$, tread
pattern from a pitch image.

OUTPUTS

Predicted RRC with range,
session log, CSV, printable
report.