

TECH TIPS

STRUCTURAL ENDURANCE TESTING

Designed, Tested and Built to Withstand Tough, Real World Conditions

Your equipment is a big investment. Just a small amount of dirt can destroy your engine. A filter that is not designed, tested and built to withstand real world conditions can fail, resulting in contaminants passing through or around the filter media and reaching the engine. That's why Baldwin takes testing seriously.

Testing Above and Beyond Industry Standards

A controlled lab test is an important step in the development stage. But will the filter that performs great in the lab do the same in actual tough working environments?

During the development process of our Channel Flow EXO™ and EnduraPanel™ air filter lines, we not only perform industry standard ISO lab tests, but we go even further. Proprietary, structural endurance tests are performed against the OE, simulating “real world” vibration, pressure and temperature variations to:

- Compare durability and consistent performance against the OE
- Identify the filter's structural strength or weakness
- Ensure the filter is constructed to prevent contaminants from passing through and reaching the engine
- Predict real world results in tough, working conditions

Superior Endurance Over the OE

Test results prove the Channel Flow EXO and EnduraPanel air filters outperform the OE every time.

Baldwin filters demonstrate structural endurance throughout the entire life of the test. The media and structure remain in place, undamaged, with no contaminant bypass and no signs of failure.

Baldwin continues to deliver durable, high-performing filters to keep your engines clean and operating in top condition.

OE AIR FILTER



Structural Bowing, resulting in glue-bead separation

Glue-bead Separation, resulting in leak paths, allowing contaminant to pass through

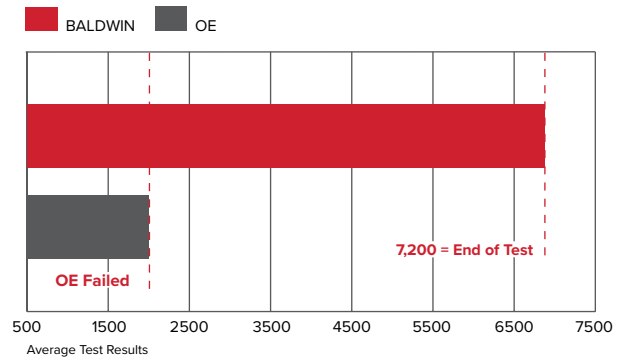
ENDURAPANEL AIR FILTER



Structural Durability, resulting in no separation or leak paths

EnduraPanel Structural Endurance Testing

Structural Endurance (Cycles)



Less than halfway into the prescribed 7,200 cycle test, the OE experienced structural failure, media distortion, glue breakdown and contaminant bypass around the paper wrapper.