

# THE SPECIAL SAUCE

# TESTING, TESTING, ONE, TWO

#### WE'RE BIG ON DILIGENCE AND GETTING OUR HEADLIGHTS DIRTY.

At Yakima, there's no such thing as makeshift. We're lighthearted in nature, but we're downright relentless about developing equipment that provides serious leverage in life. All of our proven solutions do more than meet ISO requirements; they undergo extensive testing inside our high-tech facilities and out in the real world. We use foolproof lab simulations and actual street smarts to maximize the strength and safety factor of every product. We shake, stress, and pummel all parts independently and together in the form of fully assembled units. Having a methodical process means we can stand behind the very best warranty policies in the business.

# THE DESIGN PROCESS

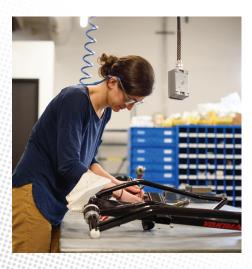
### PEACE OF MIND PACKS MANY ELEMENTS OF SURPRISE.

Yakima products are easy on the eyes—and easy to use. We study how our customers like to travel and base our design decisions on those needs and preferences. We put both sides of our brains to work, pairing common sense with unlimited imagination. Our equipment checks all the boxes; it's intuitive, functional, indestructible, and guaranteed to amp up every vehicle's aesthetic. Count on us to keep gear safe and everyone's sanity and image intact. From built-in bottle-openers to audible usability cues, we think through details that make a world of difference.

# ENSURING THE PERFECT FIT

## **BUILT FOR BEEFY, SLEEK, LARGE, AND COMPACT.**

These days, vehicles are changing and new activities are on the rise. Gear is evolving too, giving us even more of a reason to continuously tailor our products. We have an in-house team committed to fitting all makes, shapes, body styles, and belongings. Because when it comes to truly capable solutions, there's no one-size-fits-all approach. From big rigs to modest sedans and fat tires to rooftop tents, we cater to the full gamut of transportation-related trends. We spend hours ensuring our equipment is easy to install and simple to load and store. Then we document each fit in an ever-growing database for quick reference. Travel with certainty knowing Yakima is ready for an array of realms, tools, and toys, no matter what set of wheels our customers drive.







**PRODUCT DESIGN** 

**SAFETY TEST** 

**PROPER FIT** 







#### THE NITTY-GRITTY

On top of continuously pushing our internal standards, we also incorporate external industry standards as they develop, such as:

- ISO 11154 Roof Load Carriers
- DIN 75-302 Roof Racks for Passenger Cars
- ADAC City Crash
- ASTM G154-00-UV
- ASTM D3359-Paint
- ISTA 1C-Packaging

### STATIC TESTING

We perform static pull testing to meet or exceed ISO and DIN requirements in addition to our internal standards. These tests pull the gear in all directions—up, down, forward, back, sideways, and at an angle. The pull forces vary based on product and direction to simulate the dynamic loads that a rack experiences while the vehicle is driving. They also simulate the aerodynamic loads that happen when a vehicle is cruising down the highway with little regard for speed limits.

#### **DYNAMIC TESTING**

Dynamic testing is performed on a singleaxis purpose-built shaker and a six-axis MOOG shaker. The shakers simulate driving over different types of rugged road surfaces, and can focus on specific frequencies that accelerate wear.

#### **ROAD TESTING**

We take on speed bumps, speed humps, potholes, gravel, and washboard surfaces. Then we throw in emergency stops, swerves, excessive speed, and more. Some of the course features are industry standards, but many are Yakima internal tests. And, yes, it's really fun.

### **ENVIRONMENTAL TESTING**

We also test each product for weather resistance, including temperature, corrosion, UV, and ozone. These tests ensure that the product will work in all conditions, and continue to work well for years on your vehicle.

#### **ADDITIONAL TESTING**

And there's more...we also test for other performance attributes to make sure our products meet our high expectations.

- Security Testing to ensure security and theft resistance
- ADAC City Crash 8g or 12g dynamic test to simulate a crash situation
- Impact To ensure resistance to impact from flying objects or from dropping the product
- Paint and Decal Adhesion To make sure the paint and decals are durable
- PAH and REACH To ensure materials used in the products do not contain certain substances and are safe for our consumers and environment
- Usability Making sure our product is easy and safe to use as intended
- User Field Testing Getting products in use by real people in the real world