

Finding the right ultrasonic probe for your industry

To keep your assets reliable, you don't just need an ultrasonic probe. You need the ultrasonic probe that's fit for your industry and machinery. We know there are many options to choose from and the process of finding the right fit can be overwhelming. This buyer's guide will help walk you through the essentials of what to look for in order to ensure precision, usability and longevity.

Application



What to look for

Ultrasonic probes can range from straight beam to immersion, with models tailored to a variety of industries. When searching for the best probe for your assets, you want to focus on parameters like frequency, element size, and form factor.



Why it matters

To have the most reliable and accurate inspections, you need to know which transducers are built for your specific assets. Because probes can serve a wide range of applications, the wrong one can render your data useless.



Benefit

Whether it's aerospace, oil & gas, or transportation, Waygate Technologies can help you find the most reliable probe to fit your needs. And if those needs can't be met by our 600+ models, we can customize a probe to get the job done.



Materials



What to look for

Accuracy and durability are the most imperative aspects of your probe, and materials like piezoceramic and stainless steel housings are the most essential factors in providing you just that.



Why it matters

When it comes to keeping your assets reliable, your probe's components need to be too. Utilizing the best materials enables you to get the most precise readings from a probe that's able to withstand continuous use.



Benefit

One of Waygate Technologies' most crucial processes is sourcing for only the highest-quality components and materials—such as in-house piezoceramic processing—leaving you with fewer repairs and more time in the field.



Testing



What to look for

It's important to check whether the probe you're purchasing has undergone performance testing in order to know whether it meets rigorous specifications.



Why it matters

Each probe must undergo rigorous testing to not only measure its accuracy and durability, but to ensure continuity throughout models as well. This allows you to replace your probe with the same exact model without the need for any calibration adjustments.



Benefit

Waygate Technologies tests each probe as if it were out in the field to monitor signals, frequency and bandwidth, all to guarantee that they're not only meeting industry standards, but yours as well.



Serviceability



What to look for

Probes should be built to last, but you want to make sure they're easily fixable as well.



Why it matters

Ultrasonic probes typically work in extreme environments, which can lead to unforeseen and difficult-to-prevent wear and tear that can ultimately impact your uptime and productivity.



Benefit

Waygate Technologies designs products that can be serviced efficiently, with a global supply chain that can quickly and easily find cost-efficient replacement parts down to the smallest, most obscure detail. And our one-year warranty on all probes allows you to replace inspection equipment when beyond repair.



We have developed three different series of transducers, each with their own unique characteristics, to respond to your specific needs.



Alpha Series

The Alpha Series provides the most heavily damped broadband performance with the least needed gain. Its high sensitivity provides the best signal-to-noise ratio for applications where axial or distance resolution take precedence.



Benchmark Series

The proprietary piezocomposite active elements make our Benchmark Series a no brainer for excellent sensitivity, with a high signal-to-noise ratio for unmatched penetration. They have superior acoustic matching to plastics, water, coarse grain metals and other low-impedance materials.



Gamma Series

The Gamma Series holds its own with medium pulse and damping, best for general purpose applications where gain and distance resolution take precedence over axial resolution.