WC BRANHAM®
SOLUTIONS IN MOTION

Choosing Your Gearbox: Checklist of Must-Have Specs

Input and Output Needs? (Torque & RPM)	Know your required torque and RPM for both input and output. Certain applications, such as heavy manufacturing machinery, will likely require higher-speed, higher-torque gearboxes.
Shaft Diameter?	Know what your gearbox bore sizes should be. You want to make sure you have the right fit so your design works more efficiently and also to minimize wear and tear.
Gear Ratio?	Decide if you need a 1:1, 2:1, 3:2, 10:1 or 20:1 ratio.
Shaft Alignment?	Determine if your design requires a gearbox with offset shafts or shafts on the same plane. This information will dictate whether you'll need a spiral bevel gearbox or a helical gearbox.
Special Requirements?	Consider whether or not your design will be exposed to harsh environments. If your design requires corrosion-resistant materials, you may want to consider our INSERT-A-SHAFT® CRL Washdown gearboxes or our INSERT-A-SHAFT® Stainless Steel series. These are ideal for rugged, wet operating environments, which means they are good choices for systems used in industries like food processing, meat packing, or chemical processing where machinery must undergo high-pressure chemical sanitation washes frequently.
Backlash Tolerance?	All mechanical systems need to account for some level of gear backlash, but certain applications, like those that require precise motion control, have a much lower backlash tolerance. If your system has stricter backlash requirements, consider exploring helical, spiral bevel, or worm gears.