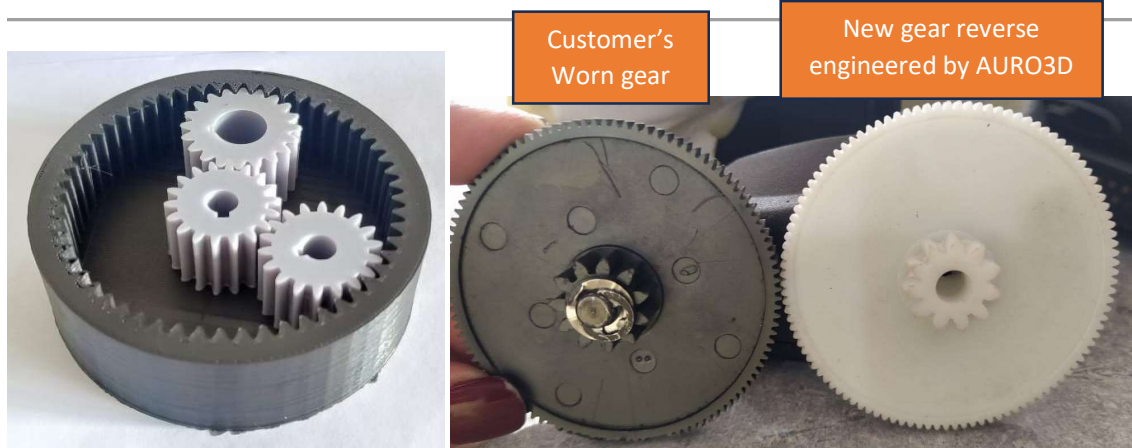


AURO3D

Pioneers in Precision Custom Gears

Engineered for Excellence: Special Custom Gears from AURO3D

Delivering Precision Plastic & Mechanical Gearing Solutions for India's Industries



Introduction

At AURO3D based in Sangli, Maharashtra, we are pioneers in the custom manufacturing of high-performance gears. We understand that standard solutions often fall short when your application demands precision, durability, and a perfect fit. That's why we specialize in Special Custom Gears, meticulously engineered to meet the unique requirements of your machinery and systems. From micro-robotic gears to large industrial components up to 300mm in diameter, we are your trusted partner for custom gearing solutions in India.

Why Choose Our Custom Gears?

Our expertise in custom gear manufacturing allows us to deliver solutions that offer significant advantages:

Precision Engineering:

We go beyond standard. Our experienced engineering team works collaboratively with you to design and manufacture gears with the exact tooth profile, pitch, and dimensions required for your unique motion system, ensuring smooth, efficient, and reliable power transmission.

Optimal Material Selection:

We utilize various grades of high-quality plastic rods and other robust materials to produce gears that excel in their intended environments. Our Plastic Gears are lightweight, corrosion-resistant,

and significantly quieter than metal gears, often operating without lubrication in low-load applications, making them economical for many light-duty uses.

Superior Durability:

Crafted with a sturdy design, our gears are built to last, offering excellent wear resistance and long operational life, minimizing the need for frequent replacements.

Negligible Maintenance Needs:

Our gears are designed for high performance with minimal upkeep, contributing to lower operational costs and increased uptime for your machinery.

Convenient Installation:

Engineered for precise fit and easy integration into your assemblies, ensuring a hassle-free setup process.

Our Custom Gear Capabilities:

We are equipped to provide a diverse range of Custom Gears tailored to your specific needs:

Materials:

We work with various grades of plastic (including Nylon for high strength and wear resistance, and ABS for impact resistance and stiffness) and other specialized materials to ensure optimal performance.

Types of Gears:

- Spur Gears: For parallel shafts, simple and highly efficient.
- Helical Gears: For smoother and quieter operation, often with higher load capacity.
- Worm Gears & Worm Wheels: Ideal for high-ratio speed reduction and non-intersecting shafts.
- Bevel Gears: For power transmission between intersecting shafts, commonly at 90 degrees.
- Internal Gears, Rack & Pinion, Micro Gears, Pinions, and other Custom Gear Profiles.

Size Range:

We specialize in precision gears ranging from very small micro gears (e.g., for robotic and toy applications) up to large industrial gears with a diameter of 300mm.

Manufacturing Processes:

We employ Precise Additive Manufacturing for small quantity production from plastic rods, ensuring high precision and quality.

Beyond Manufacturing: Our Engineering Services

At AURO3D we offer comprehensive engineering support to bring your gear concepts to life:

Reverse Engineering:

Have an old, worn-out gear needing replacement, or missing original drawings? Our experienced engineering team uses advanced measuring and inspection tools to precisely determine the geometry of your existing gear, allowing us to accurately recreate and manufacture copies.

Prototyping:

Crucial for new product development, we design and manufacture prototype gears that adhere to your strict requirements. Whether assisting in the initial gear design or working from your detailed drawings, we produce the exact prototype needed to prove your design's effectiveness.

Redesign Services:

If your gears need improvement, our engineering and production teams can help redesign existing gears, even if we didn't originally manufacture them. We work with you to enhance gear quality and performance, creating the exact solutions you need.

Industries We Serve:

Our Custom Gears are vital components in a variety of sectors:

Automotive Industry:

- Speedometer gears, internal mechanisms, sensor drives, and lightweight components.

Robotics & Automation:

- Precision gears for robotic arms, actuators, and automated assembly lines.

Medical Devices:

- Small, quiet gears for pumps, diagnostic equipment, and surgical tools.

Consumer Electronics:

- Durable gears for printers, cameras, and intricate electronic mechanisms.

Industrial Machinery:

- Power transmission components for specialized equipment, instruments, and textile machinery.

Toys & Models:

- Durable, smooth-running gears for high-quality toy mechanisms.
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Partner with the Gear Experts in Your Region!

We are proud to be a leading Gear Manufacturer in Sangli, Maharashtra, serving clients across the Kolhapur, Satara, and Solapur regions, and throughout India. Whether you are a Gear Manufacturer looking for specialized components or an OEM seeking a reliable custom gear supplier, we are here to help.

Contact Us Today for a Custom Gear Solution!

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