

TECHNICAL PRODUCT SPECIFICATION

Heavy-Duty Multi-Spline Gear Shaft System Documentation

Manufacturer:	ESS KAY ENGINEERS	Report Date:	July 1, 2026
Component:	Heavy Industrial Multi-Spline Power Transmission Shafts	Document Ref:	EKE-GS-2026-07G

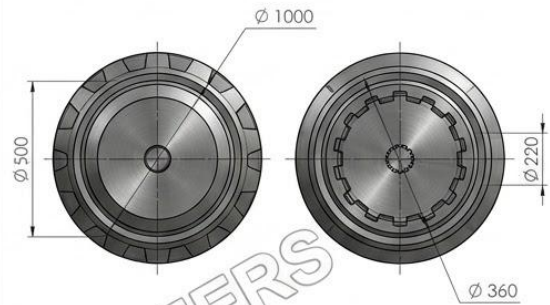
1. Blueprint Drawing & Orthographic Projections

The engineering blueprint drawing below specifies the dimensional parameters of the high-torque gear shafts across standard multi-axis projections: ISO 1 Rendering, Plan View profile with diameters, Side View indicating key envelope lengths (L, L1, L, R), and an End View tooth angular orientation schematic.

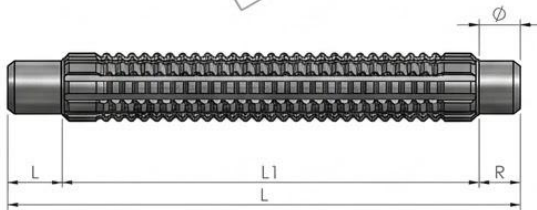
ISO 1



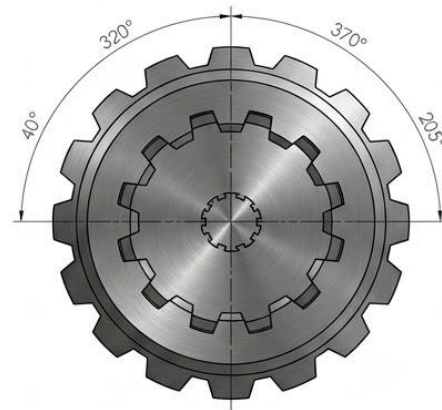
PLAN VIEW



SIDE VIEW



END VIEW



2. Engineering Parameters & Tooth Geometry

Structural & Mechanical Design Features

- **Complex Segmented Splines:** Alternating cross-cut geometric splines engineered for maximum positive locking engagement and high torque capability in heavy industrial gearboxes.
- **Integrated Base Collars:** Rigid smooth step-down diameters at both driving ends designed for heavy-duty bearing seats and coupling junctions.
- **Angular Tooth Distribution:** Precise symmetrical internal and external radial indexing profiles (as analyzed under the End View panel) secure smooth gear meshing.
- **Manufacturing Quality Audit:** Monitored and verified under strict metrology protocols by ESS KAY ENGINEERS to ensure uniform tooth pitch concentricity and high shear resistance.