

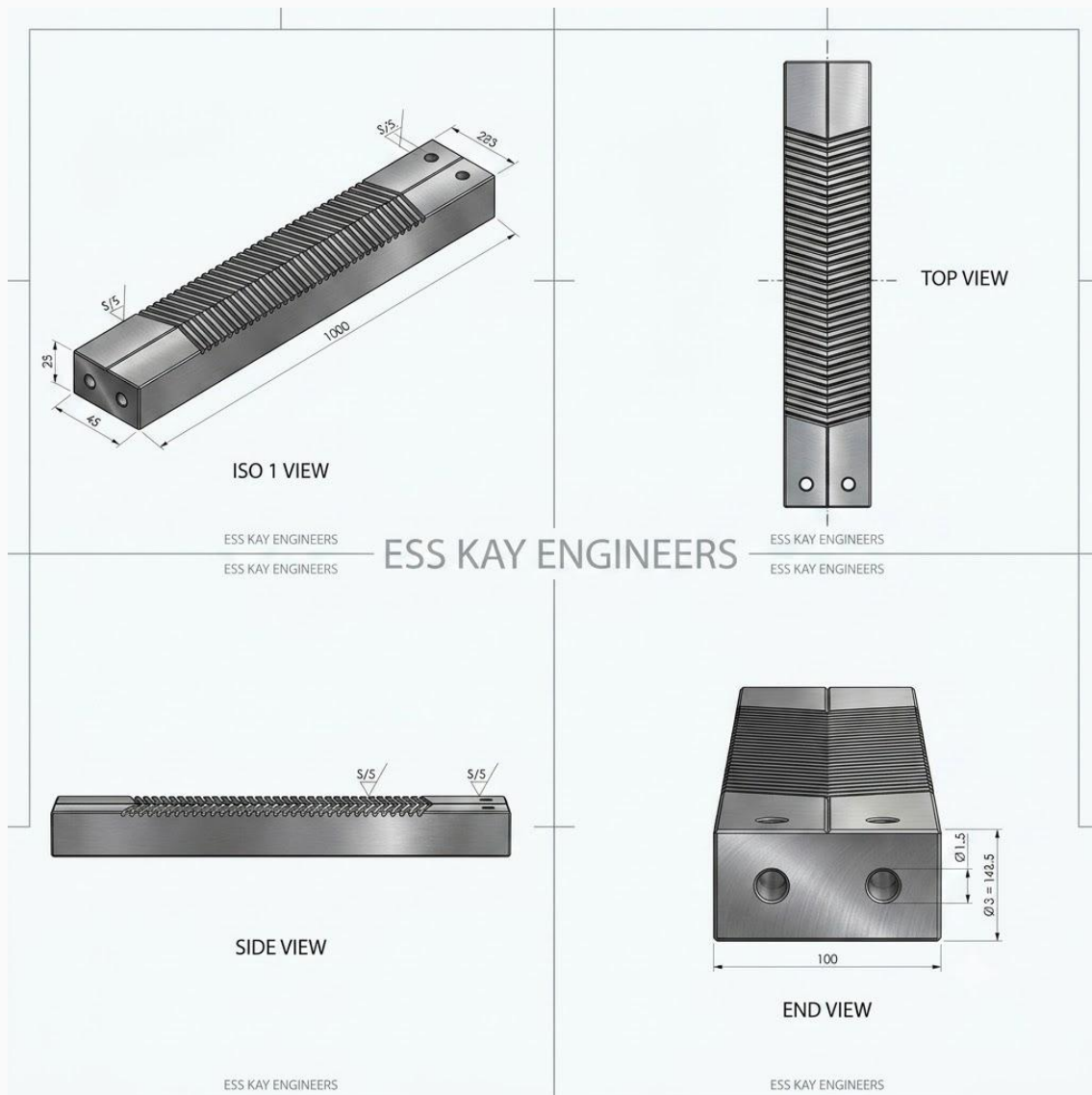
TECHNICAL PRODUCT SPECIFICATION

Precision Herringbone Toothed Rack Documentation

Manufacturer:	ESS KAY ENGINEERS	Report Date:	July 1, 2026
Component:	Precision Herringbone Linear Gear Rack	Document Ref:	EKE-HR-2026-09D

1. Multi-View Orthographic Blueprints & Projections

The detailed technical drawing blueprint layout below details the component under four specific engineering perspectives: ISO 1 View with primary envelope markings, Top View for pitch tracking, Side View, and End View for mounting clearance tolerances.



2. Geometric & Engineering Characteristics

Design Profile Breakdown

- **Herringbone Double-Helical Tooth Profile:** Dual opposing helical gear paths cancel lateral axial thrust, providing smooth high-load translation and silent linear kinematics.
- **Integrated Guide End-Blocks:** Solid un-toothed end faces feature accurate dual mounting alignment counter-bores/pins for rigid tool-nest placement.
- **Dimensional Standards:** Engineered for precision linear actuation frameworks with precise transverse tooth alignment across the longitudinal axis.
- **Quality Certification:** Fully verified by ESS KAY ENGINEERS under strict metrology protocols to guarantee tooth profile concentricity and edge finish.