

# TECHNICAL PRODUCT SPECIFICATION

Modular Power Transmission Shaft & Precision Core Pin Assembly Kit

|                      |                                                                         |                      |                 |
|----------------------|-------------------------------------------------------------------------|----------------------|-----------------|
| <b>Manufacturer:</b> | ESS KAY ENGINEERS                                                       | <b>Report Date:</b>  | July 1, 2026    |
| <b>Component:</b>    | Multi-Component Transmission<br>Lead Screw, Splined Rod, &<br>Core Pins | <b>Document Ref:</b> | EKE-KT-2026-15K |

## 1. Multi-View Spatial Projection Analysis

The technical documentation panel below maps the full geometric envelope and layout of the mechanical component kit from four indexed industrial perspectives: Front View, Right View, Left View, and Top View orientations.



## 2. Engineering Parameters & Kit Breakdown

### Mechanical Structural Characteristics

- **High-Precision Lead Drive Screw:** Main transmission shaft with continuous helical threading and precision-ground step-down driving ends for accurate linear actuator translation.
- **Multi-Spline Drive Shaft:** Secondary companion shaft with precise longitudinal linear teeth designed for positive-locking high-torque rotary engagement.
- **Graduated Slotted Core Pins:** Includes four micro-pins with stepped configurations, designed for aligning, locating, or expanding within precise sub-assemblies.
- **Parallel Stock Plate:** Accompanying rectangular ground steel bar to assist in mounting stability or mechanical keyway setup.
- **Quality Engineering Audit:** Manufactured and audited under strict industrial standards by ESS KAY ENGINEERS to certify linear straightness and exact run-out alignment across all parts.