APPLICATIONS

Knife Modules & Loose Knives are custom designed for slitting the following materials:

- Thin Film Photovoltaic Solar Panel media, Metal foil and Plastics (CIGS)
- Metal Foils for capacitors
- Fine grade Diamond coated films for burnishing & super-polishing
- Flexible circuit boards
- Fine Gauge Steels
- Magnetic Media (coated Polyester & P.E.T.)

BENEFITS

- Knife designs to suit your current slitting system, Flex/Solid, Spring Loaded & Dish-shaped knives
- Knife Modules suitable for Wrap or Kiss Slitting
- Precise presentation of web to the knives using Pivoting Camelback design
- Improved knife life with precision 0.001 mm (.000040") increment side load mechanism
- Faster setup times with accurate & repeatable first knife contact continuity check system

Series III, one meter wide web, Spring-loaded Dished Knives, and Precision Side Load Mechanism

Assorted Knives, Knife Holders and Spacers

Flex/Flex Arrangement with Camelback, 1026 knife positions
FEATURES

- Standard and custom designed Knife Modules and Knife Configurations
- Knife materials include:
  - Ultra-fine and Sub-micron Tungsten Carbide
  - A2, D2, and M2 heat treated tool steels
- Spacer materials include:
  - Ceramics, Silicon Nitride, Silicon Carbide and Alumina Oxide
  - Heat treated Stainless Steel
  - Tungsten carbide
- Knife & Spacers O.D. fabricated to 180 mm (7.0”)
- Thickness from 0.381 mm (.150”)
- Tolerance +/- 0.0005 mm (.000020”)
- Flatness & Parallelism within 0.0005 mm (.000020”)
- Surface finish down to 0.006 µm Ra (.25 µ inches Ra)

ENGINEERED SOLUTIONS

ITI is a full service supplier of Slitter Knife Modules and Loose Knives and have been solving web conversion problems since 1975. Quality analysis extends from component First Article inspection to Statistical Process Control (SPC) of all knives and spacers. Dimensional integrity of all critical specifications and tolerances is verified in ITI’s environmentally controlled metrology laboratory.

ITI offers the following additional services:

- Expert process analysis and system hardware design
- On-site engineering, installation and product support
- Knife configuration design, Flex/Solid, Flex/Flex, Spring Loaded and Dished-Shaped styles, fabrication and stacking
- Standard and custom designed Knife Modules
- Knife Module re-sharpening and maintenance services

ITI has been producing high precision tooling since 1961. ITI products are fabricated at our 65,000 square foot facility in Oxnard, California, USA. Only the highest quality materials are used. Critical properties of materials are all carefully considered during the design stage to ensure optimized performance. ITI’s engineering staff is proficient in working with customers to provide the best solution for each application.