



Dual rail flux pre-cleaning system

Korea Semiconductor System .Co., ltd

Beyond Imagination

Of customer satisfaction with
quality products
and services

➤ Executive summary

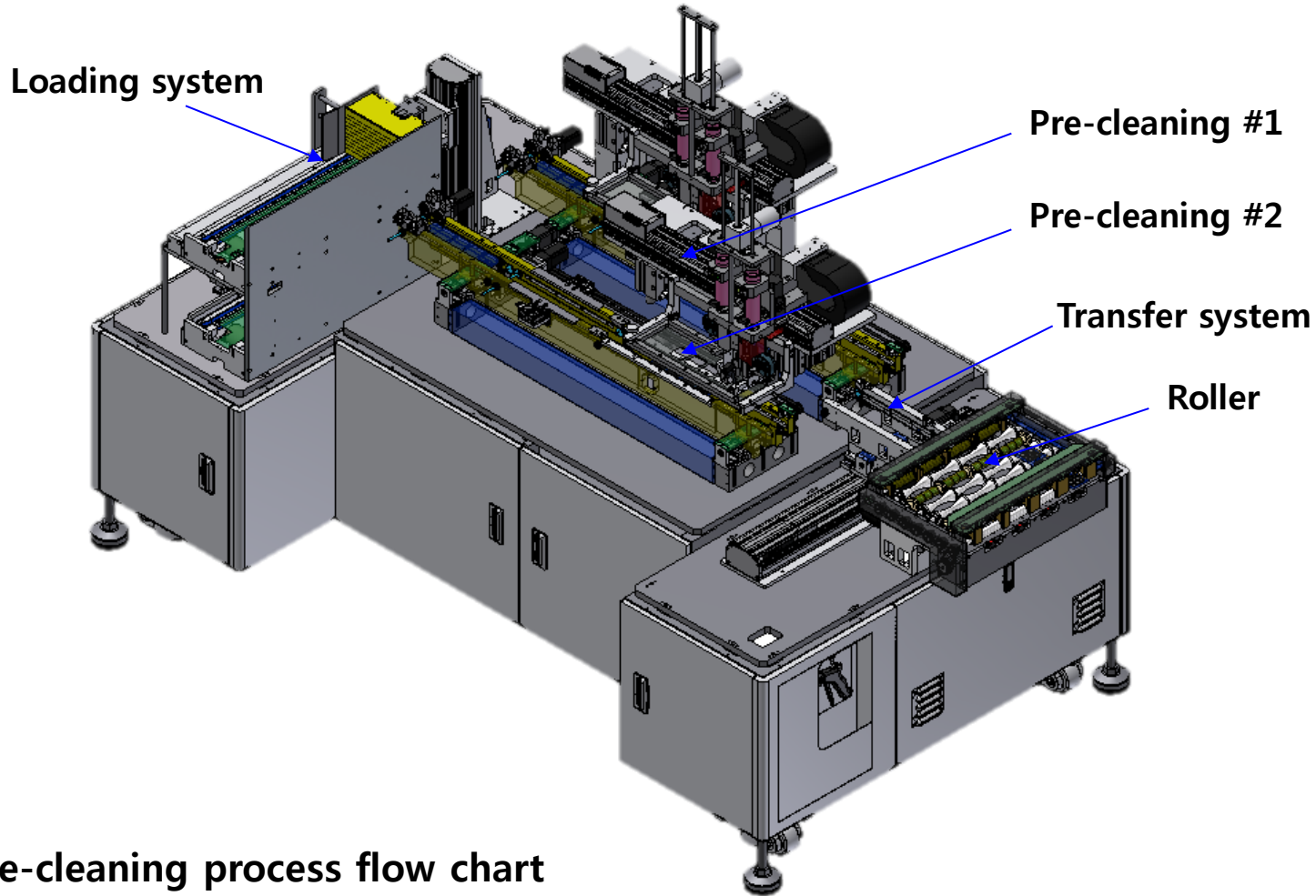


- Multiple function system for cleaning. OSP pre cleaning and Via cleaning.
- High productivity
- Ensure Reliability and Quality

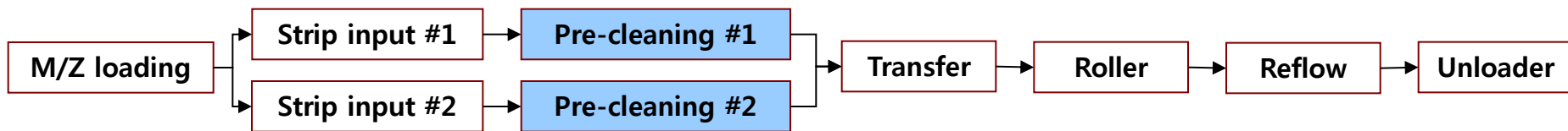
➤ System

- . KPM300 is flux dotting for OSP removal on bottom ball pad.
- . KPM300 optimize the blade angel, force, special station block to apply reliable ensure the quality.
- . For high-productivity, dual rail had been applied.

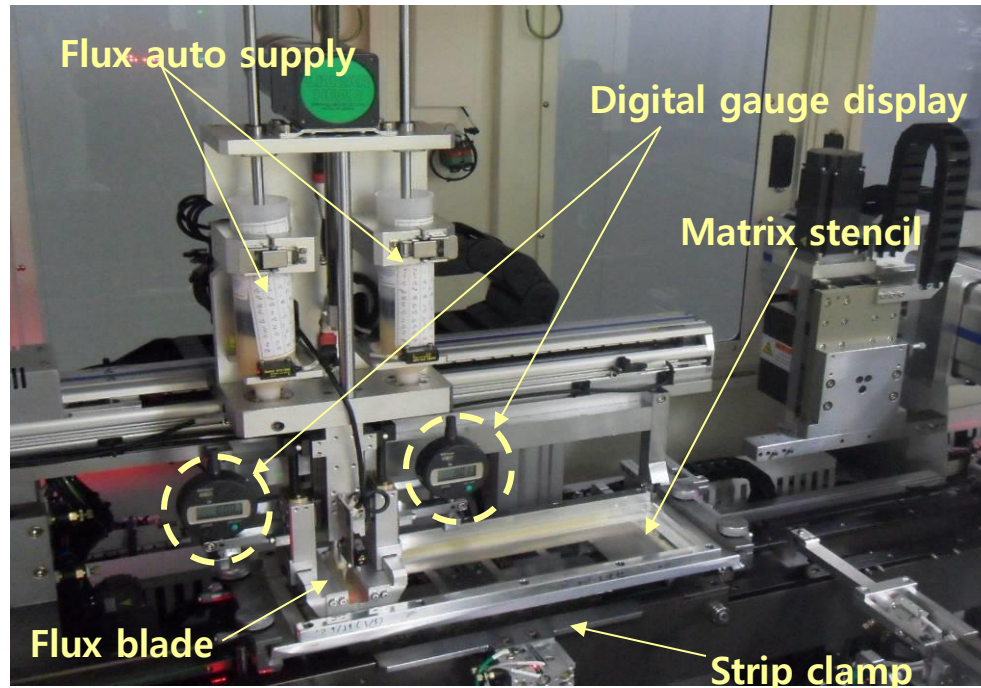
➤ System overview / Flow chart



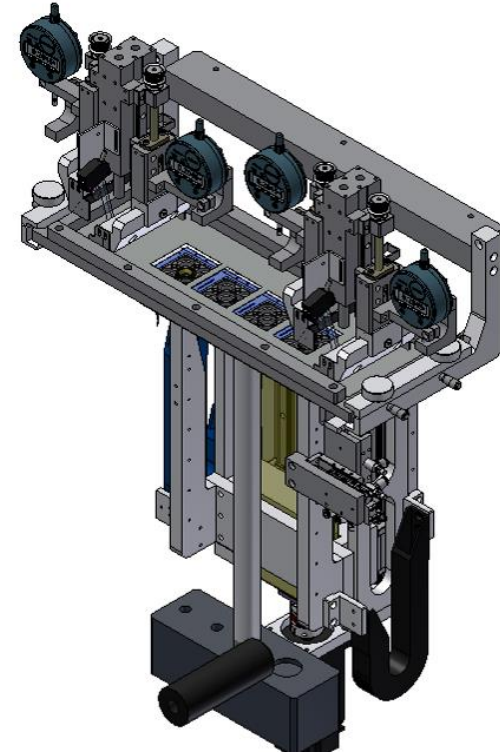
➤ Pre-cleaning process flow chart



➤ Pre-cleaning process



Pre-cleaning for stencil area

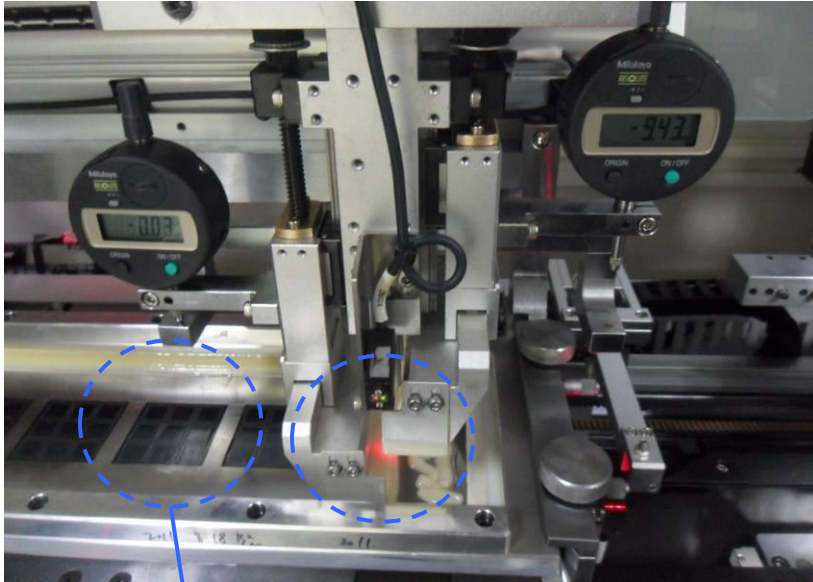


➤ Pre-cleaning special feature

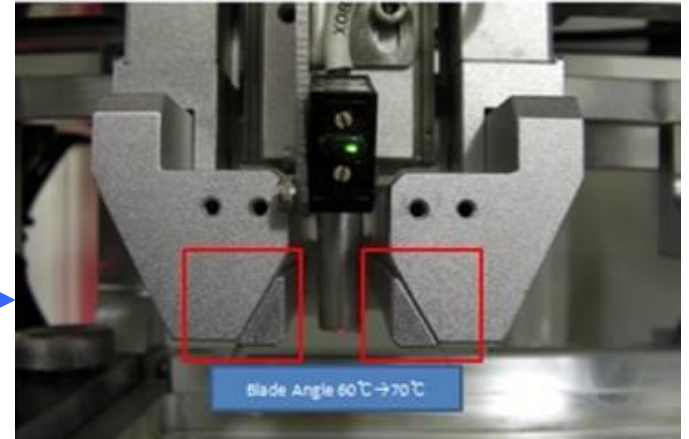
- Optimized blade angle, Flux applied into OSP strip and via hole.
- Parameter setting for station block height control and prevention material damage.
- Flux volume maintained the same as constant blade force control and digital display.
- Strip warpage compensation by station block and strip clamp.
- Reliable flux auto supply and management.

➤ Stencil flux coverage quality

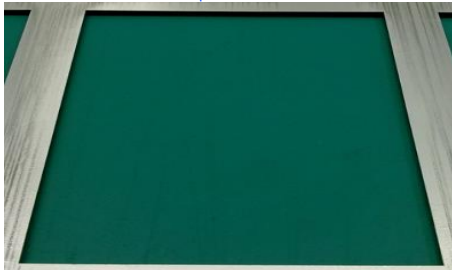
Optimized the blade angle and force after flux squeeze, below images showing the full coverage.



Via cleaning for stencil area



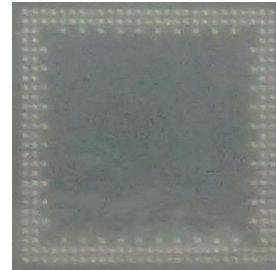
Optimized blade angle



Stencil type



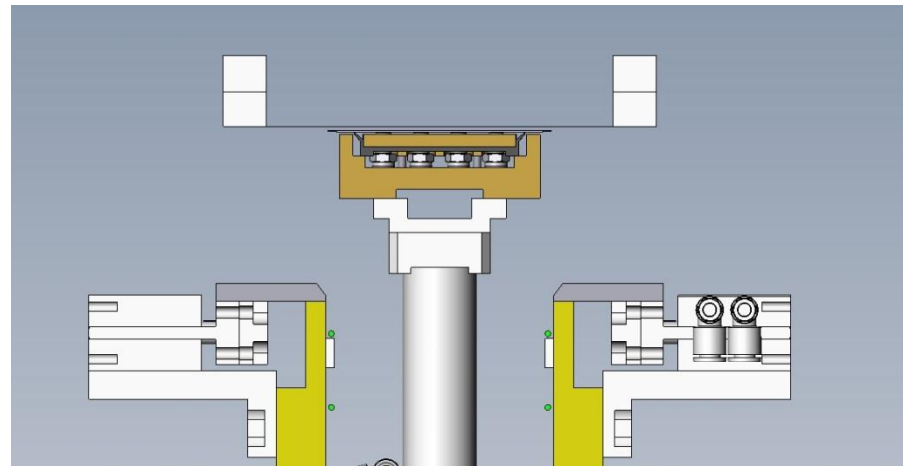
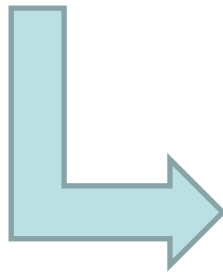
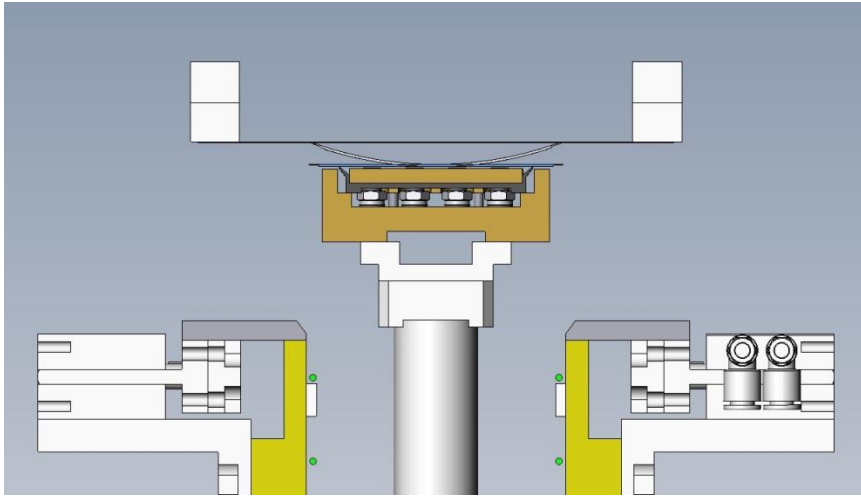
Flux squeezing



After reflow quality

➤ Warpage Compensation

- Bottom Index & Stencil movement to provide the most optimized strip handling for warped strips.



➤ Machine handling specification

Item	Dual rail flux pre-cleaning system _ KPM300	Remark
Cleaning method	Stencil squeeze	
Application package	All Package _OSP, Via hole flux cleaning	
Package length	170mm ~250mm	
Package width	60mm ~ 100mm	
System alignment	Strip guide block/ Controlled location pin hole	
Special function	Blade force controlled by motor Optimized blade angle, Special station block Key in history	
MTBA	2hrs	
MTBF	168hrs	
S.P.M	OSP stencil cleaning : 6strip/min Via Hole cleaning : under 4trip/min	
Up time	99%	
Conversion Parts	Stencil, Urethane, station block	
System price		
Delivery		