IPTE

DEPANELING
FEEDING
MARKING
MOUNTING
SCANNING
SOLDERING
VISION
WELDING
CLEANROOM
CONVEYING
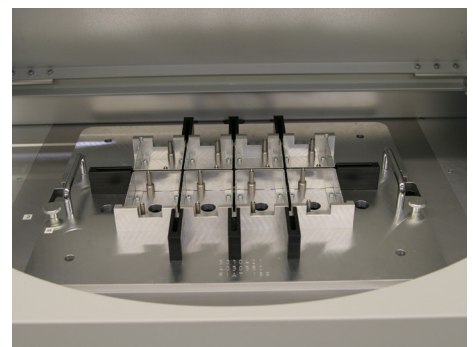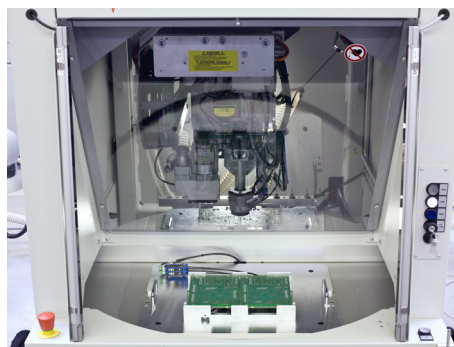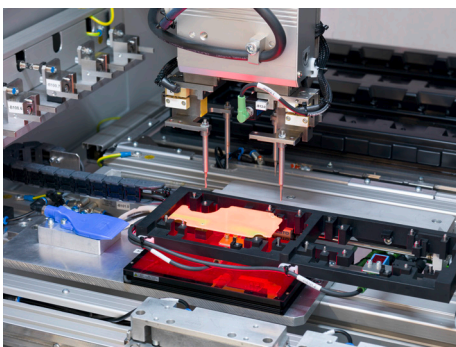
Depaneling

IPTE Depaneling systems are designed to singulate individual boards from a panel in a high speed, low stress process. The depaneling units are economical in footprint, cost, have an excellent return on investment and embrace all the latest concepts in lean design.
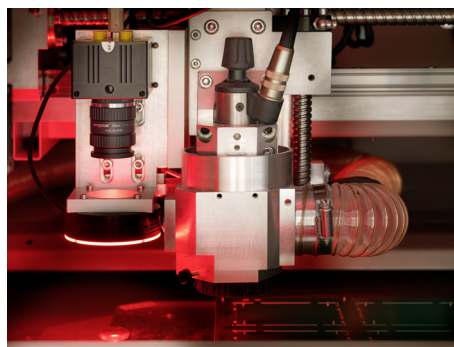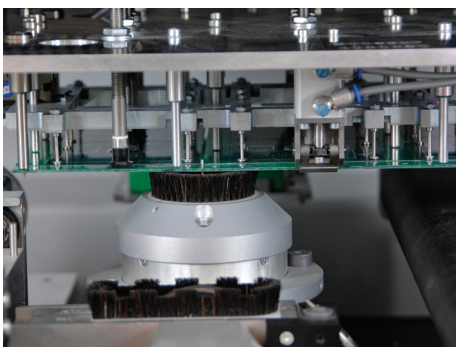
The welded steel framed unit is fully equipped with its own control and diagnostics via a user friendly interface. Each unit is fully compatible with other SMEMA units and other standard equipment in electronics manufacturing lines to ensure a truly 'plug and play' assembly line strategy. A large variety of routing is possible: top or bottom, routing with saw, router bit and laser; each process type offers a robust solution to the market.
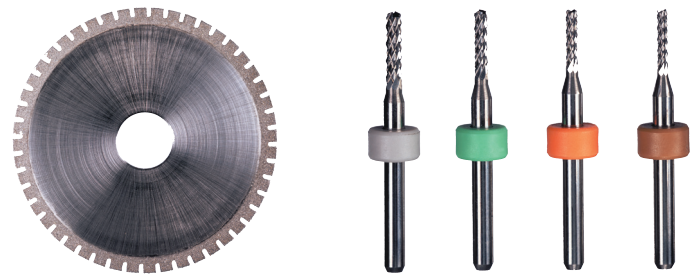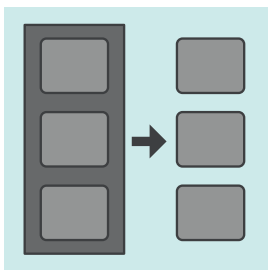
In-line depaneling

SpeedRouter
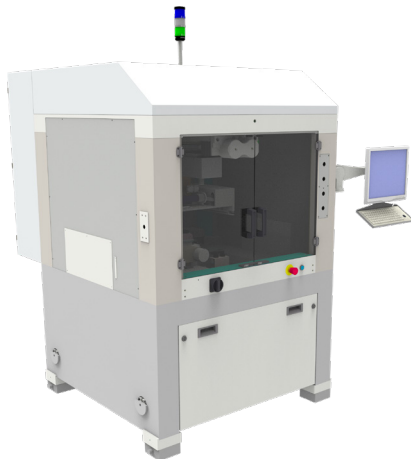
- Robust aluminum cast and granite construction
- Linear motor technology
- Bottom side routing
- Capable of routing and/or sawing
- Product specific gripper for complete PCB
- Flexible outfeed handling (conveyor, flat belt, tray)
- Bottom side dust cleaning

FlexRouter Gen 3

- Linear motor technology
- Bottom side routing
- Ideal for high diversity, high volume production
- Flexible servo and pneumatic grippers
- Flexible outfeed handling (conveyor, flat belt, tray)
- Bottom side dust cleaning

Off-line depaneling

EasyRouter II

- High speed, low stress depaneling
- Top side routing with high frequency spindle
- Top or Bottom side dust cleaning
- Depaneling accuracy ±0,1 mm
- Turntable concept for up to two fixtures
- Loading/Unloading during depaneling process
- Camera assisted teaching
- Ionizer

SLIMRouter

- High speed, low stress depaneling
- Top side routing and dust cleaning
- Depaneling accuracy ±0,2 mm
- Fixed configuration
- Turntable concept
- Loading/Unloading during depaneling process
- Ionizer
- Plug and Play

EasyRouter II Plug&Play

- High speed, low stress depaneling
- Top side routing with high frequency spindle
- Top or Bottom side dust cleaning
- Depaneling accuracy ±0,1 mm
- Turntable concept for up to two fixtures
- Loading/Unloading during depaneling process
- Camera assisted teaching
- Ionizer
- Plug and Play

TopRouter

- High speed, low stress depaneling
- Top side routing and/or sawing
- Top or Bottom side dust cleaning
- Depaneling accuracy ±0,1 mm
- Turntable concept for up to two fixtures
- Loading/Unloading during depaneling process
- Router bit breakage detection and life monitoring
- Automatic router bit exchange
- Ionizer

Depaneling specification

In-Line Depaneling Equipment

	FlexRouter Gen 3	SpeedRouter
Dimensions (L x D x H):	1.000 x 2.200 x 2.000 mm	1.200 x 1.600 x 1.900 mm
Working area:	420 x 420 mm	410 x 330 mm (*)
Routing access:	Bottom	Bottom
Top side component clearance:	50 mm	30 mm
Bottom side component clearance:	8 mm	8 mm
PCB Loading/Unloading:	In-Line	In-Line
Cutting tool:	Router	Router and/or Saw
Cutting speed router:	max 60 mm/sec	max 60 mm/sec
Cutting speed saw:	-	max 120 mm/sec
Depaneling accuracy:	± 0,1 mm	± 0,1 mm
Router bit exchange:	manual, Option Auto 8 Bits	Auto Exchange 25 Bits
Saw blade exchange:	-	manual
Tool break detection:	option	option
Ionisation:	standard	standard
Weight:	1.600 kg	1.400 kg
Vacuum cleaner:	option (external)	option (external)

(*) Depending on configuration

Off-Line Depaneling Equipment

	EasyRouter II	SLIMRouter	TopRouter
Dimensions (L x D x H):	1.080 x 1.630 x 1.300 mm	1.000 x 1.630 x 1.300 mm	1.000 x 1.900 x 1.840 mm
Working area:	425 x 365 mm (*)	400 x 350 mm (*)	435 x 370 mm (*)
Routing access:	Top	Top	Top
Top side component clearance:	8 mm / 30 mm (*)	8 mm (*)	8 mm
Bottom side component clearance:	30 mm	30 mm	30 mm
PCB Loading/Unloading:	Manual Front	Manual Front	Manual Front
Cutting tool:	Router	Router	Router and/or Saw
Cutting speed router:	max 60 mm/sec	max 60 mm/sec	max 60 mm/sec
Cutting speed saw:	-	-	max 200 mm/sec
Depaneling accuracy:	± 0,1 mm	± 0,2 mm	± 0,1 mm
Router bit exchange:	manual	manual	Auto Exchange 10 Bits (*)
Saw blade exchange:	-	-	manual
Router bit break detection:	standard	standard	standard
Plug and Play:	option	standard	-
Ionisation:	standard	standard	standard
Weight:	650 kg	600 kg	1.100 kg
Vacuum cleaner:	option (external)	option (external)	option (external)

(*) Depending on configuration