Automatic Inserting Machine
自动插件机

Tyco Electronics

Our commitment. Your advantage.

Automatic Multi-head Inserting Machine-Mulserter 200
全自动多头插件机 Mulserter–200

Automatic Multi-head Inserting Machine, Model:Mulserter 200, is designed to insert Eyelet pins, Gripper pins, Round pins, Lugs and odd shaped components into PCBs in accordance with Insertion Programs made by machine itsellf.
The operator can manage the usage of head tools selectively with the combination of three different kinds of Insertion Heads according to the production schedule. The main elements of this model are machine itself & PCB feeding system,and the machine consists of Insertion Head, Clinch Unit, X-Y Table, Positioning Unit, Component Feeding Unit, LCS system, PC and Electric Parts. This model has advantage of reliable performance & low noise & economical usage with the simplicity of mechanical parts and an easy operating system.

全自动多头插件机设备Mulserter 200主要用于在PCB上插入各种元器件（Eyelet Pin, Gripper Pin, Round Pin, Lug以及其他异型件，插件的程序可在机器上编制。
用户可根据生产要求有选择的使用三种不同的插入头，此型号由主机和PCB传送系统组成。主机由插入头、Clinch单机，X–Y工作台，激光定位校正系统，元器件传送系统，PC和电气部份组成。
Mulserter 200的特点有：稳定可靠、经济实用、容易操作和低噪音。

Mulserter-200

Main Feature

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS-232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C because only one M/C can excute to insert three different kinds of components.

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS-232C接口，可便捷的与外界通讯。

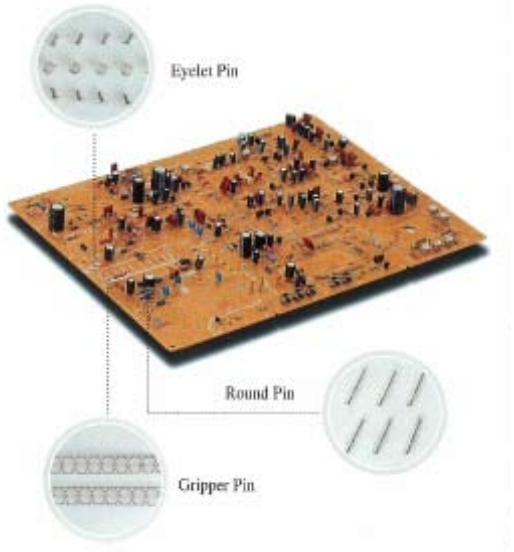
简单方便操作功能
操作者可在操作面板上方便的按照程序运行机器。
通过操作软件，操作者可方便的操控机器

经济实用
用户可使用一台机器处理最多三种不同类型的元器件以达到经济之目的，节省采购成本。

MAIN SPECIFICATIONS

NO	Specification	Mulserter 200
1.	Applicable PCB Size(L×W)	Min:100×80(mm)/Max.460×360(mm)
2.	PCB Transfer Direction	L→ R / R → L
3.	Insertion Speed	0.27~0.4sec. per component (variable as component)
4.	Table Speed	22.5M per min.
5.	PCB Loading Time	5.5sec
6.	Component Kinds of Insertion applicable	Three kinds
7.	Component Feeding Method	Bowl Feeding
8.	Clinch	Quadrisection/Hexasection
9.	M/C color	White Gray or Blue
10.	M/C Dimension (L×D×H)	2210(L) ×1225(D) ×2000(H)mm
11.	M/C Weight	1000kg
12.	PC (as controller)	Pentium Ⅲ- 1GHz DSP Card, Disk on Module (32MB) 15" Color Monitor
13.	Air Source	5~6 kgf/cm2
14.	Air Consumption	656Nℓ/ min
15.	Electric Power	220V±10%/50~60Hz/1.7kw
16.	Temperature	10℃~35℃
17.	Humidity	30~70%
18.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB



Automatic Terminal Inserting Machine Mulserter 300T
全自动端子插件机 Mulserter 300T

Automatic Multi-Inserting Machine, Model: Mulserter 300T, is designed to insert Lugs, Taps, Fuse Holders, Terminals and odd shaped components into PCBs in accordance with Insertion Program made by the machine itself and not to be affected by the shape, direction and size of components.
This machine consists of a Rotary Table and Heads, so the operator is able to select three different kinds of components regardless of a direction.
Convenient to operate via the Touch Screen, which is operated using the Windows System.

全自动多功能插件机Mulserter 300T，用于将插件，保险丝座，端子，异型元器件插入PCB中，无需考虑元器件的外型，方向和尺寸。插件的程序可在机器上编制。 Mulserter 300T包括旋转工作台和插入头，便于用户插入三种不同类型的异型件而无须考虑异型件的方向性。方便于操作者，该机的操作是在WINDOWS 界面下的触摸屏上进行。

Mulserter-300T

Main Feature

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor. Very convenient to operate via the Touch Screen. Special switch is installed for the operator's convenience when programming.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS-232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C because only one M/C can excute to insert three different kinds of components.

TABLE TURNING FUNCTION
Each head can insert components at 4 direction

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息，该机器提供更方便的触摸屏操作功能，并另外安装了一个特殊开关供操作者在机使用。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS-232C接口，可便捷的与外界通讯。

简单方便操作功能
操作者可在操作面板上方便的按照程序运行机器。
通过操作软件，操作者可方便的操控机器

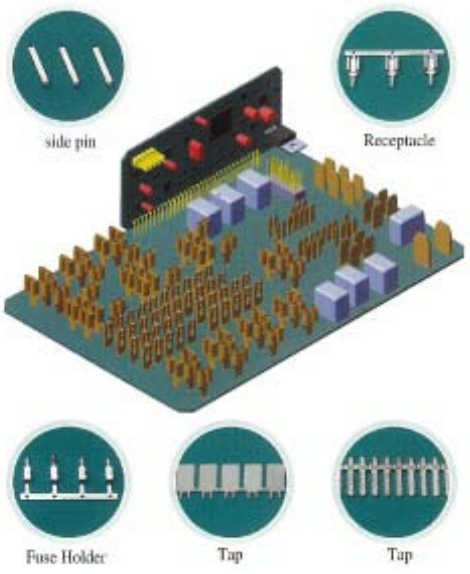
经济实用
用户可使用一台机器处理最多三种不同类型的元器件以达到经济之目的，节省采购成本。

工作台旋转功能
每个插入头以四个方向插入元器件

MAIN SPECIFICATIONS

NO	Specification	Mulserter 300T
1.	Applicable PCB Size(L×W)	Min:100×80(mm)/Max.330×260(mm)
2.	PCB Transfer Direction	L→ R / R → L
3.	Insertion Speed	0.27~0.65sec. per component (variable as component)
4.	Table Speed	22.5M per min.
5.	PCB Loading Time	5sec.
6.	Component Kinds of Insertion applicable	Three kinds
7.	Component Feeding Method	Roll Feeding
8.	Clinch	Quadrisection/Hexasection or press fit
9.	M/C color	White Gray or Blue
10.	M/C Dimension (L×W×H)	2210(L) ×1350(W) ×2000(H)mm
11.	M/C Weight	1000kg
12.	PC (as controller)	Pentium Ⅲ - 1GHzDSP Card, HDD 80GB 14" TFT LCD Touch Screen Monitor
13.	Air Source	5~6 kgf/cm2
14.	Air Consumption	656Nℓ/ min
15.	Electric Power	220V±10%/50~60Hz/1.7kw
16.	Temperature	10℃~35℃
17.	Humidity	30~70%
18.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB



Automatic SB Fuse Inserting Machine Mulserter-2000S

Automatic SB Fuse Insertion Machine, Model: MULSERTER-2000S, automatically inserts SB fuses (or relay) into a J/B (Junction Box). It equips the J/B on the Table Jig for manual insertion, and then uses a pallet and processes loading/unloading automatically with a conveyer.

全自动SB Fuse 插件机，型号：MULSERTER–2000S 自动将SB保险丝（或继电器）插入J/B（接线盒）利用本装备可手动装载和插入 J/B到 Table 上的夹具，并可通过 Pallet和传送带自动实现装载/卸载。

Mulserter-2000S

Main Feature

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor. Very convenient to operate via the Touch Screen. Special switch is installed for the operator' s convenience when programming.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS–232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C because only one M/C can excute to insert six different kinds of components.

TABLE TURNING FUNCTION
Each head can insert components at 3 direction.

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息，该机器提供更方便的触摸屏操作功能，并另外安装了一个特殊开关供操作者在机使用。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS–232C接口，可便捷的与外界通讯。

简单方便操作功能
操作者可在操作面板上方便的按照程序运行机器。
通过操作软件，操作者可方便的操控机器

经济实用
用户可使用一台机器处理最多六种不同类型的元器件以达到经济之目的，节省采购成本。

工作台旋转功能
每个插入头以三个方向插入元器件

MAIN SPECIFICATIONS

NO	Specification	Mulserter 2000S
1.	Applicable PCB Size(L×W)	Max.250×250(mm)
2.	Insertion Speed	0.65sec. per component (variable as component)
3.	Table Speed	22.5M per min.
4.	Loading Method	Manual
5.	Component Kinds of Insertion applicable	Six kinds
6.	Component Feeding Method	Bowl Feeding
7.	M/C color	White Gray or Blue
8.	M/C Dimension (L×D×H)	1150(L) ×2040(D) ×1650(H)mm
9.	M/C Weight	1700kg
10.	PC (as controller)	Pentium Ⅲ - 1GHzDSP Card, HDD 80GB 14" TFT LCD Touch Screen Monitor
12.	Air Source	5~6 kgf/cm2
13.	Air Consumption	656Nℓ/ min
14.	Temperature	10℃~35℃
15.	Humidity	30~70%
16.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB

Automatic Mini Fuse Inserting Machine Mulserter-2000M

Automatic Mini Fuse Insertion Machine, Model: MULSERTER-2000M, automatically inserts Mini fuses into a J/B (Junction Box). It equips the J/B on the Table Jig for manual insertion. And then uses a pallet and processes loading/ unloading automatically with a conveyer.

全自动微型保险丝插件机，型号2000M自动将微型保险丝插入J/B（接线盒）中利用本装备可手动装卸和插入J/B到Table上的夹具。并可通过Pallet和传送带自动实现装载/卸载。

Mulserter-2000M

Main Feature

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor. Very convenient to operate via the Touch Screen. Special switch is installed for the operator's convenience when programming.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS-232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C can excute to insert up to six different kinds of components.

TABLE TURNING FUNCTION
Each head can insert components at 2 direction.

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息，该机器提供更方便的触摸屏操作功能，并另外安装了一个特殊开关供操作者在机使用。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS-232C接口，可便捷的与外界通讯。

简单方便操作功能
操作者可在操作面板上方便的按照程序运行机器。
通过操作软件，操作者可方便的操控机器

经济实用
用户可使用一台机器处理最多六种不同类型的元器件以达到经济之目的，节省采购成本。

工作台旋转功能
每个插入头以二个方向插入元器件

MAIN SPECIFICATIONS

NO	Specification	Mulserter 2000M
1.	Applicable PCB Size(L×W)	Max.250×250(mm)
2.	Insertion Speed	0.55sec. per component (variable as component)
3.	Table Speed	22.5M per min.
4.	Loading Method	Manual
5.	Component Kinds of Insertion applicable	Six kinds
6.	Component Feeding Method	Bowl Feeding
7.	M/C color	White Gray or Blue
8.	M/C Dimension (L×D×H)	1550(L) ×1573(D) ×1658(H)mm
9.	M/C Weight	1600kg
10.	PC (as controller)	Pentium Ⅲ - 1GHzDSP Card, HDD 80GB 14" TFT LCD Touch Screen Monitor
12.	Air Source	5~6 kgf/cm2
13.	Air Consumption	656Nℓ/ min
14.	Temperature	10℃~35℃
15.	Humidity	30~70%
16.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB

Automatic Terminal Inserting Machine Mulserter-2000T
全自动端子插件机Mulserter–2000T

Automatic Terminal Inserting Machine. Model:Mulserter 2000T, is designed to insert terminals and odd shaped components into PCBs in accordance with Insertion Programs made by machine itself.
The user can manage the usage of head tools selectively with the combination of three different kinds of Insertion Heads according to his production schedule. The main elements of this model are machine itself & PCB feeding system, and the machine consists of Insertion Head, Clinch Unit, X-Y Table, Turn and Positioning Unit, Component Feeding Unit, LCS system, PC and Electric Parts. Since this model performs in SERVO & CAM system, it has advantage of reliable performance & Low noise & economical usage with the simplicity of mechanical parts and easy operating system.

全自动端子插件机设备，型号: Mulserter 2000T,通过机器的插入程序实现自动将各类端子和其他异型端子插入PCB。
使用者可根据实际生产计划，有选择的使用三种不同种类插入头。此型号由主机和PCB传送系统构成，主机由插入头，Clinch单元、X–Y工作台、旋转和定位单元、元器件传送单元、LCS系统、PC和电气部件构成、因为该型号设备使用伺服和CAM控制系统、所以有良好的可靠性、低噪音及经济性，且机械部件简单，操作系统简便的优良特性。

Mulserter-2000T

Main Feature

RELIABLE SYSTEM
High–speed insertion and stability performed by SERVO&CAM system

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS–232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C because only one M/C can excute to insert three different kinds of components.

TABLE TURNING FUNCTION
Each head can insert components at 4 direction

系统的可靠性
伺服和CAM控制系统，高速插入和良好的稳定性。

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS–232C接口，可便捷的与外界通讯。

简单方便操作功能
操作者可在操作面板上方便的按照程序运行机器。
通过操作软件，操作者可方便的操控机器

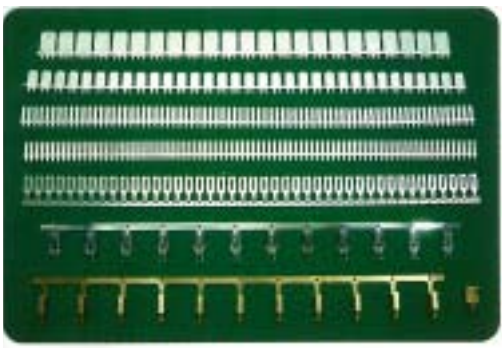
经济实用
用户可使用一台机器处理最多三种不同类型的元器件以达到经济之目的，节省采购成本。

工作台旋转功能
每个插入头以四个方向插入元器件

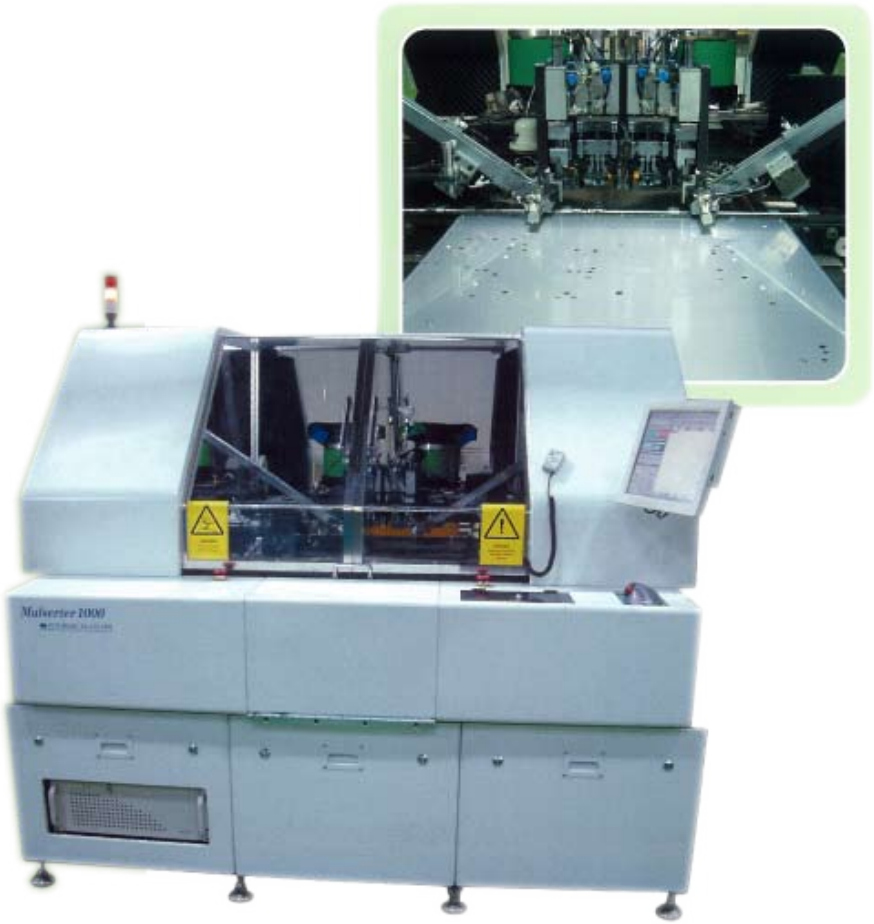
MAIN SPECIFICATIONS

NO	Specification	Mulserter 2000T
1.	Applicable PCB Size(L×W)	Min:100×80(mm)/Max.330×250(mm)
2.	PCB Transfer Direction	L→ R / R → L
3.	nsertion Speed	0.23~0.35sec. per component (variable as component)
4.	Table Speed	22.5M per min.
5.	PCB Loading Time	5sec.
6.	Component Kinds of Insertion applicable	Three kinds
7.	Component Feeding Method	Reel Feeding
8.	Clinch	Quadrisection/Hexasection or press fit
9.	M/C color	White Gray or Blue
10.	M/C Dimension (L×W×H)	2322(L) ×2100(W) ×2100(H)mm
11.	M/C Weight	1200kg
12.	PC (as controller)	For industrial Usage: Pentium 4 2.8GHz DSP Card, HDD 80GB 15” Color Monitor
13.	Air Source	5~6 kgf/cm2
14.	Air Consumption	100Nℓ/ min
15.	Electric Power	220V±10%/50~60Hz/4kw
16.	Temperature	10℃~35℃
17.	Humidity	30~70%
18.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB



Automatic Boss Inserting Machine Mulserter-1000P
全自动Boss插件机Mulserter–1000P



Automatic Boss Inserting Machine, Model:MULSERTER-1000P automatically inserts a boss into the back plate of a PDP. It divides bosses which are provided through the parts feeder and automatically inserts them onto the back plate on an X-Y table, and it can process loading/unloading.

全自动Boss插件机，型号: MULSERTER–1000P自动将Boss插入PDP背板。本装备通过送料器将Boss自动插入X–Y table上的Back plate，并可自动实现装载/卸载。

Mulserter-1000P

Main Feature

MONITORING FUNCTION
It displays the production information,trouble message,and other valuable operating information on the monitor.

PROGRAM GENERATING FUNCTION
System makes the program by itself, and also the operator can easily output, input, edit and save the data with PC.

DIAGNOSTIC FUNCTION
When the M/C has trouble, error message appears on the monitor automatically.

OUTER COMMUNICATION FUNCTION
It is very convenient for operator to handle RS-232C

EASY OPERATING FUNCTION
It is very convenient for the operator to handle M/C by operating software on panel and dualism with key board being established.

ECONOMIC USAGE
The customer can reduce the cost of purchasing M/C because only one M/C can excute to insert four different kinds of components.

监控功能
显示器可显示产品信息，出错信息和各种可用操作信息，该机器提供更方便的触摸屏操作功能，并另外安装了一个特殊开关供操作者在机使用。

编程功能
系统可在线编程，操作者可便捷的通过PC进行输出、输入，编辑和存储数据功能。

诊断功能
当机器出现故障时，机器会自动的在显示器上显示出错信息，以便于及时排除。

外部通讯功能
通过RS-232C接口，可便捷的与外界通讯。

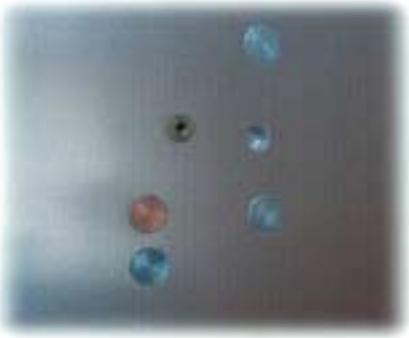
简单方便操作功能
通过操作软件，操作者可方便的操控机器。

经济实用
用户可使用一台机器处理最多四种不同类型的元器件，以达到经济之目的。

MAIN SPECIFICATIONS

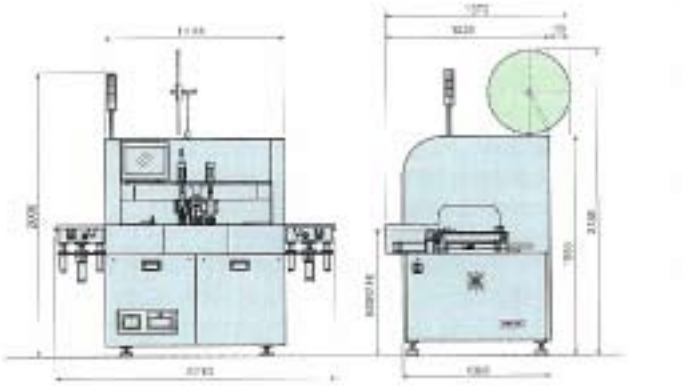
NO	Specification	Mulserter 1000P
1.	Applicable PAD CHASSISB Size(L×W)	for PDP42”~ 57”(user option)
2.	PCB Transfer Direction	L→ R / R → L
3.	Insertion Speed	0.6 sec. per component (variable as component)
4.	Table Speed	22.5M per min.
5.	Loading Time	7sec.
6.	Component Kinds of Insertion applicable	Four kinds
7.	Component Feeding Method	Bowl Feeding
8.	M/C color	White Gray or Blue
9.	M/C Dimension (L×D×H)	4460(L) ×2300(D) ×2128(H)mm
10.	M/C Weight	2500kg
11.	PC (as controller)	PentiunIII-1GHz DSP Card, HDD 80GB 14” TFT LCD Touch Screen Monitor
12.	Air Source	5~6 kgf/cm2
13.	Air Consumption	656Nℓ/ min
14.	Electric Power	220V±10%/50~60Hz/1.7kw
15.	Temperature	10℃~35℃
16.	Humidity	30~70%
17.	LCS	Automatic Coordinates Collection System by Laserbeam

INSERTED FORM INTO PCB



DIMENSION

MULSERTER 200



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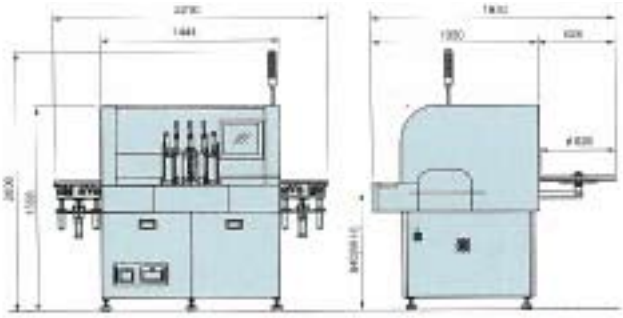

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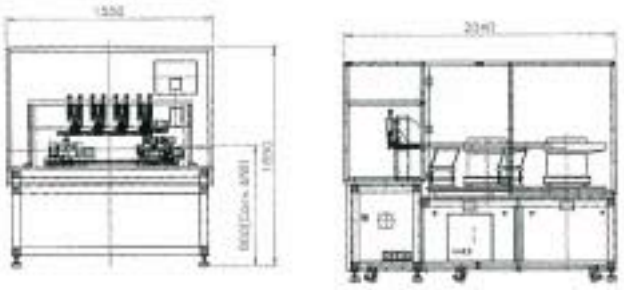

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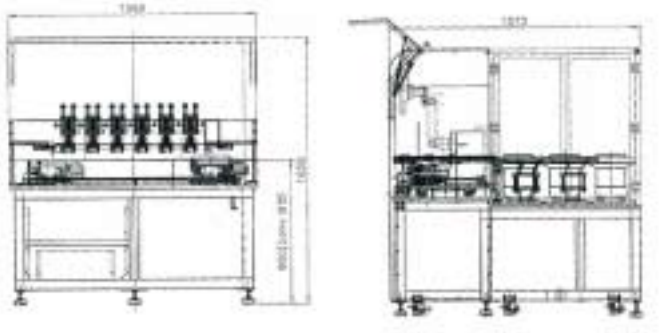

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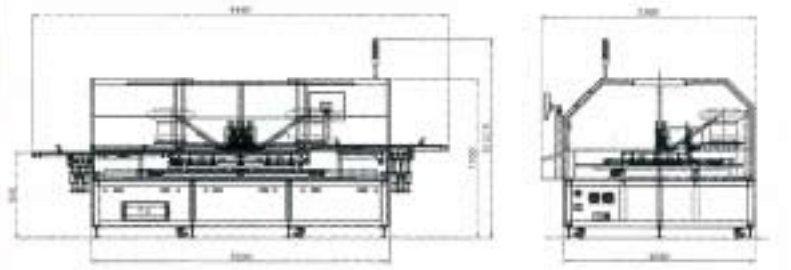
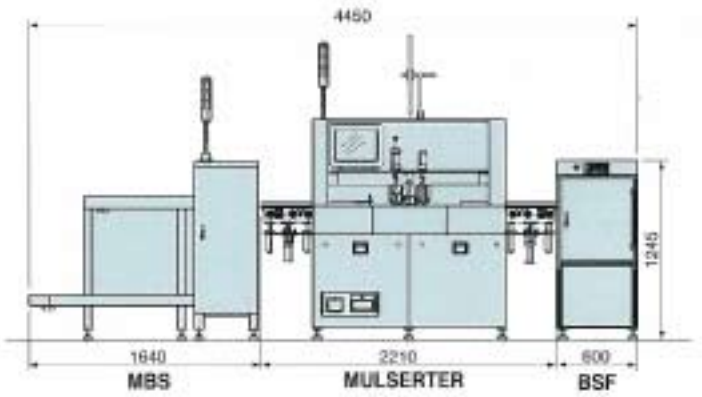


Layout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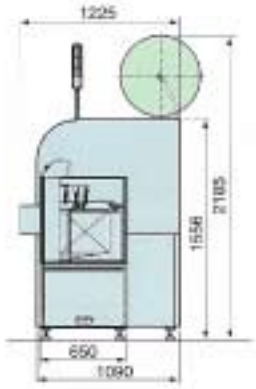
MBS
2210
MULSERTER
600
BSF
1245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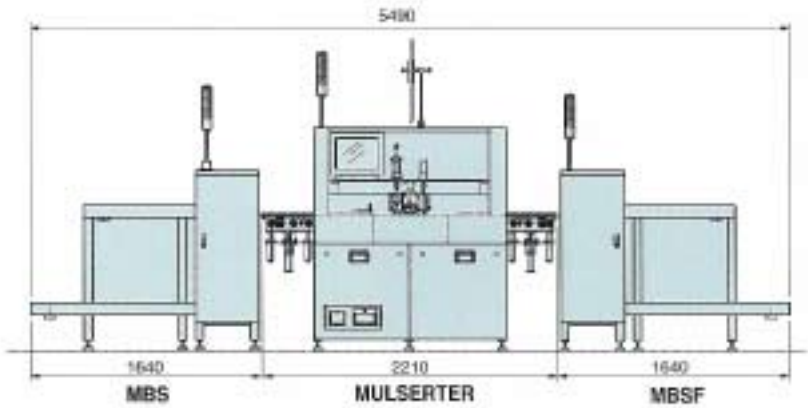
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MULSERTER
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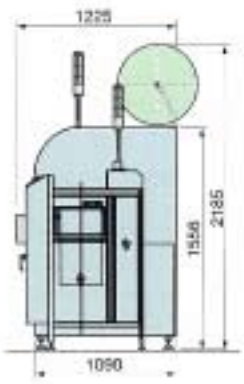
MBSF


1225
2185
1556
1090

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