

# Chapter 1 Introduction

**Final Bonder**

**TFC-FB1C**

**Ver1.1 E**

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## Chapter 1 Introduction

This manual explains operation and features of Final Bonder. Model TFC—FB1C.  
Please read and understand this instruction sufficiently before operating.

### 1.1. Out line

This machine is equipment for carrying out final bonding of the IC that carried out tentative bonding by the ACF method of construction etc. It can connect with the machine of the TFC series of our company.  
One unit is equipped standard with two heads, a maximum of 4 unit connection (8 heads) can be performed, and productivity is improved sharply.

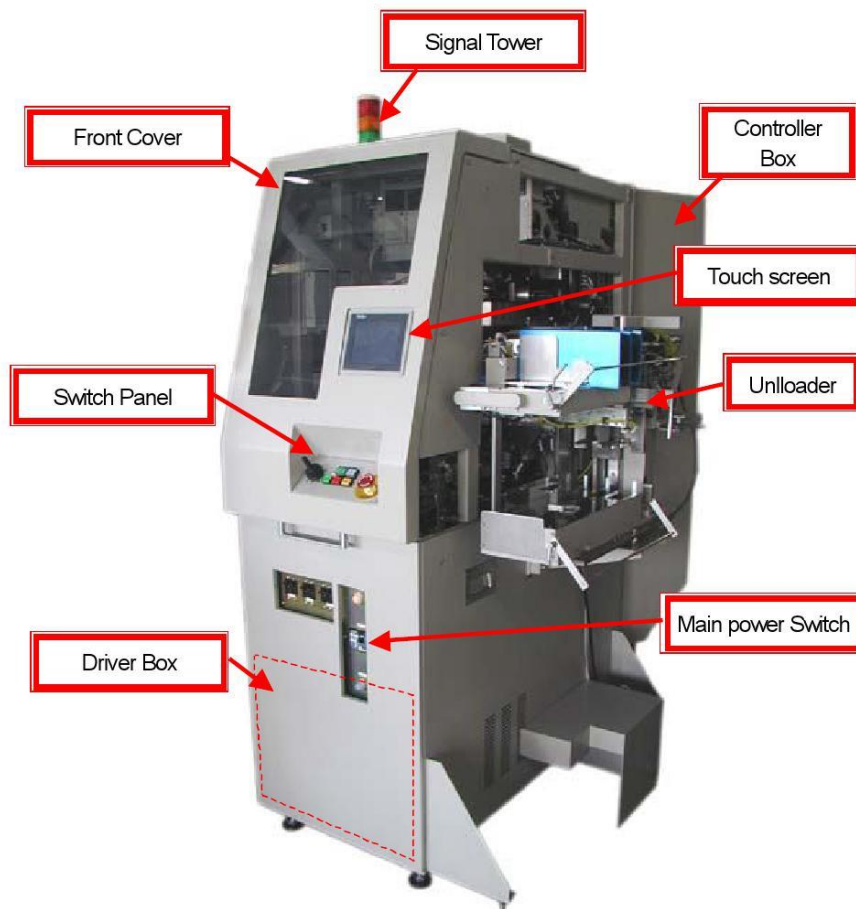
### 1.2. Features

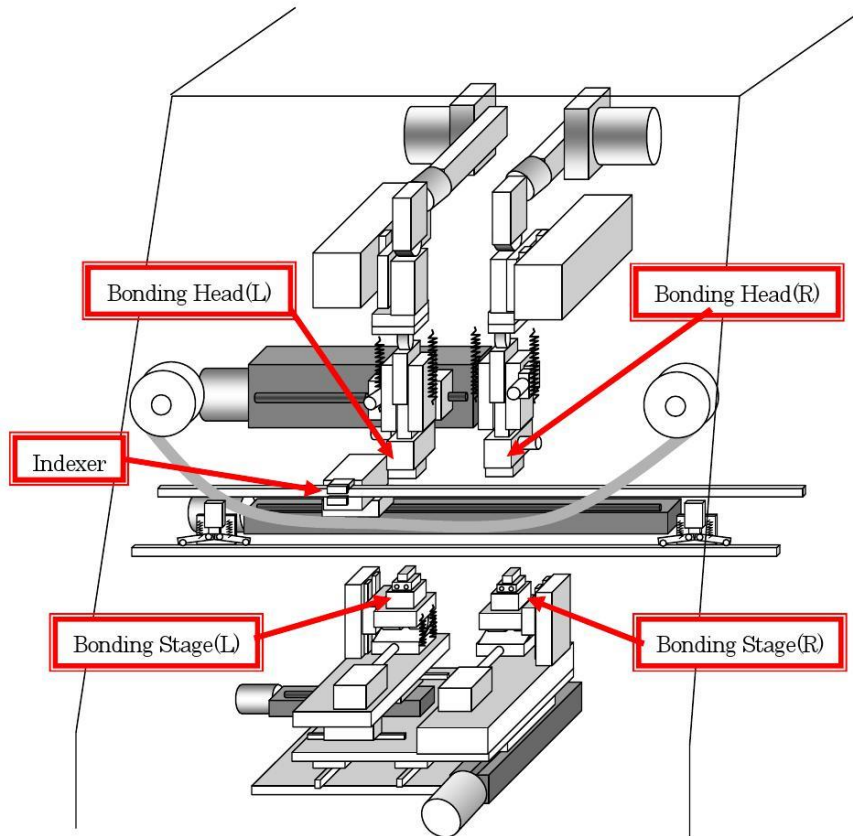
High load : Max 490N  
High accuracy load : Load feedback by the load cell. Multi-stage control is also possible.  
High parallelism : Individual backup stage, A pressurization part / tool part separation system adoption  
Easy operation : Color touch panel adopted.  
Small foot print : 544 mm(width) × 1469mm(depth: 340mm controller including)  
versatility : By unit connection, additional connection of a maximum of 4 units (8 heads) is possible.

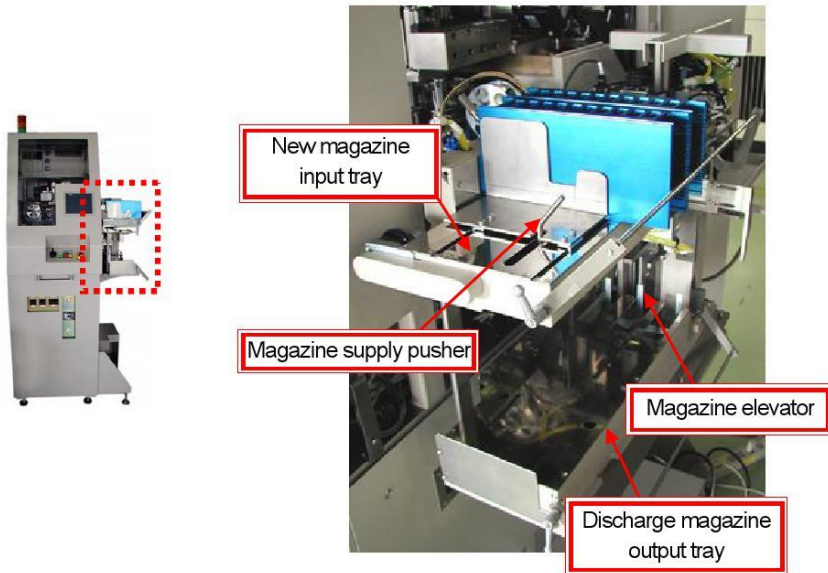
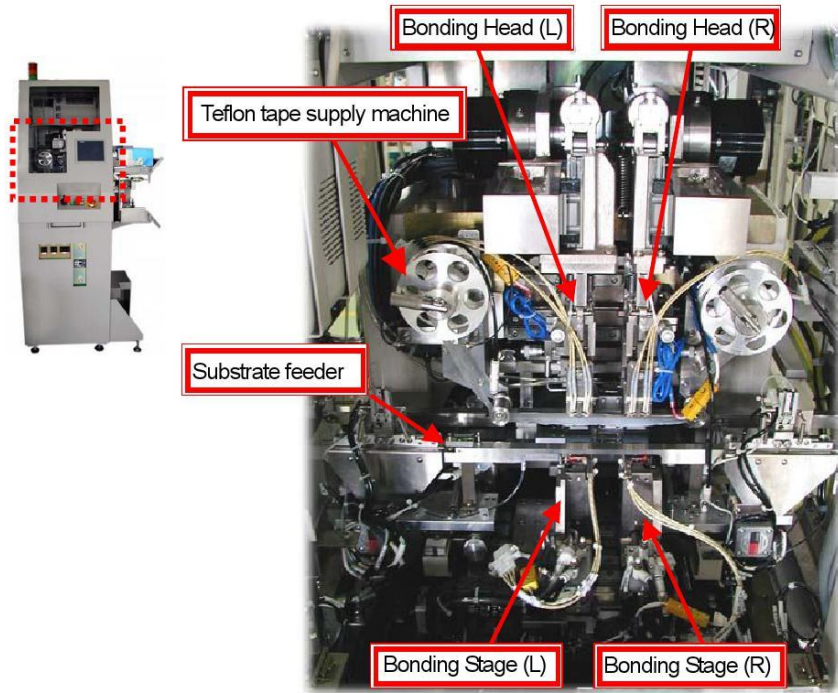
### 1.3. Unit Construction

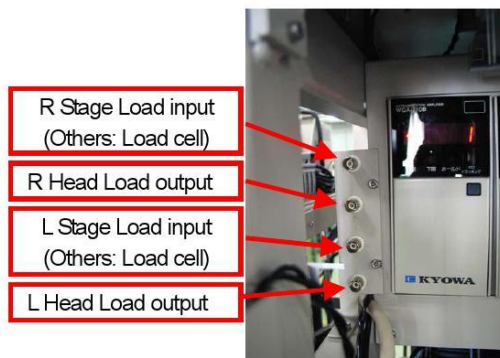
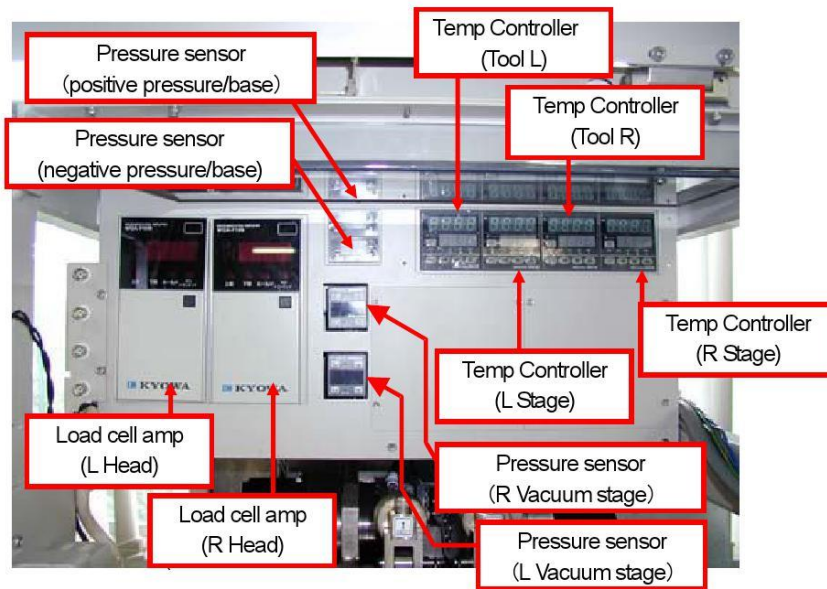
This Chapter explains TFC-FB1C machine Unit Construction.

#### 1.3.1. Unit name

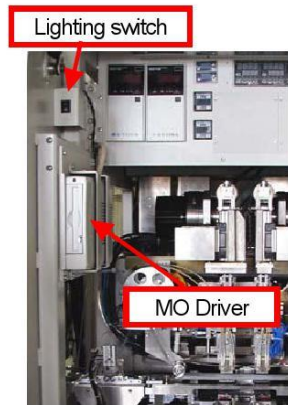
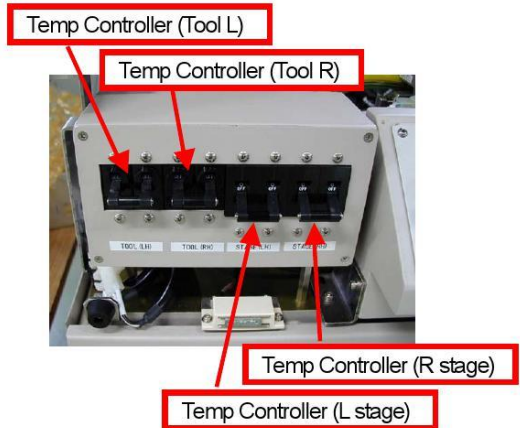
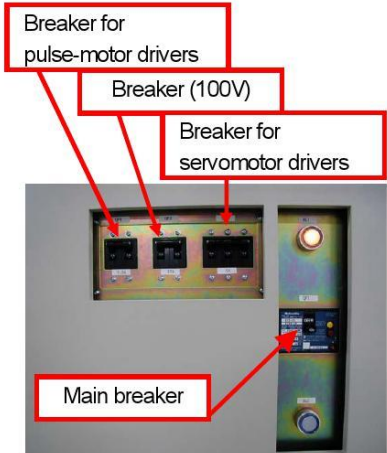
















### 1. 3. 3. Signal tower and buzzer

This unit inform operator the situation of machine, using signal tower (Red, Yellow, Green) and buzzer.

• Signal tower

Situation	Signal
Auto running. (Machine is under production)	Green light on
After orientation (Capable of auto motion)	Green light on and off
Manual motion or data taking	Yellow light on
Waiting material, on orientation	Yellow light on and off
Error	Red light on and off
Power on	Red light on

• Buzzer

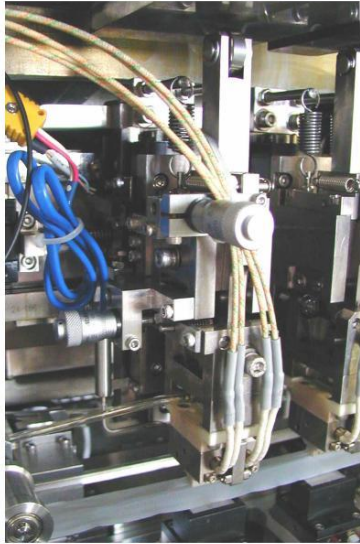
Situation	Signal
Error	"Flicker"
Material waiting	"Flicker"

### 1. 3. 4. Sensors

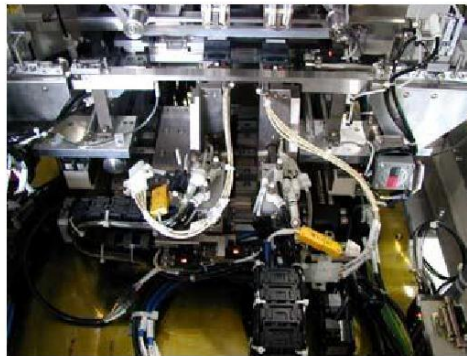
Name	Description
Cover sensor	When open the cover, safety sensor will work. a. When open the main cover: Stop at once.
Air pressure, Vacuum pressure	Should be adjusted when vacuum situation is changed Refer appendix.

### 1. 3. 5. Others

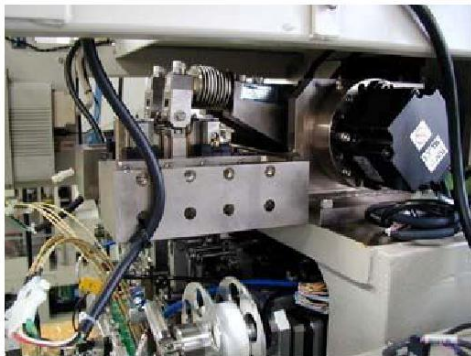
Name	Description
Light	Every light volume is adjusted by touch panel. (Set the switch [REMO])
Air unit	Air units are at Machine front and inside of backside. (Air cut valve shall be prepared by customer)
Power supply connecting unit	Supplying power part to equipment.
Check terminal	Terminal for checking. Load cell Heater: 100°C/V Video: Monitor video signal



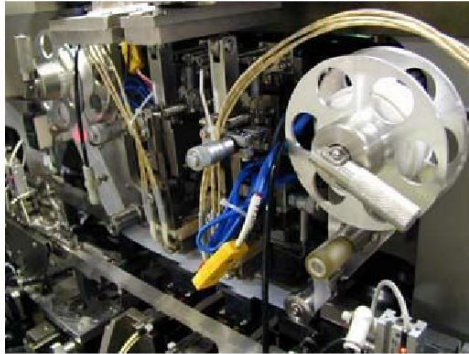
Bonding Head



Bonding stage



Pressure portion



Teflon tape supply machine



Connection to TFC-2000C



4-unit connection to TFC2000C

### 1. 3. 6. Basic specification

#### (1) Dimension

Width (frontage)	: 544 mm
Depth	: 1469mm (including controller 340mm)
Height	: 1100mm
Path line	: 1744mm (exclusive signal tower 190mm) (including front cover (open) 1967mm)
Weight	: 800kg (approx.)

#### (2) Performance

Bonding accuracy: 10 ~ 490N

#### (3) Facilities

Power supply	: AC 3 Phase 200/220V $\pm$ 10% (50/60Hz)
Power consumption	: 2kVA (approx.)
Compressed dry air	: over 0.5 MPa (150 liter/min)
Vacuum	: over -80 kPa (100 liter/min)