



## Measurement



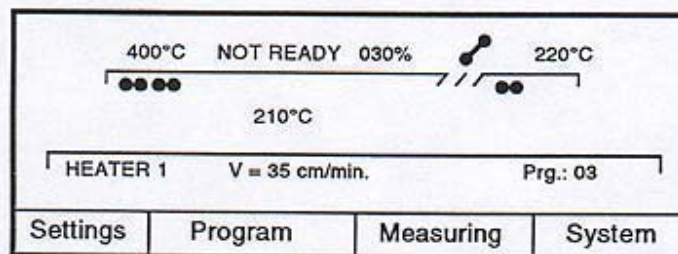
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### Recording a Process Curve

High quality reflow soldering which is gentle of the material is only possible, if you measure the temperature which is effecting on the PCB. The real temperature curve of a PCB ensures of the heating capacity, the heating conduction, and the absorptions characteristic of the PCBs material and their components. For finding optimal temperature profiles and for documentation for quality assurance, the Reflow System offers you the possibility of recording process curves. The process curves can be printed out with a serial printer.

As standard the Reflow System is furnished with thermo couple plug on the feeding side of the system.

- I Press in system screen the function key <Measure> for measurement.



The following screen appears.

MEASUREMENT			
>>	01	Löten	<<
	02	Kleben	
	03	--	
	04	--	
	05	--	
Display	Save	Measure	Print

You can record, save, analyse and print out a process curve.



## Measurement

**SEF**

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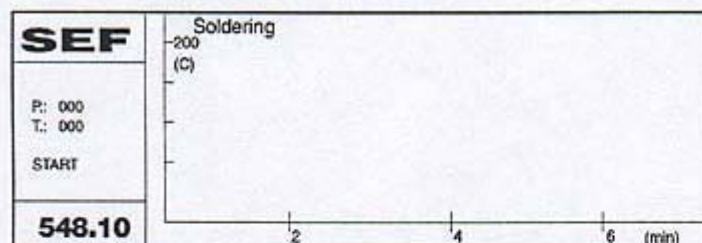
- I Mount the sensor on the PCB.
- I Put the PCB and the measuring sensor adapter on the transport system.
- I Push the connector of the sensor in the plug (3) on the feeding side of the system.
- I After the PCB moved into the heating chamber press <Measure>, to start the recording.

### Record a Process Curve



MEASUREMENT			
>>	01	Löten	<<
	02	Kleben	
	03	--	
	04	--	
	05	--	
Display	Save	Measure	Print

The following screen appears.



### Attention

The transport system moves through the extremely hot heating chamber. Do not reach into the heating chamber during operation. Use heat-proof protective gloves.

- I With <Enter> you can stop the recording.  
The process curve is saved on the place "00" with the name "Backup".  
You get back to the screen of process curves.



Please note, that the recorded process curve is saved on the place "00" with the name "Backup". If you want to use the process curve you must save it on another place before.



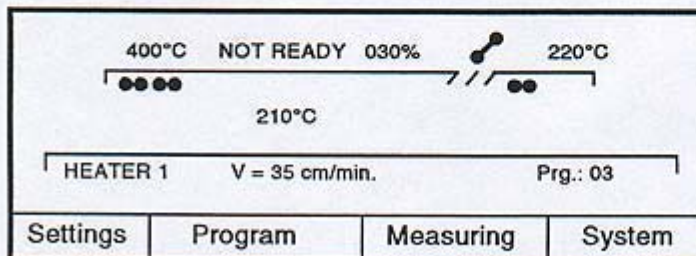
## Measurement

# SEF

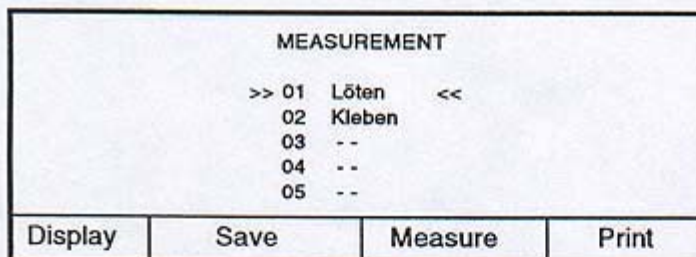
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You can analyse a process curve with the function display.  
Before using the process curve you must load it.

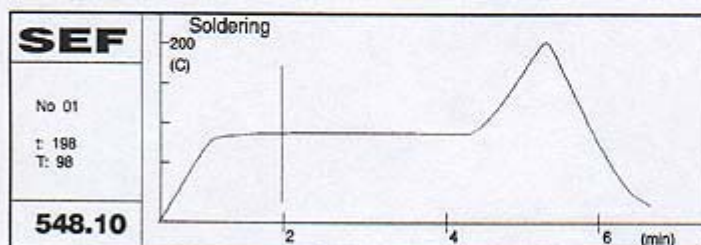
- I Press in system screen the function key **<Measure>** for measurement.



The following screen appears.

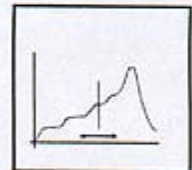


- I Select the right process curve with **<▲>** and **<▼>**.
- I Confirm the process curve with **<Display>**. The process curve will be displayed.



- I Abort with **<Esc>**.  
You get back to the process curve menu.

### Load a Process Curve



Select  
Load

Abort

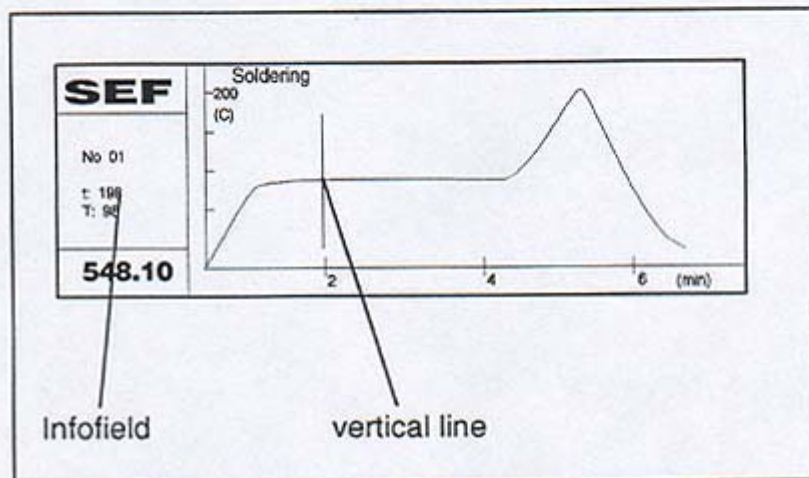


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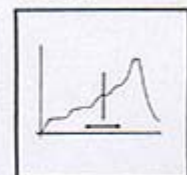
A recorded process curve can be analyzed. The electronic will add a vertical line additionaly to the process curve.



You can move this vertical line in the recorded process curve. In the Infocfield you will get in dependence of the vertical line the temperature and the time value.

- I With <▼> and <▲> you can move the vertical line in the process curve.
- I Abort with <Esc>.

## Analyze a Process Curve





## Measurement

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- I You can scroll the directory with <▲> and <▼>.
- I Select the right place. The arrows >> << are marking the place.
- I Confirm the place with the function key <Save>.
- I With <Enter> you overwrite the process curve on this place.
- I With <Esc> you abort this function.  
You get back to the proccess curve menu.
- I Enter the name of the process curve.  
The name can have a lenght of 8 characters.
- I Enter digits direct with the <10-key>-pad or for characters press the right or left <function>-key.  
At the cursor position you will get an "A" or an "Z".
- I By every pressing of <▼> the next character of the alphabet follows nd by every pressing of <▲> the previous character of the alphabet follows.
- I Confirm the character with <function>- or <10-key>-key. You can enter a name with 8 characters.
- I Confirm the new name with <Enter>.
- I Abort with <Esc>.  
You get back to the proccess curve menu.

Select a Place

Overwrite a  
Process Curve

Identification

Store

Abort

Page 5



## Measurement

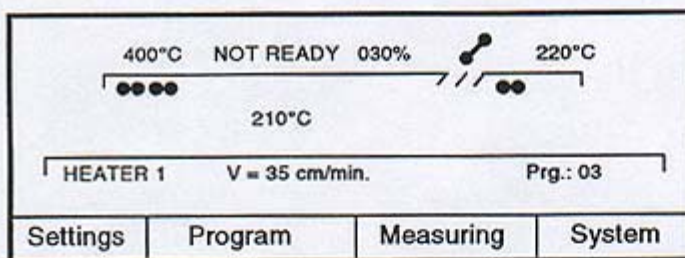
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The last recorded process curve is saved on the place "00" with the name "Backup". For a later analysing or using the process curve you must save it on another place.

*Up to 16 process curves can be stored. The places 1- 2 are preset for master curves. You can not overwrite them. The places 3 - 16 are free for storing*

- Press in system screen the function key <Measure> for the measurement.

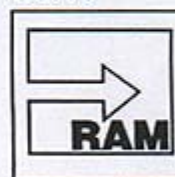


The following screen appears. You can load, save and print a process curve.

MEASUREMENT			
>>	01	Löten	<<
	02	Kleben	
	03	--	
	04	--	
	05	--	

Display	Save	Measure	Print
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## Save a Process Curve





## Measurement

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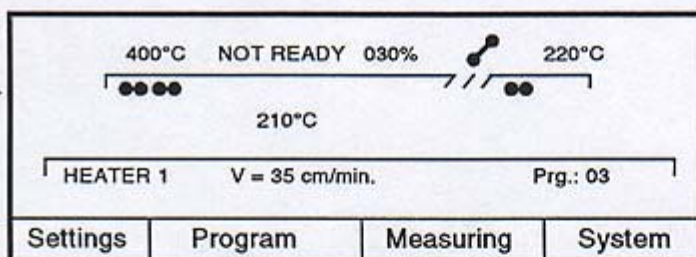
Just recorded or loaded process curves can be printed out.

*Take care that the printer is ready and supplied with paper inside of the printer. The pin-connection of the plug and the interface protocol you will find in the chapter "10.0 Technical Appendix, Pin Connection".*

### Print a Process Curve



- I Connect the serial printer on the interface plug on the side of the System.
- I Press in system screen the function key <Measure> for measurement.



The following message appears:

MEASUREMENT			
>>	01	Löten	<<
	02	Kleben	
	03	--	
	04	--	
	05	--	
Display	Save	Measure	Print

- I You can select the right process curve with <▲> and <▼>.
- I Press <Print>. The process curve will be printed out. You get back to the process curve menu.