ACHI®

Settings of parameter for **ACHI**® series BGA Rework Stations

1、First, we need to know the difference between lead ball(the melting point is 183℃) and lead-free ball(217℃).secondly, please do the accurate judgement on the ball you will rework.

2、Generally speaking, you'll do the work of reballing after removed the chips. Please chosse to use the temperature parameters of lead or lead free depends on the balls you used.

3、It's often the incomplete weld when there is problem of the BGA chips. there is no need to remove the chips. to use repairing welding methods has a high success rate about 85%. There is no need to remove the chips at first. you could try as the following methods:

　1. Use FLUX（liquid）to scour clean the balls at bottom of BGA chip.

　2. welding it.

4、How to set temperature curve which you need？this problem is very simple，As we know：the melting point of Lead ball is 183℃ and that of Lead－free is 217℃. When we debugging（as with Lead-free soldering rework）, we will temporarily ignore the temperature segments and curve！ First Set maximum temperature at 220℃ and then RUN, this is a very critical time right now! when the upper temperature arise to about 200℃. at this time, we should observe carefully liquefaction developing of the solder

balls from the side! you can use tweezers lightly touching chips. the chip can be sliding. the chip will be downward collapse, when the balls was fully liquefaction， at this time，you need to see the temperature values and time showed by the temperature controller or soft！ extend the time of this temperature 10 -15 seconds longer after the solder ball became liquid。now, this temperature values and time is an ideal combination!

Specially kind remind:

Whether you press the "START" button of the BGA station or the

"START" button of the software window,

The BGA rework station only run the temperature profile already set well

in the "PTN" window of the temeperature controller,

If you want to run the the temperature profile of the software, you must

download the profile to or store it   in   temperature controller first .

For example:

we are reworking a Lead-free BGA chip, suppose the 160℃

is the second last segments the temperature values， first， we must

measurement the calefactive time from 160 ℃ to 220 ℃   ，suppose the time
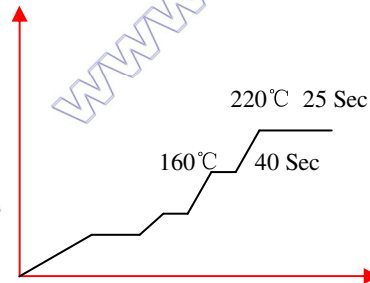
is 40 sec. current the last segments of parameter is：

r1＝1.00，l4=220，d4=80 .

begin to run, the balls began to liquefaction when we saw at 220℃ and

lasted 15 Sec. So, we can draw a conclusion :

1、From 160℃ to 220℃ ， the calefactive time is 40 sec.

2、At 220℃ and need to lasted 15 Sec

3、40 sec ＋15 sec +10 sec ＝65 sec

220℃ 25 Sec

160℃ 40 Sec

Finally, we will modification parameter of the last temperature segments：

r4＝1.00， l4＝220，d4＝65.

This is the temperature parameter you wanted！

Thanks for your attention!