

# C5500 Calibration

Before you start calibrating the instrument , something must be noted :

1. Please start calibrate after 24h when you changed the water .
2. Keep the room temperature stable .

## Calibrating

Calibration process:

1. Open the software , click “system setting” . Input the calorific value of benzoic acid ,change the analysis content into “Calibrating Heat Capacity By Benzoic Acid”(Figure 1 and Figure 2)



Figure 1

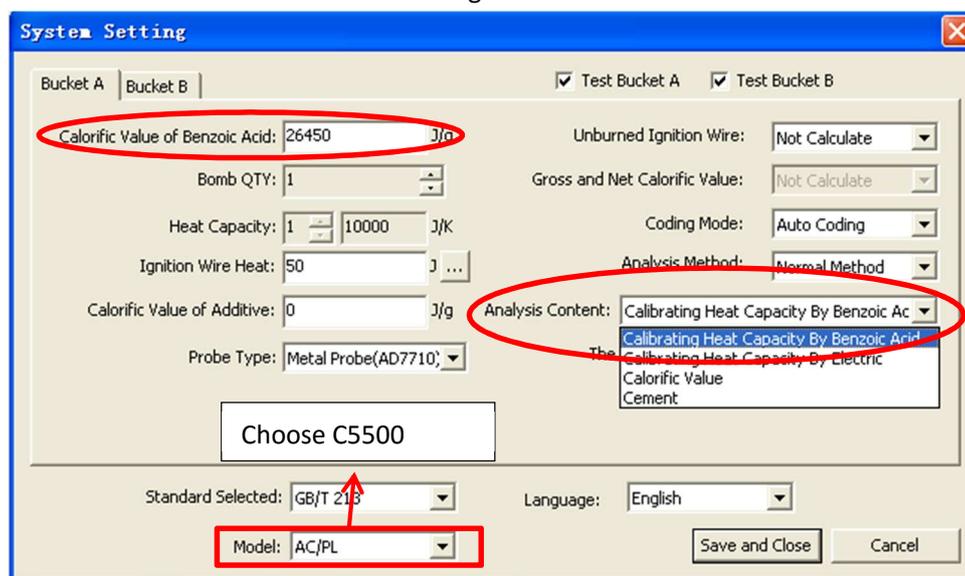


Figure 2

2. After finished setting , click “Start Analysis” and input the weight of benzoic acid ( $1g \pm 0.1g$ ) (Figure 3 and Figure 4)



Figure 3

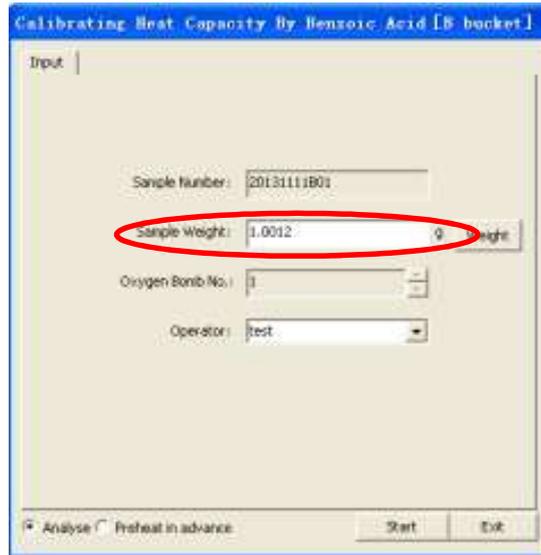


Figure 4

3. After finished analyzing 5 samples , click “Function- Calculate Average Heat Capacity” and choose those five results , click “Calculate The Average Value” , then you will get the average value and RSD , at last , click “Save” to save the value .(Figure 5 and Figure 6)

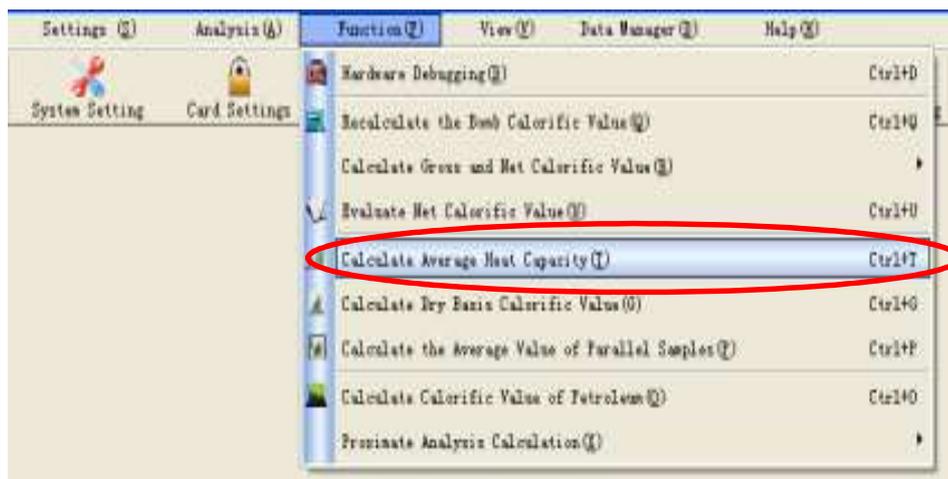


Figure 5

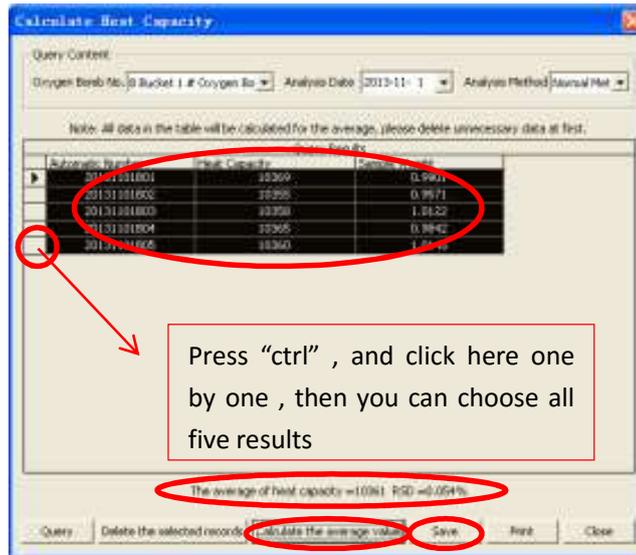


Figure 6

4. Now calibration has been finished .

## Verification

After calibrating , we need to do verification to check the calibration .

Verification process :

1. Click "system setting " again , and change analysis content into "Calorific Value"(Figure 7)

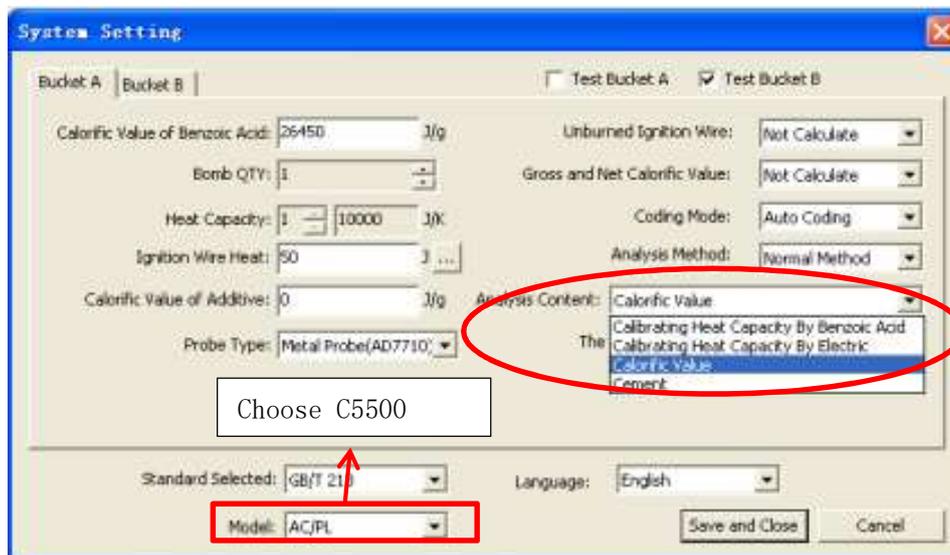


Figure 7

2. Click "Start Analysis" (two samples or more), input the sample weight ( $1g \pm 0.1g$ ). And record the results .(Figure 8)

Normal Method Calorific Value (Not Calculate) [D bu...]

Input

Sample Number: 20131111B01

Sample Weight: 0.5986 Weight: 0

Sample Name: benzoic acid

Oxygen Bomb No.: 1

Operator: test

Analyse  Preheat in advance

Start Exit

Figure 8

3. Calculate the average value of these results . If the difference between the average value after minus 40J/g and the calorific value of benzoic acid is 60 J/g , the calibration is good .