



中国认可  
国际互认  
检测  
TESTING  
CNAS L11210



# TEST REPORT

**Report No.** : WTN25N10268034C

**Applicant** : Zhejiang Chint IoT Technology Co.,Ltd.

**Address** : No. 1 Liangce Road, Yueqing City, Wenzhou, Zhejiang Province, P.R.China.

**Manufacturer** : Zhejiang Chint IoT Technology Co.,Ltd.

**Address** : No. 1 Liangce Road, Yueqing City, Wenzhou, Zhejiang Province, P.R.China.

**Sample Name** : Multi-functional digital panel meters

**Sample Model** : PD600

**Reference Sample Model** : Refer to following pages

**Test Requested** : As applicant's requirement, in accordance with the RoHS Directive 2011/65/EU and its amendment (EU) No. 2015/863, to determine the Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent chromium [Cr (VI)], polybrominated biphenyls (PBBs), polybrominated diphenyl ethers (PBDEs), dibutyl phthalate (DBP), butyl benzyl phthalate (BBP), di (2-ethylhexyl) phthalate (DEHP), diisobutyl phthalate (DIBP) content in the submitted sample

**Test Conclusion** : **PASS** (Please refer to following pages for details)

**Date of Receipt sample** : 2025/10/13

**Testing period** : 2025/10/13~2025/10/20

**Date of Issue** : 2025/11/19

**Test Result** : Refer to following pages

**Prepared By:**

**Waltek Testing Group (Ningbo) Co., Ltd.**

Address: Zone 3, 1/F., No.6, Building 011; Zone 1, 5/F., No.1, Building 007, No.1177, Lingyun Road, Ningbo Hi-Tech Zone, Yinzhou District, Ningbo, Zhejiang, China

Tel: +86-574-8749 3888 Fax: +86-574-8386 8018 Email: [nb@waltek.com.cn](mailto:nb@waltek.com.cn)

Signed for and on behalf of  
Waltek Testing Group (Ningbo) Co., Ltd.



WTN25N10268034C

**Reference Sample Model:**

PD666, PD7777, PD700C, PD300, PD600-□□□□□, PD666-□□□□□, PD7777-□□□□□,  
 PD700C-□□□□□, PD300-□□□□□

(The first □ can be 1,2,3,4,6,8 or blank; the second □ can be D,S,H or blank; the third □ can be P,K,B,T or blank; the fourth □ can be 4, 3 or blank; the fifth □ can be H, EL or blank)

**Test Results:**

1. Lead, Mercury, Cadmium, Hexavalent Chromium, PBBs and PBDEs:

Test Method:

- (1) With reference to IEC 62321-3-1:2013, screening - Lead, Mercury, Cadmium, total Chromium and total Bromine by X-ray fluorescence spectrometry;
- (2) With reference to IEC 62321-4:2013+AMD1:2017 CSV, determination of Mercury by ICP-OES;
- (3) With reference to IEC 62321-5:2013, determination of Lead and Cadmium by ICP-OES;
- (4) With reference to IEC 62321-7-2:2017 and IEC 62321-7-1:2015, determination of Hexavalent Chromium by UV-VIS;
- (5) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

Unit: mg/kg

Part No.	Part description	Result of EDX					Result of Wet Chemical Testing	Conclusion
		Cd	Pb	Hg	Cr	Br		
1	Grey plastic shell	BL	BL	BL	BL	BL	---	<b>PASS</b>
2	Black plastic board	BL	BL	BL	BL	BL	---	<b>PASS</b>
3	Grey plastic button	BL	BL	BL	BL	BL	---	<b>PASS</b>
4	Black plastic sleeve	BL	BL	BL	BL	BL	---	<b>PASS</b>
5	Transparent plastic buckle	BL	BL	BL	BL	BL	---	<b>PASS</b>
6	Green plastic terminal	BL	BL	BL	BL	BL	---	<b>PASS</b>
7	Silvery metal frame	BL	BL	BL	IN	N/A	Cr (VI): Negative	<b>PASS</b>
8	Silvery metal frame	BL	BL	BL	BL	N/A	---	<b>PASS</b>
9	Silvery metal screw	BL	BL	BL	IN	N/A	Cr (VI): Negative	<b>PASS</b>
10	Black electronic component	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	<b>PASS</b>
11	Black plastic interface	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	<b>PASS</b>
12	Black patch resistor	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	<b>PASS</b>
13	Yellow capacitor	BL	BL	BL	BL	BL	---	<b>PASS</b>



Part No.	Part description	Result of EDX					Result of Wet Chemical Testing	Conclusion
		Cd	Pb	Hg	Cr	Br		
14	Silvery electronic component	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
15	Black Integrated Circuit	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
16	Silvery electronic component	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
17	Green PCB	BL	BL	BL	BL	BL	---	PASS
18	Silvery metal solder	BL	BL	BL	BL	N/A	---	PASS
19	Transparent glass plate	BL	BL	BL	BL	BL	---	PASS
20	White plastic board	BL	BL	BL	BL	BL	---	PASS
21	Silvery metal sheet	BL	BL	BL	BL	N/A	---	PASS
22	Black plastic button	BL	BL	BL	BL	BL	---	PASS
23	Silvery metal sheet	BL	BL	BL	IN	N/A	Cr (VI): Negative	PASS
24	Black plastic shell	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
25	Green PCB	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
26	Silvery metal solder	BL	BL	BL	BL	N/A	---	PASS
27	Black electronic component	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
28	Yellow electronic component	BL	BL	BL	BL	BL	---	PASS
29	Green PCB	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	PASS
30	Silvery metal solder	BL	BL	BL	BL	N/A	---	PASS
31	Black diode	BL	IN	BL	BL	BL	Pb: $3.76 \times 10^4$ #1	PASS
32	Blue electronic component	BL	IN	BL	BL	BL	Pb: $1.74 \times 10^3$ #1	PASS
33	White capacitor	BL	IN	BL	BL	BL	Pb: $1.22 \times 10^4$ #2	PASS
34	Silvery metal pin	BL	BL	BL	BL	N/A	---	PASS



Part No.	Part description	Result of EDX					Result of Wet Chemical Testing	Conclusion
		Cd	Pb	Hg	Cr	Br		
35	Black plastic frame	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	<b>PASS</b>
36	Green plastic interface	BL	BL	BL	BL	BL	---	<b>PASS</b>
37	Silvery metal pin	BL	BL	BL	BL	N/A	---	<b>PASS</b>
38	Green electronic component	BL	BL	BL	IN	BL	Cr (VI): ND	<b>PASS</b>
39	Yellow electronic component	BL	BL	BL	BL	BL	---	<b>PASS</b>
40	Black electronic component	BL	IN	BL	BL	IN	Pb: 288 PBBs: ND PBDEs: ND	<b>PASS</b>
41	Black electronic component	BL	BL	BL	BL	IN	PBBs: ND PBDEs: ND	<b>PASS</b>
42	Silvery electronic component	BL	BL	BL	BL	BL	---	<b>PASS</b>
43	Black electronic component	BL	BL	BL	BL	BL	---	<b>PASS</b>
44	Yellow plastic adhesive tape	BL	BL	BL	BL	BL	---	<b>PASS</b>
45	Transparent plastic sleeve	BL	BL	BL	BL	BL	---	<b>PASS</b>
46	Black plastic cover	BL	BL	BL	BL	BL	---	<b>PASS</b>
47	Silvery metal shell	BL	BL	BL	BL	N/A	---	<b>PASS</b>
48	Black plastic base	BL	BL	BL	BL	BL	---	<b>PASS</b>
49	Silvery metal sheet	BL	BL	BL	BL	N/A	---	<b>PASS</b>
50	Yellow plastic sheet	BL	BL	BL	BL	BL	---	<b>PASS</b>
51	Grey plastic sheet	BL	BL	BL	BL	BL	---	<b>PASS</b>
52	Grey plastic sheet	BL	BL	BL	BL	BL	---	<b>PASS</b>



## 2. Phthalates:

Test Method:

With reference to IEC 62321-8:2017, determination of Phthalates content by GC-MS.

Unit: mg/kg

Serial No.	Part No.	Results				Conclusion
		DBP	BBP	DEHP	DIBP	
T01	1+2+3+5+6 <sup>△</sup>	ND	ND	ND	ND	PASS
T02	4+44+45 <sup>△</sup>	ND	ND	ND	ND	PASS
T03	10+12+13+14+15 <sup>△</sup>	ND	ND	ND	ND	PASS
T04	11+20+22+24+35 <sup>△</sup>	ND	ND	ND	ND	PASS
T05	16+17+19+25+27 <sup>△</sup>	ND	ND	ND	ND	PASS
T06	28+29+31+32+33 <sup>△</sup>	ND	ND	ND	ND	PASS
T07	36+48+51+52 <sup>△</sup>	ND	ND	ND	ND	PASS
T08	38+39+40+41+42 <sup>△</sup>	ND	ND	ND	ND	PASS
T09	43	ND	ND	ND	ND	PASS
T10	46+50 <sup>△</sup>	ND	ND	ND	ND	PASS

**Notes:**

(1) EDX test:

(a) For the restricted substances PBBs/PBDEs, the EDX results show the total Br content; for the restricted substance Cr (VI), the EDX results show the total Cr content;

(b) Results were obtained by EDX for primary screening, and further chemical testing are recommended to be performed, if the concentration exceeds the below warning value according to IEC 62321-3-1:2013;

Unit: mg/kg

Elements	Polymers	Metals	Composite material
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$
Br	$BL \leq (300-3\sigma) < X$	---	$BL \leq (250-3\sigma) < X$

(c) BL=Below Limit by EDX analysis, OL=Over Limit by EDX analysis, IN=Inconclusive, LOD = The limit of detection, "----" = Not regulated, X=need further chemical analysis;

(d) For composite material, the EDX results may be different to the actual content in the sample.

(2) Chemical test and Regulatory limits:



Test Items		CAS No.	MDL	Limit (by weight in homogeneous materials)
Pb		---	2 mg/kg	1000 mg/kg
Cd		---	2 mg/kg	100 mg/kg
Hg		---	2 mg/kg	1000 mg/kg
Cr (VI)	Metal	---	0.10 $\mu\text{g}/\text{cm}^2$	1000 mg/kg
	Others	---	8 mg/kg	
PBBs		---	5 mg/kg (Each)	1000 mg/kg (Sum)
PBDEs		---	5 mg/kg (Each)	1000 mg/kg (Sum)
Dibutyl phthalate (DBP)		(84-74-2)	50 mg/kg	1000 mg/kg
Benzyl butyl phthalate (BBP)		(85-68-7)	50 mg/kg	1000 mg/kg
Di(2-ethylhexyl) phthalate (DEHP)		(117-81-7)	50 mg/kg	1000 mg/kg
Di-iso-butyl phthalate (DIBP)		(84-69-5)	50 mg/kg	1000 mg/kg

(3) "#1" = According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 7(c)-I is reiterated here "Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e. g. piezoelectronic devices, or in a glass or ceramic matrix compound.". Test Item(s) was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.

"#2" = According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 7(C)-II is reiterated here "Lead in dielectric ceramic in capacitors for a rated voltage of 125 V AC or 250 V DC or higher.". Test Item(s) was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.

(4) According to IEC 62321-7-1:2015, determined of Cr (VI) on metal sample by boiling water extraction test method, and result is shown as Positive/Negative.

Boiling water extraction:

Negative = Absence of Cr (VI) coating, the detected concentration in boiling water extraction solution is less than  $0.10\mu\text{g}/\text{cm}^2$ .

Positive = Presence of Cr (VI) coating, the detected concentration in boiling water extraction solution is greater than  $0.13\mu\text{g}/\text{cm}^2$ .

When the concentration of Cr (VI) is between  $0.10\mu\text{g}/\text{cm}^2$  and  $0.13\mu\text{g}/\text{cm}^2$ , it is not possible to directly determine whether Cr (VI) is detected.

Because different individuals may influence the determination results of the surface of the sample differences.

(5) ND = Not Detected;

(6) mg/kg = milligram per kilogram = ppm (parts per million);

(7)  $\mu\text{g}/\text{cm}^2$  = microgram per square centimetre;

(8) MDL = Method Detection Limit;

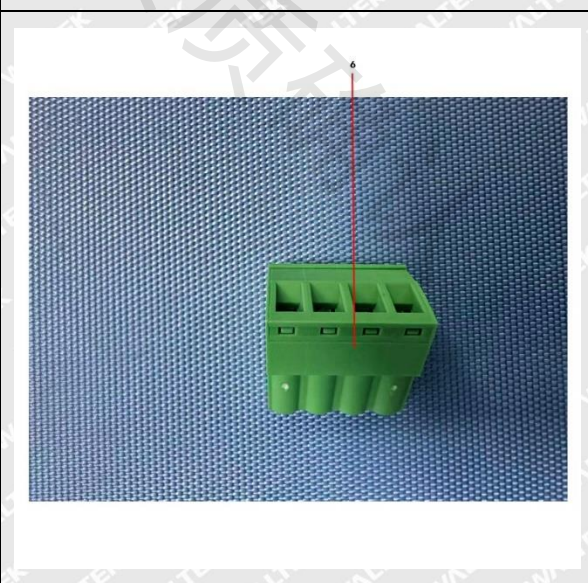
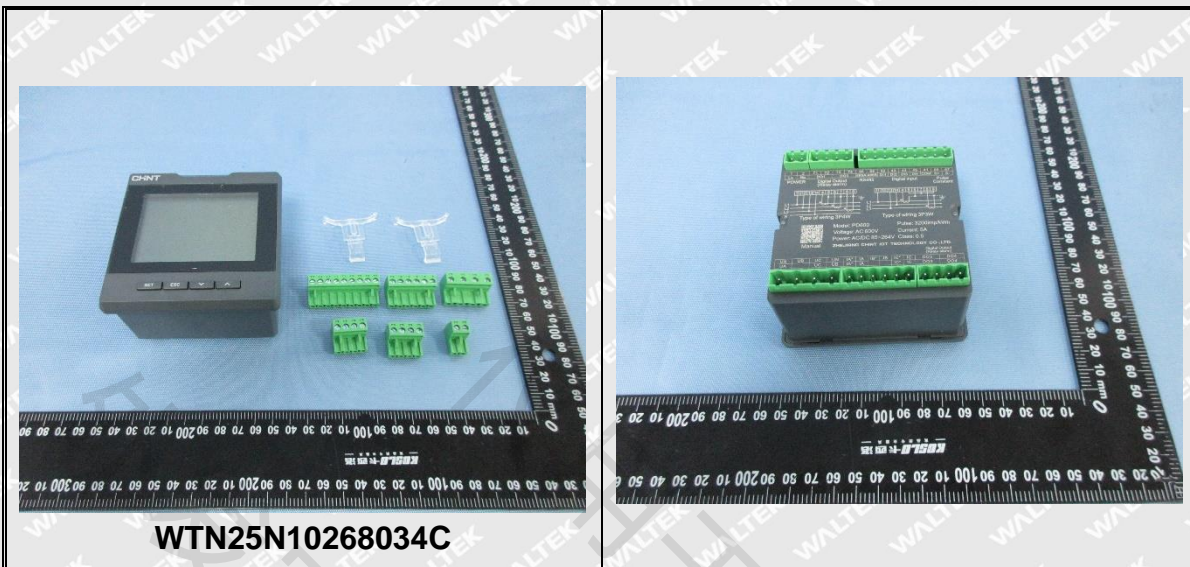
(9) "----" = Not regulated;

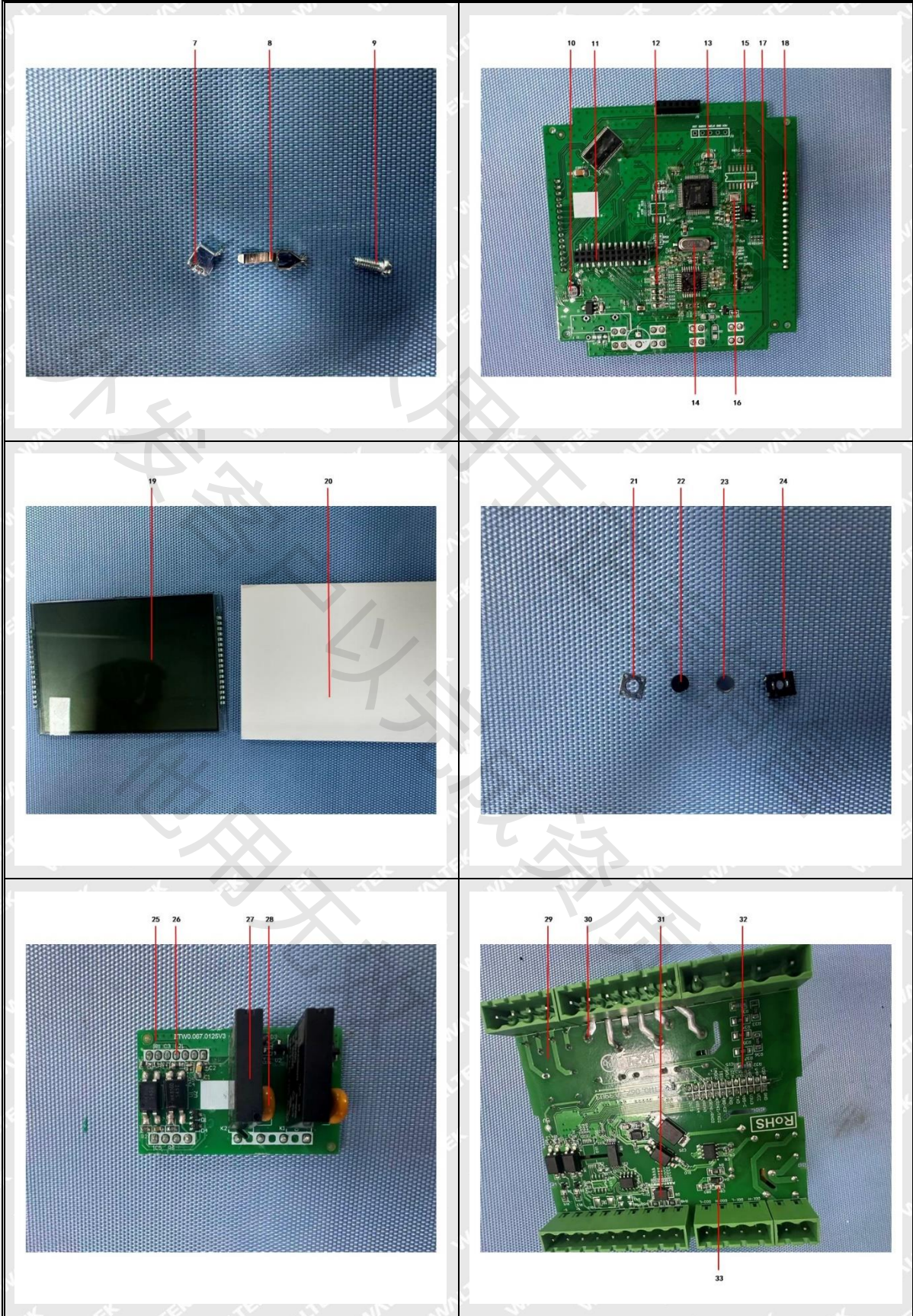
(10) N/A = Not Applicable;

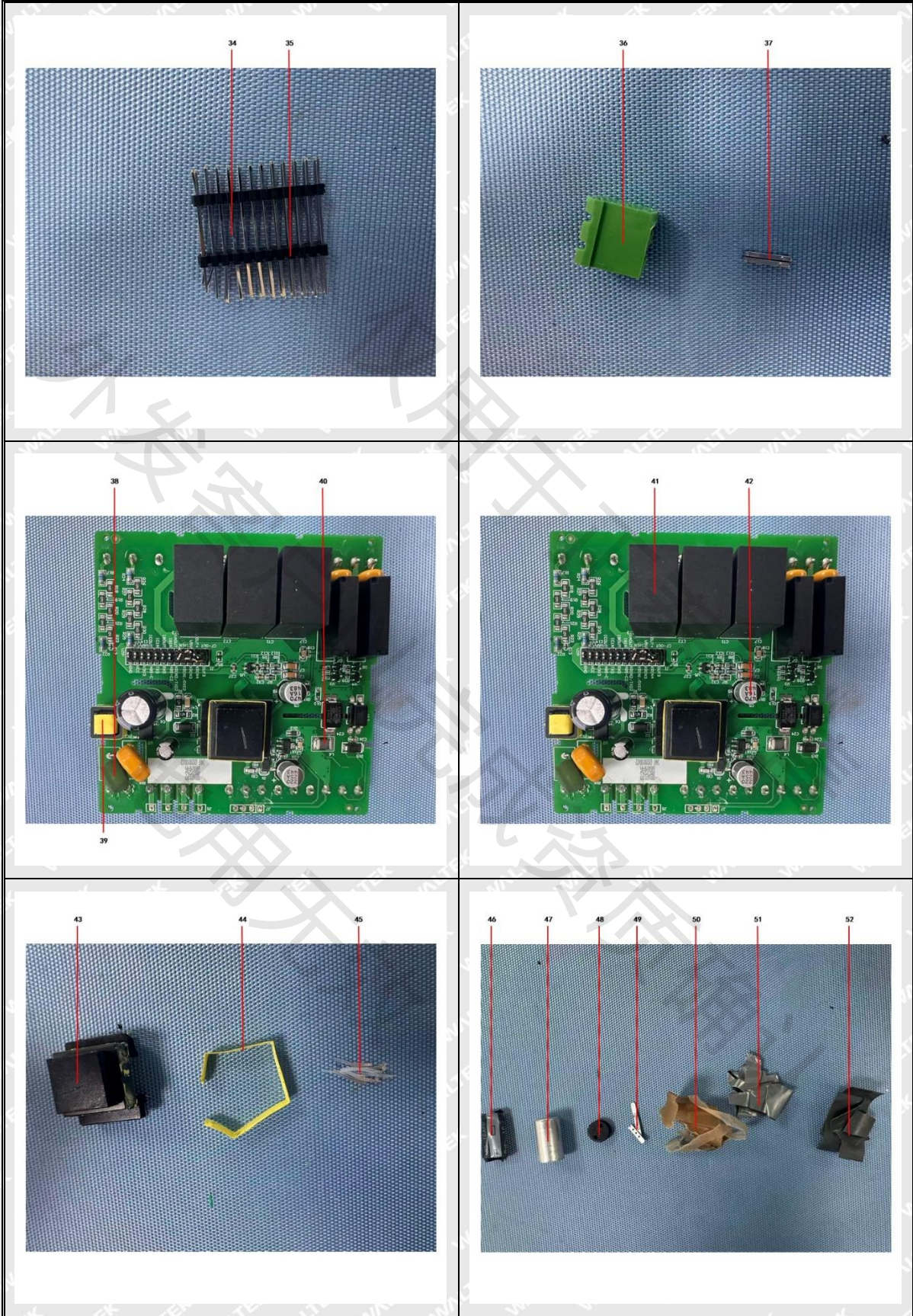
(11)  $\Delta$  = As client's requirement, the testing was conducted based on mixed components. Results are calculated by the minimum weight of mixed components.



Sample Photo(s):

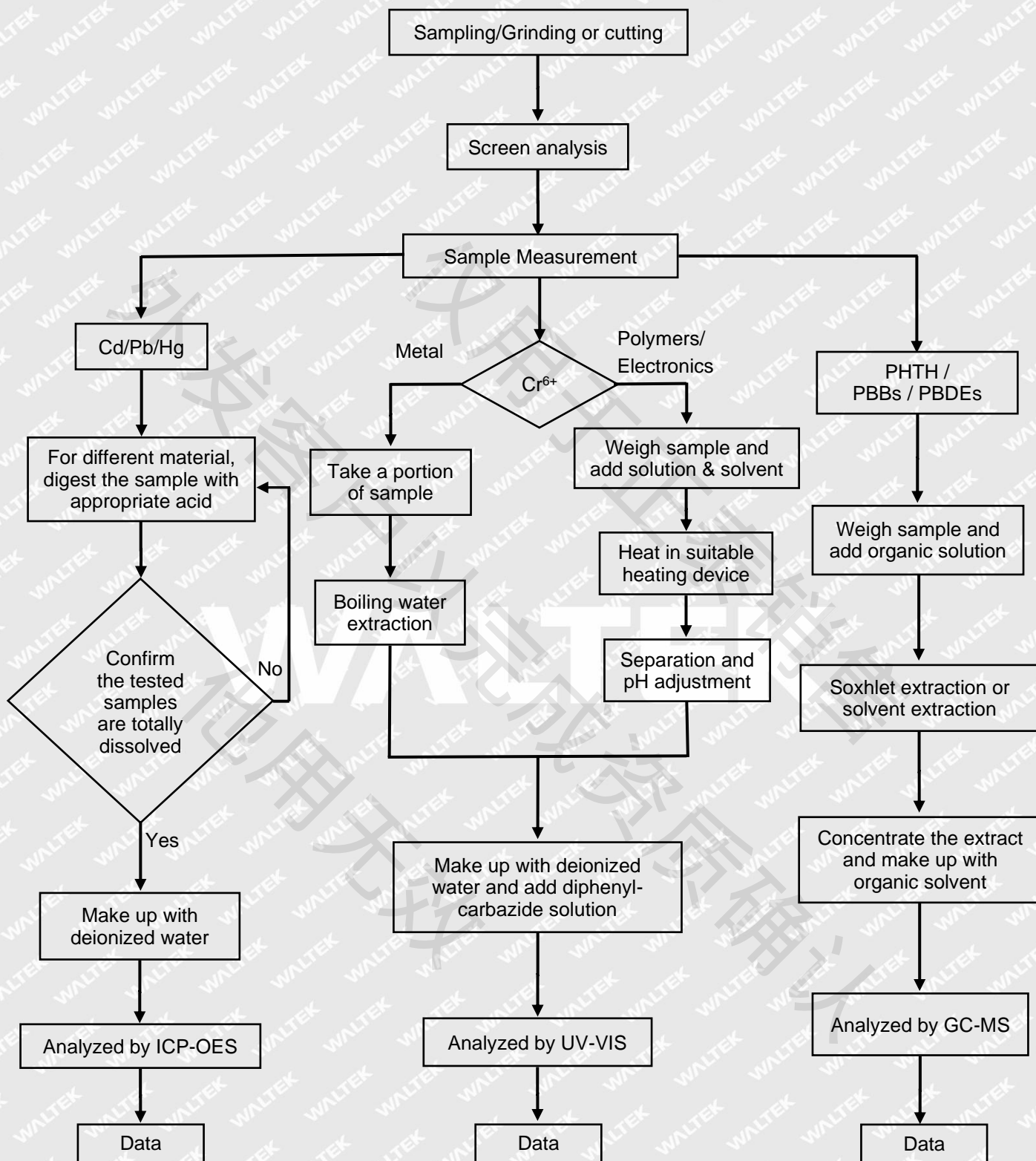








**Test Flow Chart:**





**Remarks:**

1. The results shown in this test report refer only to the sample(s) tested;
2. This test report cannot be reproduced, except in full, without prior written permission of the company;
3. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver;
4. The Applicant name and Address, the sample(s) and sample information was/were provided by the applicant who should be responsible for the authenticity which Waltek hasn't verified; The reference model samples have not been tested;
5. The test components in this report are designated by the client.

=====End of Report =====

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