SAFETY TEST REPORT

MEASUREMENT AND TEST REPORT

For

Ma'anshan Licheng Blade Manufactory	
Sanyang development zone, Bowang District, Ma'anshan City, Anhui Province	
Product Name:	slitter knife
Main Test Model:	OD(10-1200mm)xT(0.1-500mm)
Test Standard:	Selected test (s) in the selected parts as requested by client with the RoHS 2.0 Directive 2011/65/EU Annex II (EU) 2015/863 as last amended by Directive (EU) 2017/2102.
Report Number:	CBT4061530798
Test Date:	Jun. 10, 2026 to Jun. 15, 2026
Prepared By:	Guangdong Baotong Quality Inspection Co.,Ltd. Room 802,Building 22,CIMC Intelligent Manufacturing Center,No.15.Shunye West Road,Xingtan,Shunde District.Foshan,Guangdong.China
Date of issue	Jun. 15, 2026

Tested by: Reviwer: Approved:

TEST REPORT

Applicant

name:	Ma'anshan Licheng Blade Manufactory
Address:	Sanyang development zone, Bowang District, Ma'anshan City, Anhui Province

Test specification:

Standard:	Selected test (s) in the selected parts as requested by client with the RoHS 2.0 Directive 2011/65/EU Annex II (EU) 2015/863 as last amended by Directive (EU) 2017/2102.
Test procedure:	Type Test
Non-standard test method:	N/A

Test item

Description:	slitter knife
Model and/or type reference:	OD(10-1200mm)xT(0.1-500mm)
Additional model:	L(Maximum6000mm)xT(0.1-500mm)
Trademark:	/
Manufacturer:	Ma'anshan Licheng Blade Manufactory
Address:	Sanyang development zone, Bowang District, Ma'anshan City, Anhui Province

Test item particulars

Classification of installation and use:	N/A
Supply Connection:	N/A

Possible test case verdicts

- test case does not apply to the test object	:	N(.A)
- test object does meet the requirement	:	P(Pass)
- test object does not meet the requirement	:	F(Fail)

Test Content:

Test Item(s)	Test Method	Reference	Unit	Limit	MDL
Cadmium(Cd)	IEC 62321-5:2014	ICP-OES	mg/kg	≤100	3
Lead(Pb)	IEC 62321-5:2014	ICP-OES	mg/kg	≤1000	3
Mercury(Hg)	IEC 62321-4:2017	ICP-OES	mg/kg	≤1000	3
Hexavalent Chromium (Cr （VI）) (Nonmetal)	IEC 62321-7-2:2017	UV-Vis	mg/kg	≤1000	8
PBBs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	≤1000	5
PBDEs (Next form)	IEC 62321-6:2015	GC-MS	mg/kg	≤1000	5
Dibutyl Phthalate(DBP)	IEC 62321-8:2017	GC-MS	mg/kg	≤1000	30
Butyl benzyl phthalate (BBP)	IEC 62321-8:2017	GC-MS	mg/kg	≤1000	30
Di-(2-ethylhexyl) Phthalate(DEHP)	IEC 62321-8:2017	GC-MS	mg/kg	≤1000	30
Diisobutyl phthalate (DIBP)	IEC 62321-8:2017	GC-MS	mg/kg	≤1000	30

PBBs		PBDEs	
Monobromobiphenyl	Hexabromobiphenyl	Monobromodiphenyl ether	Hexabromodiphenyl ether
Dibromobiphenyl	Heptabromobiphenyl	Dibromodiphenyl ether	Heptabromodiphenyl ether
Tribromobiphenyl	Octabromobiphenyl	Tribromodiphenyl ether	Octabromodiphenyl ether
Tetrabromobiphenyl	Nonabromobiphenyl	Tetrabromodiphenyl ether	Nonabromodiphenyl ether
Pentabromobiphenyl	Decabromobiphenyl	Pentabromodiphenyl ether	Decabromodiphenyl ether

Sample Description:

No.	Material	Description
1.	slitter knife	Metal
2.	slitter knife	Metal
3.	slitter knife	Metal
4.	slitter knife	Metal
5.	slitter knife	Metal
6.	slitter knife	Metal
7.	slitter knife	Metal
8.	slitter knife	Metal
9.	slitter knife	Metal
10.	slitter knife	Metal
11.	slitter knife	Metal
12.	slitter knife	Metal
13.	slitter knife	Metal
14.	slitter knife	Metal
15.	slitter knife	Metal
16.	slitter knife	Metal
17.	slitter knife	Metal
18.	slitter knife	Metal
19.	slitter knife	Metal
20.	slitter knife	Metal
21.	slitter knife	Metal
22.	slitter knife	Metal
23.	slitter knife	Metal
24.	slitter knife	Metal
25.	slitter knife	Metal
26.	slitter knife	Metal
27.	slitter knife	Metal
28.	slitter knife	Metal
29.	slitter knife	Metal
30.	slitter knife	Metal
31.	slitter knife	Metal
32.	slitter knife	Metal
33.	slitter knife	Metal
34.	slitter knife	Metal

35.	slitter knife	Metal
36.	slitter knife	Metal
37.	slitter knife	Metal
38.	slitter knife	Metal
39.	slitter knife	Metal
40.	slitter knife	Metal
41.	slitter knife	Metal
42.	slitter knife	Metal
43.	slitter knife	Metal
44.	slitter knife	Metal
45.	slitter knife	Metal

1.Test results:

XRF Scanning-RoHS Directive 2011/65/EU

Methods:IEC 62321-3-1:2013 analysis by X-ray fluorescence spectrometry(XRF).

No.	Conclusion										
	Pb	Cd	Hg	Cr^{6+}	PBBs	PBDEs	DBP	BBP	DEHP	DIBP	
1	BL	BL	BL	BL	--	--	--	--	--	--	Pass
2	BL	BL	BL	BL	--	--	--	--	--	--	Pass
3	BL	BL	BL	BL	--	--	--	--	--	--	Pass
4	BL	BL	BL	BL	--	--	--	--	--	--	Pass
5	BL	BL	BL	BL	--	--	--	--	--	--	Pass
6	BL	BL	BL	BL	--	--	--	--	--	--	Pass
7	BL	BL	BL	BL	--	--	--	--	--	--	Pass
8	BL	BL	BL	BL	--	--	--	--	--	--	Pass
9	BL	BL	BL	BL	--	--	--	--	--	--	Pass
10	BL	BL	BL	BL	--	--	--	--	--	--	Pass
11	BL	BL	BL	BL	--	--	--	--	--	--	Pass
12	BL	BL	BL	BL	--	--	--	--	--	--	Pass
13	BL	BL	BL	BL	--	--	--	--	--	--	Pass
14	BL	BL	BL	BL	--	--	--	--	--	--	Pass
15	BL	BL	BL	BL	--	--	--	--	--	--	Pass
16	BL	BL	BL	BL	--	--	--	--	--	--	Pass
17	BL	BL	BL	BL	--	--	--	--	--	--	Pass
18	BL	BL	BL	BL	--	--	--	--	--	--	Pass
19	BL	BL	BL	BL	--	--	--	--	--	--	Pass
20	BL	BL	BL	BL	--	--	--	--	--	--	Pass
21	BL	BL	BL	BL	--	--	--	--	--	--	Pass
22	BL	BL	BL	BL	--	--	--	--	--	--	Pass
23	BL	BL	BL	BL	--	--	--	--	--	--	Pass

No.	Conclusion										
	Pb	Cd	Hg	Cr^{6+}	PBBs	PBDEs	DBP	BBP	DEHP	DIBP	
24	BL	BL	BL	BL	--	--	--	--	--	--	Pass
25	BL	BL	BL	BL	--	--	--	--	--	--	Pass
26	BL	BL	BL	BL	--	--	--	--	--	--	Pass
27	BL	BL	BL	BL	--	--	--	--	--	--	Pass
28	BL	BL	BL	BL	--	--	--	--	--	--	Pass
29	BL	BL	BL	BL	--	--	--	--	--	--	Pass
30	BL	BL	BL	BL	--	--	--	--	--	--	Pass
31	BL	BL	BL	BL	--	--	--	--	--	--	Pass
32	BL	BL	BL	BL	--	--	--	--	--	--	Pass
33	BL	BL	BL	BL	--	--	--	--	--	--	Pass
34	BL	BL	BL	BL	--	--	--	--	--	--	Pass
35	BL	BL	BL	BL	--	--	--	--	--	--	Pass
36	BL	BL	BL	BL	--	--	--	--	--	--	Pass
37	BL	BL	BL	BL	--	--	--	--	--	--	Pass
38	BL	BL	BL	BL	--	--	--	--	--	--	Pass
39	BL	BL	BL	BL	--	--	--	--	--	--	Pass
40	BL	BL	BL	BL	--	--	--	--	--	--	Pass
41	BL	BL	BL	BL	--	--	--	--	--	--	Pass
42	BL	BL	BL	BL	--	--	--	--	--	--	Pass
43	BL	BL	BL	BL	--	--	--	--	--	--	Pass
44	BL	BL	BL	BL	--	--	--	--	--	--	Pass
45	BL	BL	BL	BL	--	--	--	--	--	--	Pass

Note:

a.It is the result on total Br while test item on restricted substances is PBBs/PBDEs.It is the result on total Cr while test item on restricted substances is Cr(VI).

b.The XRF screening test for RoHS elements-The reading may be different to the actual content in the sample because of non-uniform composition.

c.Results are obtained by EDXRF for primary screening,and further chemical testing by ICP-OES(for Pb,Cd,Hg), UV-VIS for Cr(VI)and GC-MS(for PBBs/PBDEs)is recommended to be performed if the concentration exceeds the below warming value according to IEC 62321-3-1:2013.

XRF Screening limits for different matrices:

Materials	Concentration (mg/kg)				
	Cd	Cr	Pb	Hg	Br
Polymeric	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	BL≤290<X
Metallic	BL≤60<X<140≤OL	BL≤640<X	BL≤670<X<1330≤OL	BL≤660<X<1340≤OL	--
Composite materials	BL≤40<X<160≤OL	BL≤440<X	BL≤470<X<1530≤OL	BL≤460<X<1540≤OL	BL≤240<X

(a)BL=Below Limit,OL=Over Limit,X=Inconclusive,LOD=Limit of Detection,--=Not regulated.

(b)The XRF screening test for RoHS elements-the reading may be different to actual content in the sample because of non-uniform composition

(c)Chemical Method

①With reference to IEC 62321-5:2013,determination of Cadmium,Lead by ICP-OES.

②With reference to IEC62321-4:2013+AMD1:2017 CSV,determination of Mercury by ICP-OES.

③With reference to IEC 62321-7-1:2015&IEC 62321-7-2:2017,determination of Hexavalent Chromium by Colorimetric method using UV-Vis.

④With reference to IEC 62321-6:2015,determination of PBBs and PBDEs by GC-MS.

⑤With reference to IEC 62321-8:2017,determination of Phthalates by GC-MS.

(4)(a)mg/kg=0.0001%,MDL=Method Detection Limit,(c)ND=Not Detected(<MDL), --=Not Regulated

(b)Unit and MD Lin wet chemical test

Test Item	Pb	Cd	Hg	DBP	BBP	DEHP	DIBP
Unit	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL	10	10	10	100	100	100	100

The MDL for single compound of PBBs and PBDEs is 100 mg/kg

MDL of Cr(VI)for polymer and composite sample is 10 mg/kg

MDL of Cr(VI)for metal sample is 0.10ug/cm²

(c)V=Metal sample

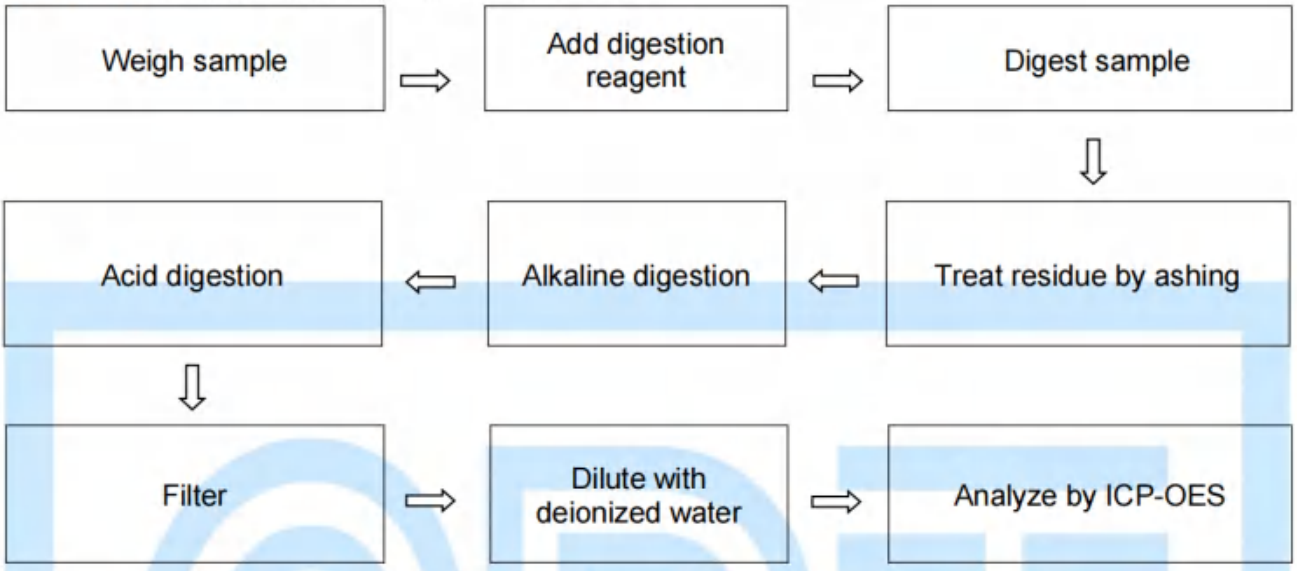
a.The sample is negative for Cr^{6+}if $Cr^{6+}$is N.D.(below the limit 0.10ug/cm²).The coating is considered a non Cr^{6+} based coating.

b.The sample positive for Cr^{6+}if the Cr^{6+}concentration is greater than 0.13ug/cm².The sample coating is considered to contain Cr^{6+}.

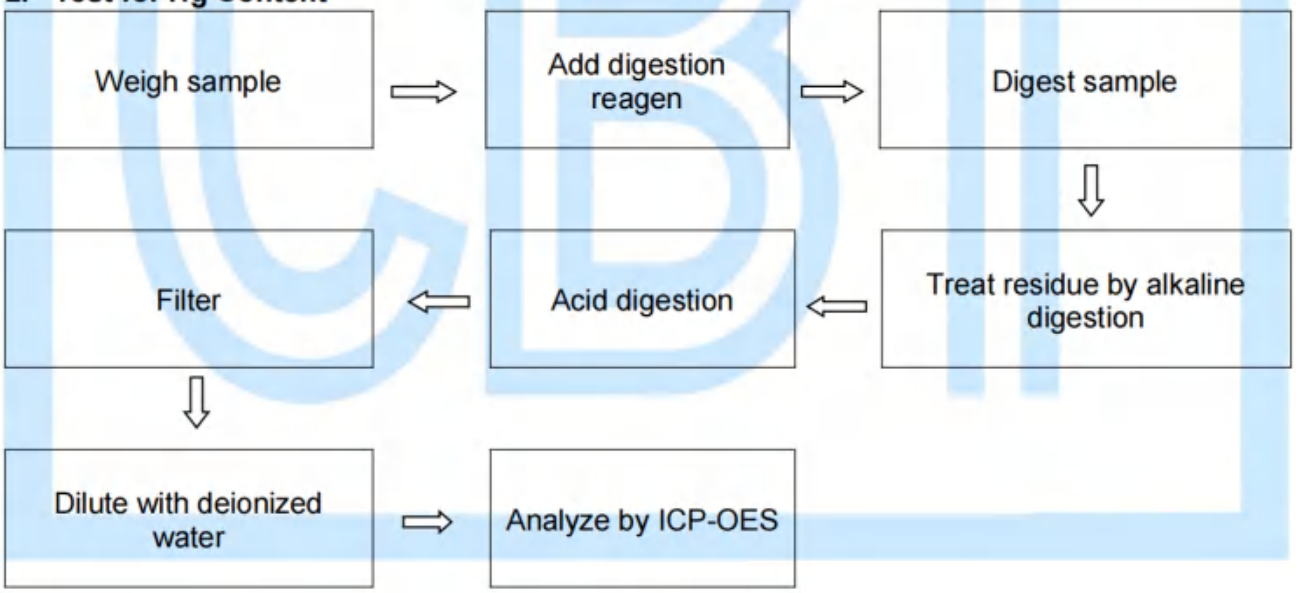
c.The result between 0.10ug/cm²and 0.13ug/cm²is considered to be inconclusive unavoidable coating variations may influence the determination.

Test Process:

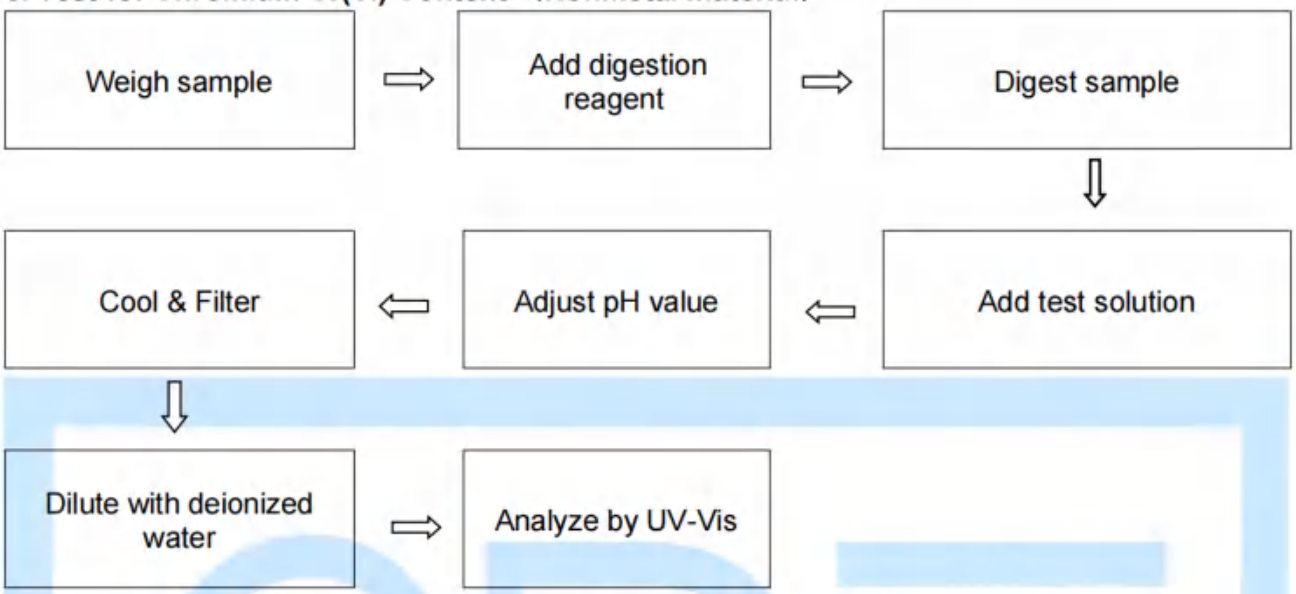
1. Test for Lead, Cadmium, Total Chromium



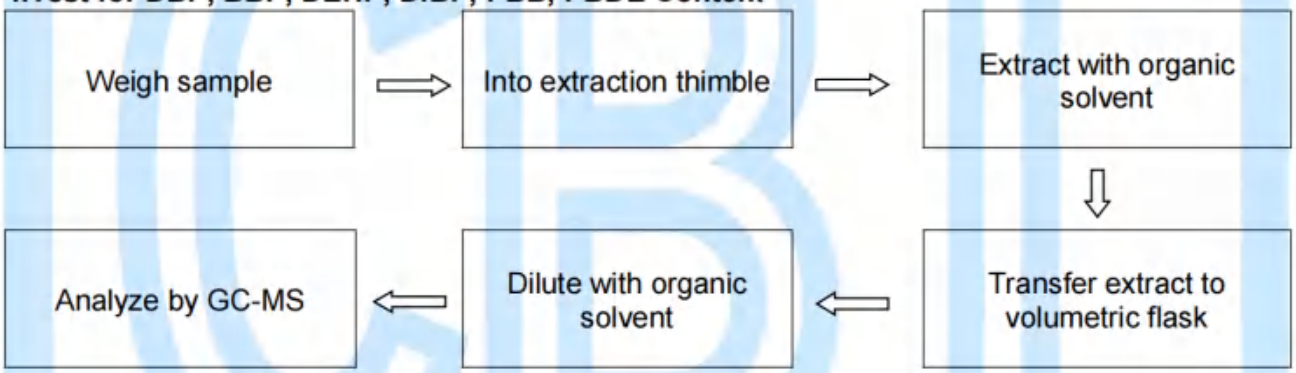
2. Test for Hg Content



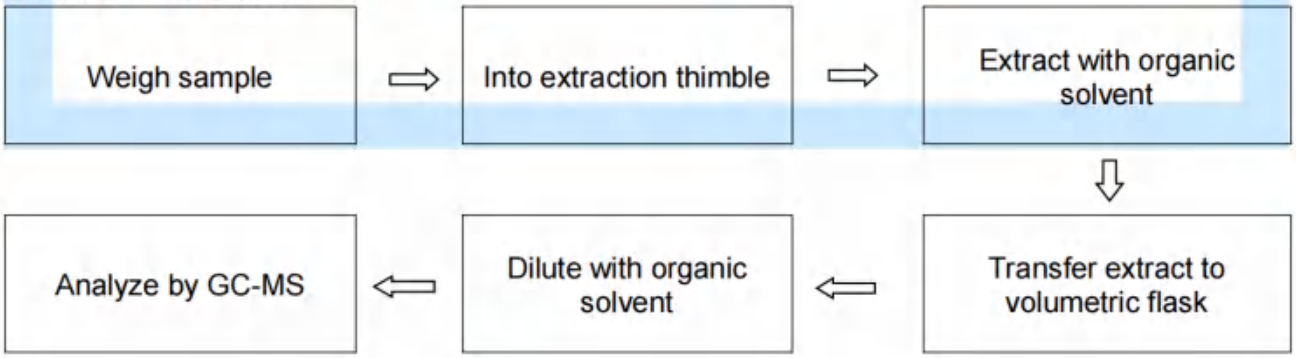
3. Test for Chromium Cr(VI) Content （Nonmetal material）



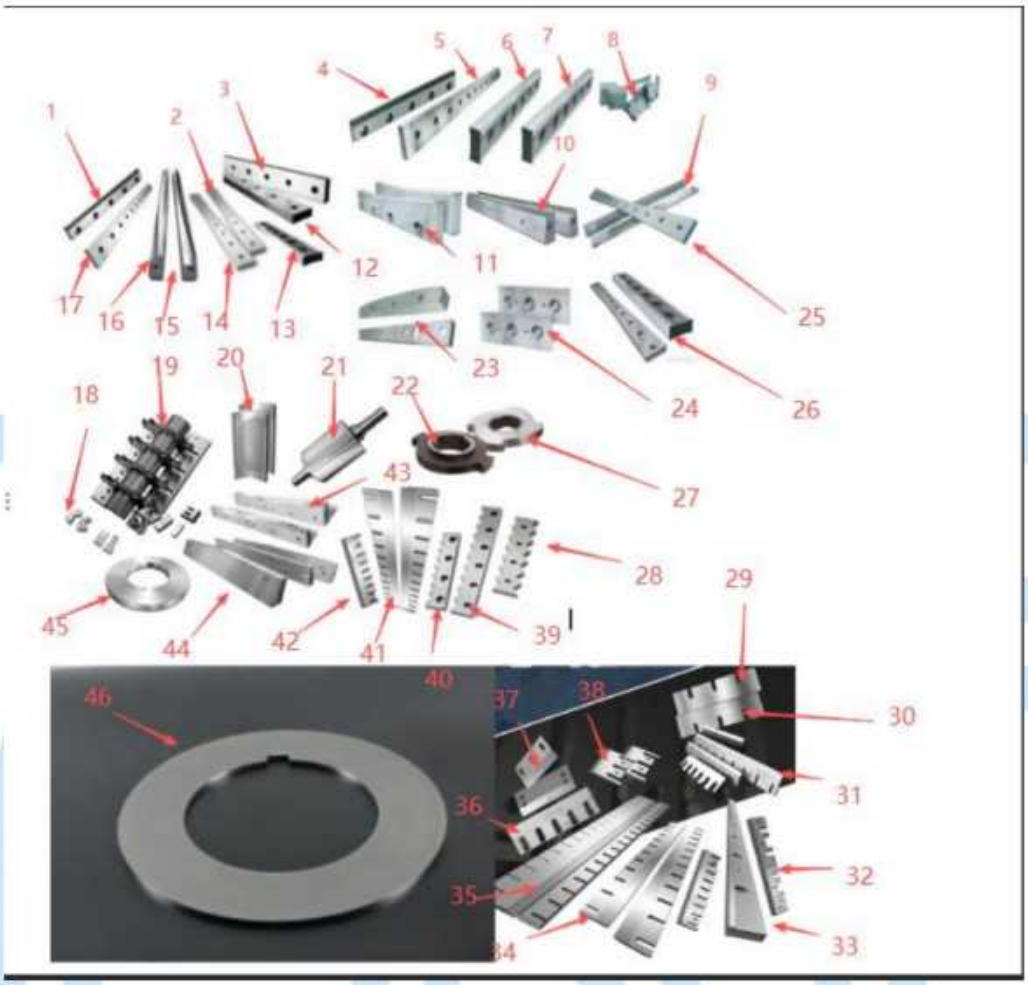
4.Test for DBP, BBP, DEHP, DIBP, PBB, PBDE Content



5.Test for Phthalates



Sample Picture



******END OF REPORT******