



# Hangzhou CHNSpec Technology Co., Ltd Introduction

领先的中国色彩和光泽分析专家  
China's leading expert of color and gloss analysis

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[www.hzcaipu.com](http://www.hzcaipu.com)


# Company Introduction



Fluorescence Measurement Spectrophotometer



2015.01




Pantone Color Reader CS-260  
build-in pantone color cards

2015.03

Bench top Spectrophotometer CS-800



2015.04



Reflectance and Transmission Spectrophotometer CS-820  
Highest Precision Spectrophotometer

2015.11

In-line Gloss Meter  
Non-contact Gloss Measurement



2016.04



Simultaneous Color and Gloss Measurement CS-600CG/CS-800CG

2017.04

Launch Haze Meter CS-700 /720

For Haze, Transmittance and Color Test



2017.  
12



Economic Haze Meter TH-100

For Haze and Transmittance Test

2018.  
12

Launch New Bench-top Spectrophotometer CS-820N

For Color Measurement



2020.  
4

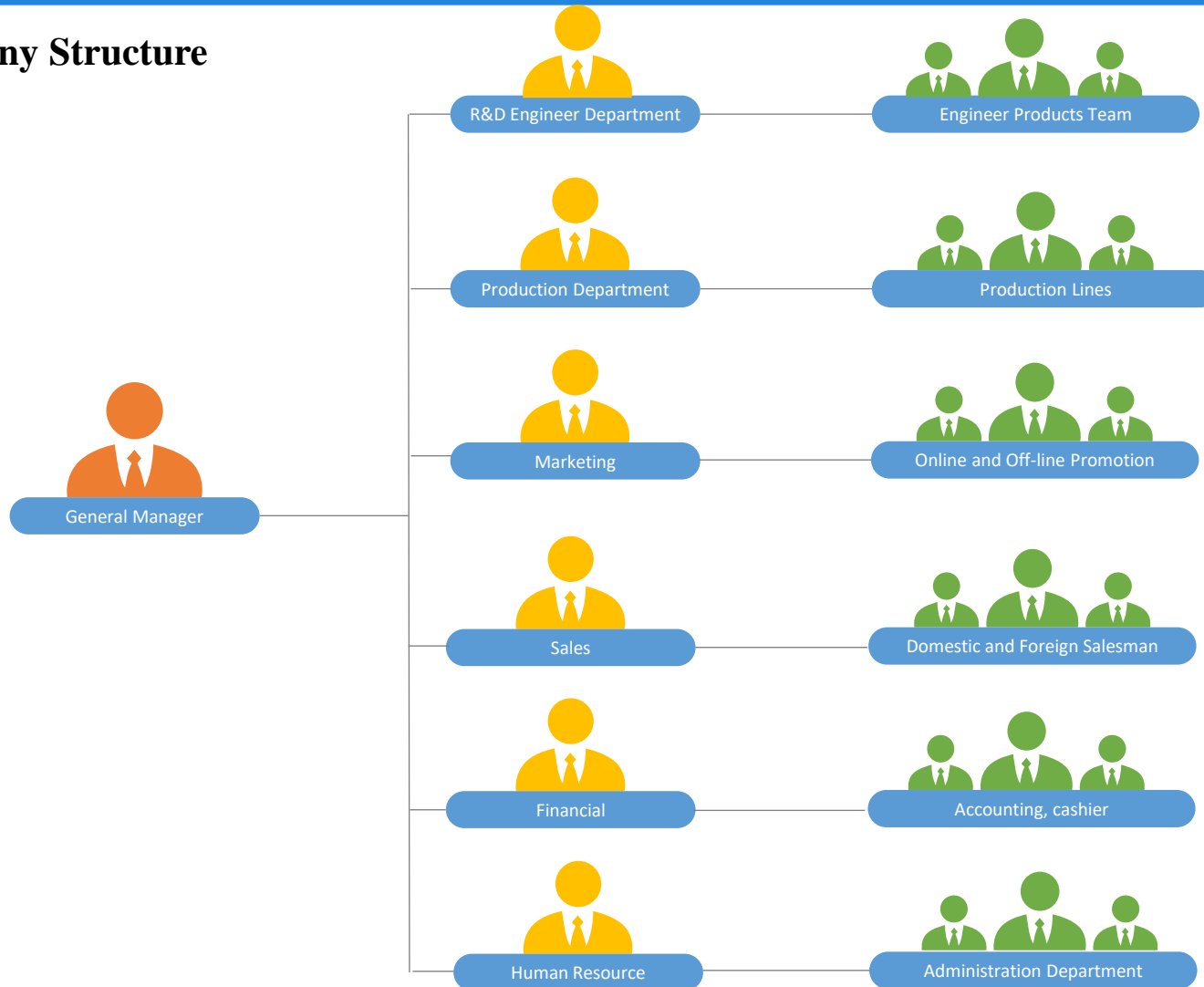
Online Color Sensor CRX-50/51/52

For Color Measurement



colormeter pro

## Company Structure





Honors

National High Technology Enterprise  
Hangzhou High Technology Enterprise  
Outstanding New Product Award  
Qinglan Project Enterprise



Paper

CHNSpec publishes more than 20 papers. 10 of them are included in SCI and SCE.



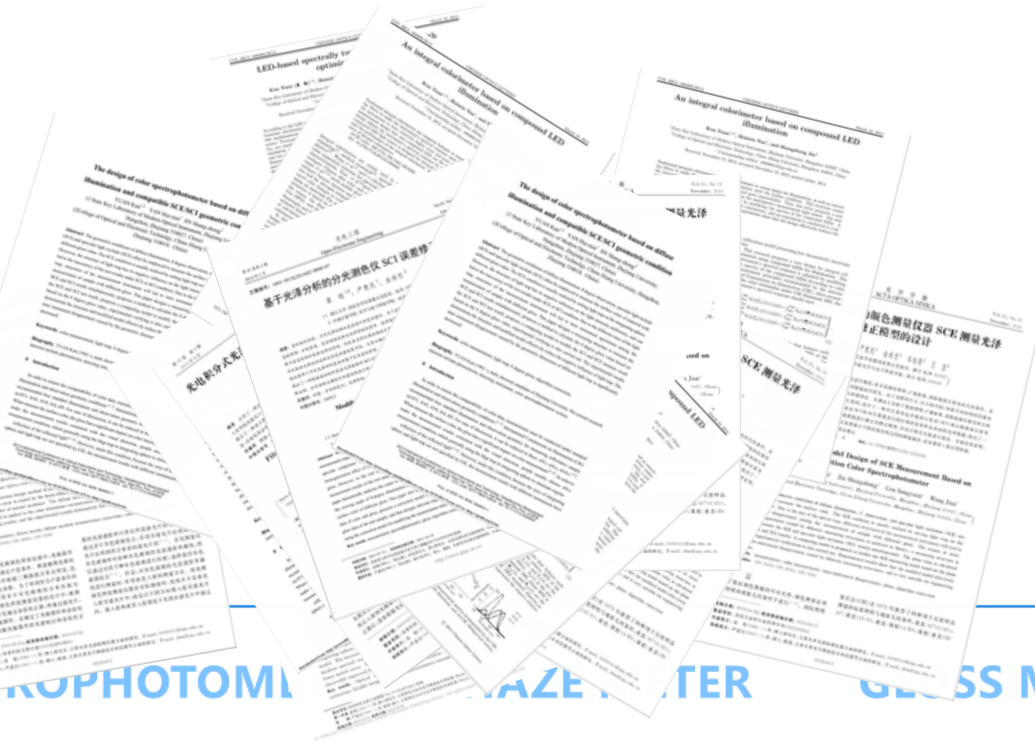
Patents

1 US Invitation Patent  
9 China Invitation Patents  
7 China Outlook Patents  
8 Utility Model Patents



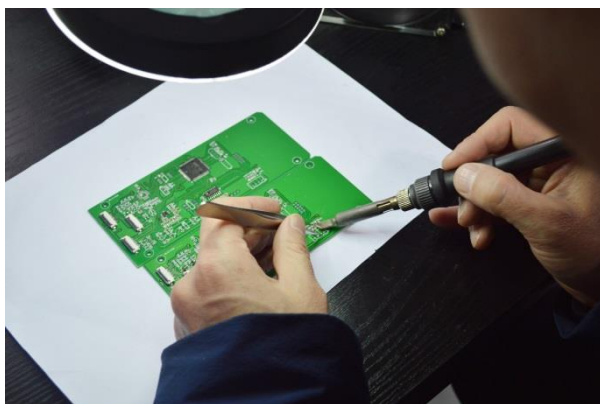
Software Patent

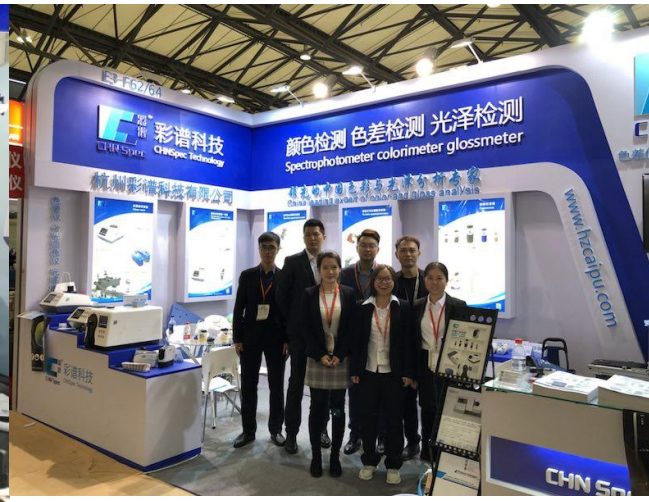
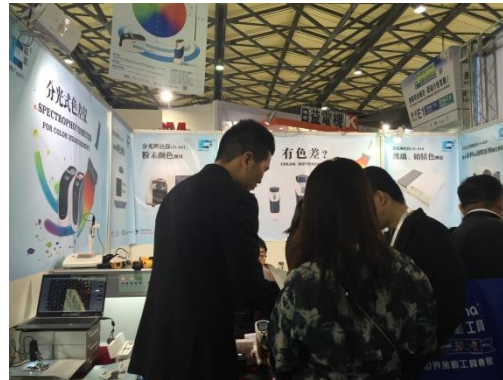
3 Software Copy Right Patents











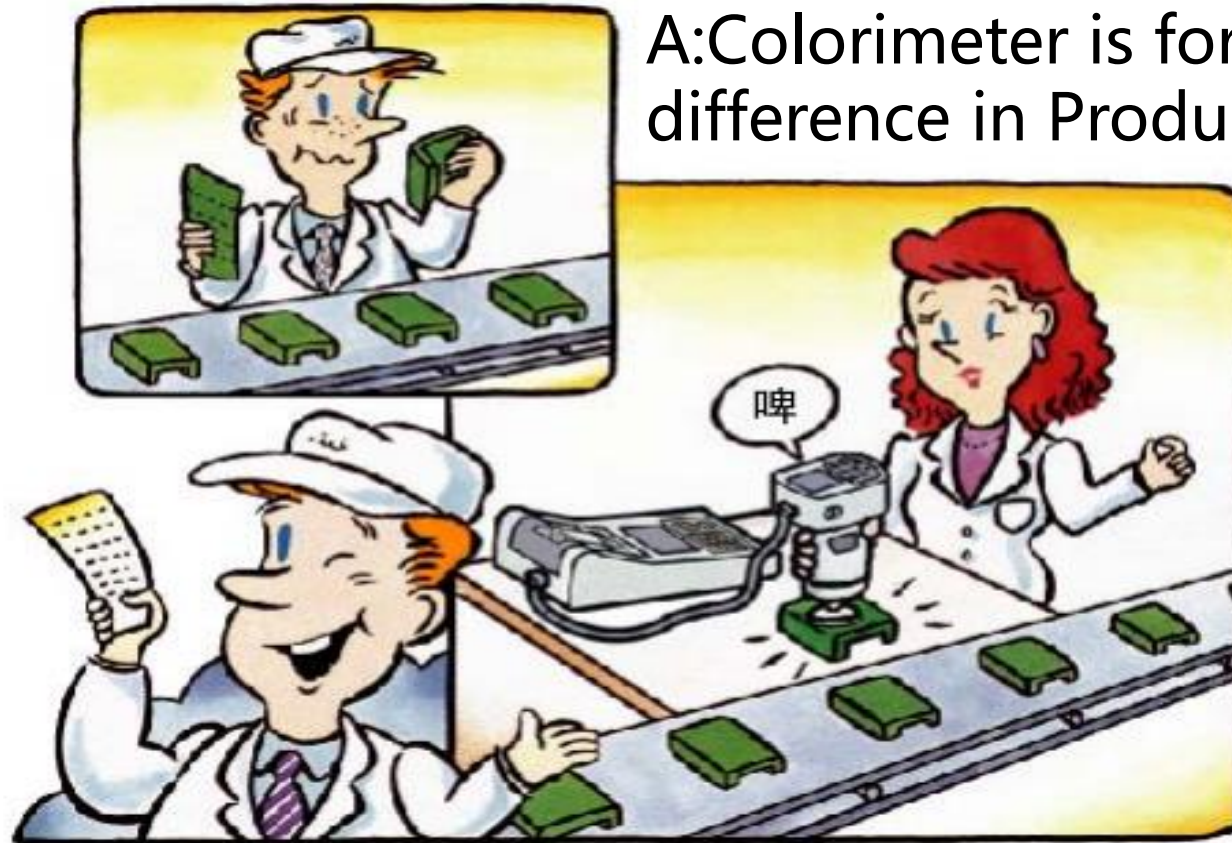
# Product Introduction

CS-10	CS-200	CS-210	CS-220	CS-260
				
Simple	Commonly Used (WI, YI)	With Camera	Design for Powder and Gelly Material	Pantone Color Reader



<b>Measuring structure</b>	45/0	<b>Measurement index</b>	CIE-Lab, CIE-LCH, HunterLab, CIE-Luv, XYZ, Yxy, RGB, Opacity, Munsell, Tint, Whiteness, Yellowness, Blackness, Color Fastness
<b>Measuring aperture</b>	8mm	<b>Lighting source</b>	LED(Full Visible Wavelength Range)
<b>Wavelength interval</b>	-	<b>Screen</b>	OLED Screen, 64*128, 0.96inch
<b>Repeatability</b>	dE<0.1	<b>Battery capacity</b>	10,000 times per charge
<b>Measuring Time</b>	1S	<b>Interface</b>	Bluetooth、USB
<b>Lighting source condition</b>	D65	<b>Calibration</b>	Automatic
<b>Angle of field</b>	10	<b>App</b>	Andriod\IOS
<b>Language</b>	English, French, Italian, German, Spanish, Simplified Chinese, Japanese, Korean, Turkish, Arabic		

Q: When do we need colorimeter?



A: Colorimeter is for checking color difference in Production Line

CS-280	CS-280+	CS-286	CS-288
			
Highest Precise Colorimeter	With Camera	With Camera All Color Spaces	With Camera All Color Spaces Mobile Phone APP







CS-580	CS-600	CS-610	CS-650	CS-660
				
<p>cost-effective Spectrophotometer</p>	<p>Color matching software support Repeatability <math>\Delta E^*_{ab}</math> 0.03</p>	<p>Color matching software support Repeatability <math>\Delta E^*_{ab}</math> 0.02</p>	<p>Color matching software support Repeatability <math>\Delta E^*_{ab}</math> 0.02 <b>With UV for Fluorescent Products</b></p>	<p>Color matching software support Best Repeatability <math>\Delta E^*_{ab}</math> 0.015</p>

CS-800	CS-801	CS-810	CS-820N
			
<p>Reflectance</p>	<p>Reflectance</p>	<p>Transmission APHA (Pt-Co), Gardner ,ASTM</p>	<p>Both Reflectance and Transmittance Measure All Color Space and Haze</p>

CRX-50	CRX-51	CRX-52
		
45/0	D/8	Three Angles 15,45,110

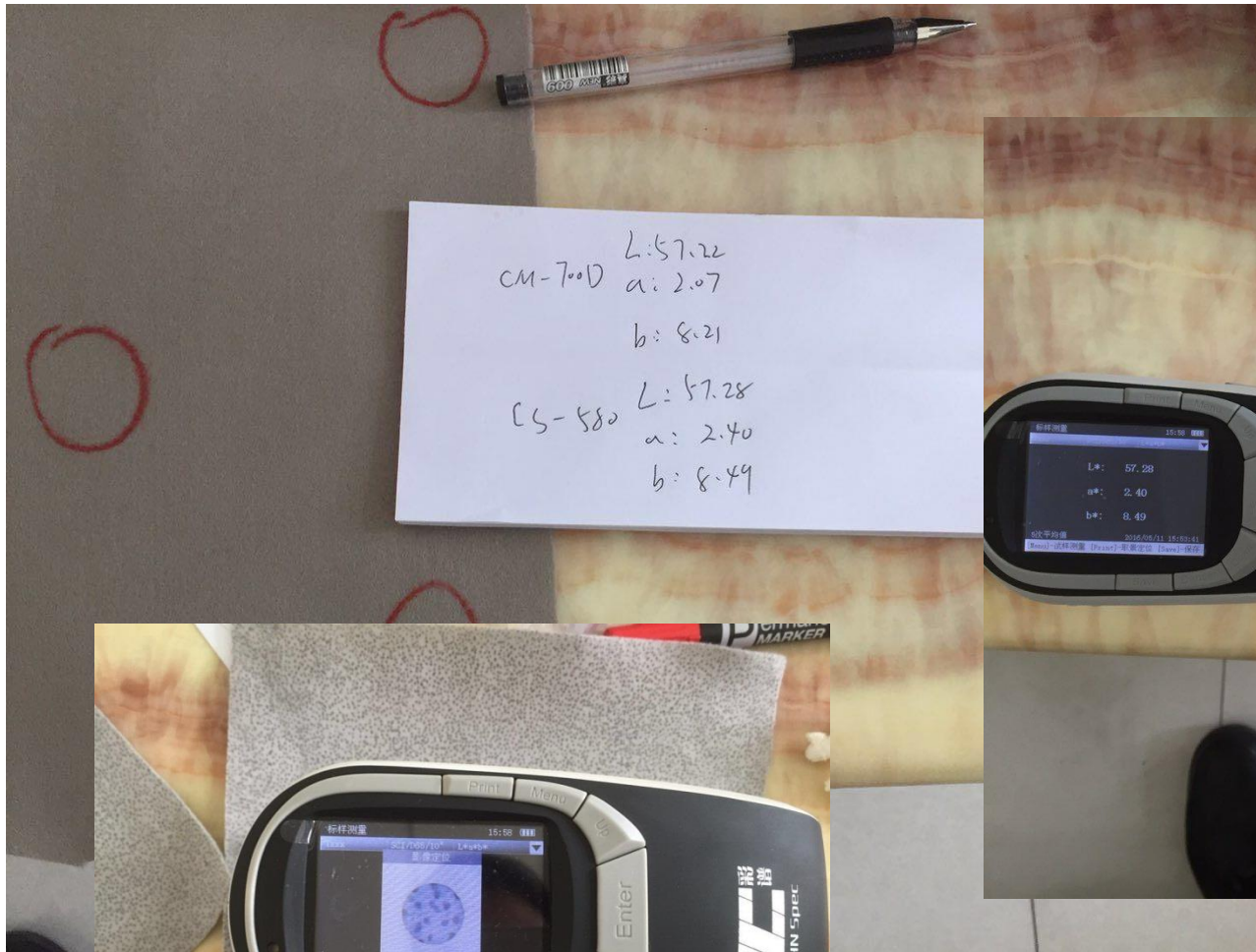
## Simultaneous Color and Gloss Measurement

CS-600C	CS-600CG	CS-800C	CS-800CG
			 <p>45/0结构,颜色光泽同时测量</p>
<p>Portable 45/0 Spectrophotometer Reflectance Measurement</p>	<p>Portable 45/0 Spectrophotometer Simultaneous Measurement of Color and 60 Degree Gloss</p>	<p>Bench top 45/0 Spectrophotometer Reflectance Measurement</p>	<p>Bench top 45/0 Spectrophotometer Simultaneous Measurement of Color and 60 Degree Gloss</p>

CS-300	CS-380	CS-3000S	In-line Gloss Meter (Custom made)
<p>Single Angle 60 Degree</p>	<p>Multi Angless 20,60,85 Degree</p>	<p>Tiny Aperture Gloss Meter 2mm</p>	<p>Non-Contact In-line Gloss Measurement</p>

# Test Result Comparing with Minolta

## COLOR MEASUREMENT, WE ARE SERIOUS



CM-700D L: 57.22  
a: 2.07  
b: 8.21

CS-580 L: 57.28  
a: 2.40  
b: 8.49



# Test Result Comparing with Minolta

## COLOR MEASUREMENT, WE ARE SERIOUS



Name	L*	a*	b*	C*	h°		
509-1 WHITE (SCI)	95.71	-0.19	2.84	2.85	93.83		7000A
Name	DL*	Da*	Db*	DC*	DH*	DEcmc	P/F DEcmc
ci62 509-1 (SCI)	0.01	-0.13 G	0.14 Y	0.15 B	0.12 G	0.24	Pass
660A 509-1 (SCI)	0.23 L	-0.09 G	0.24 Y	0.24 B	0.07 G	0.32	Pass
Name	L*	a*	b*	C*	h°		
509-2 MID GRAY (SCI)	60.13	-0.38	0.1	0.39	164.87		7000A
Name	DL*	Da*	Db*	DC*	DH*	DEcmc	P/F DEcmc
ci62 509-2 (SCI)	-0.05 D	-0.09 G	0.24 Y	0.19 B	-0.18 Y	0.39	Pass
660A 509-2 (SCI)	0.21 L	-0.10 G	0.26 Y	0.21 B	-0.19 Y	0.44	Pass
Name	L*	a*	b*	C*	h°		
509-3 DEEP GRAY (SCI)	36.04	-0.11	0.04	0.11	158.92		7000A
Name	DL*	Da*	Db*	DC*	DH*	DEcmc	P/F DEcmc
ci62 509-3 (SCI)	0	-0.05 G	0.49 Y	0.44 B	-0.22 Y	0.77	Pass
660A 509-3 (SCI)	0.15 L	-0.01	0.20 Y	0.16 B	-0.13 Y	0.33	Pass



Testing Institute



河北省计量监督检测院



浙江省纺织测试研究院



国家皮革质量监督检验中心(浙江)



中国标准化研究院公共安全标准化研究所



深圳市计量质量检测研究院



国防科技实验室认可委员会

University



北京大学



北京印刷学院

Plastic



北京现代



LEADER



瑞江汽车



哈尔斯



宁波峰诗恩塑胶有限公司  
NINGBO FENGSHEN PLASTIC CO.,LTD

Electronics



HUAWEI



格力

Textile



以纯



苏州多群纺织科技有限公司



上海纺织  
SHANGTEX

Food



青岛啤酒



海天



今麦郎



红星二锅头



五粮液股份有限公司

Paint and Furniture



顾家家居



宜家家居



立邦



兔宝宝



百润  
浙江百润树脂用品有限公司



中国·步阳

**Thank you!**