



# ONE Click Cable Measurement System Cable Quickie





### Profile Projector



### TRAditional Measurement Systems

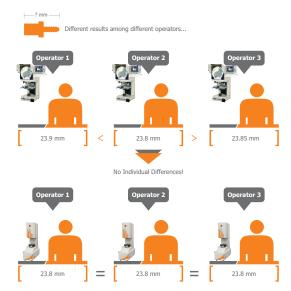
- Operator to Operator Variation
- Point-by-Point measurement takes time
- Setup Time is high
- Skilled Operator Required
- Wrong data entry by Operators

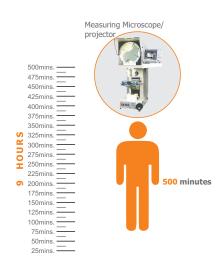
# Advantages of Cable Quickie

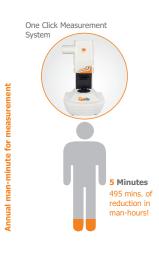
- No operator to operator variation
- Immediate results within seconds
- Automatic Report Generation
- No skill required



### Reduced Measurement Time









### **Improved Quality**

### **Cost Efficiency**

### **Shorter Measurement Time**

No Cross Hair Probing Error

**No Measurement Error** 

**No Point Selection Error** 

No Location Error

**No Alignment Error** 

**No Orientation Error** 

**No Focussing Error** 

**No Reporting Error** 

**No Edge Selection Error** 

# **CABLE-QUICKIE**

### **Features At A Glance**

**Insulator Thickness** Over

**Every Strand** 

**Minimum Insulator** 

**Thickness** 

Average Insulator Thickness

Maximum Insulator

Thickness

Cable Outer Diameter

Inner Diameter

**Concentricity** 

**Insulator Area** 

**Eccentricity** 

**Ovality** 

**Circularity** 

**Tolerance Settings** 

Width Deviation Analysis

Master calibration
 profile for slip gauges
 and ring gauges

Computer interface

(measured reading can be directly stored in excel and gives the required results)

**Customized Report** 

Generation

IEC 60811-201, 202 &

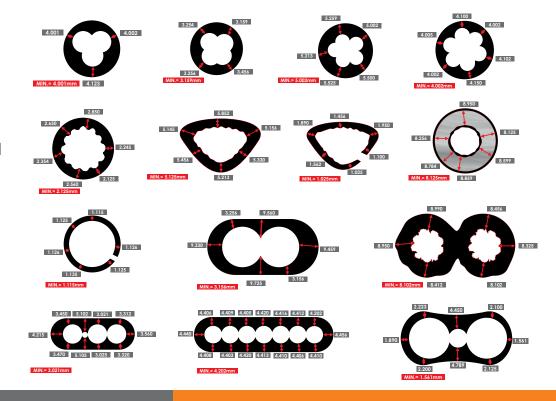
203

**EN 60811-1-1 Reports** 

**IS: 10810-6 Reports** 

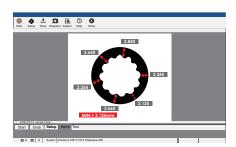


SVI-CQ-64



## **MEASURING-SOFTWARE**

### Software Desktop



Comprehensive Software Desktop with all the measuring functions just a click away. Simultaneously with the measurement you will have the result display of the measurement in front of you on the software desktop. The core of product is the simple, visual part view window with convenient tool bars that define the measurement process.

### REPORT GENERATION

Part Details			Operator Details			
Job No.	Cable		Operator Name	Pawan		
Sample No.	CC-1243		Operator I.d	12		
Customer Nam			Customer reference	e Batch 4		
Address	116, HSIDC,	, Ambala Cantt				
		Avenue	d5-30,67			
			imum= 26.56			
Inspection Re	sults	T.	imum= 26.56			
Inspection Re Parameter		Malue	Remarks			
			Remarks			
Parameter	kness	Value	Remarks			
Parameter Minimum Thick	iness int no. 1	Value 0.73	Remarks			
Parameter Minimum Thick Thickness at po	iness sint no. 1 sint no. 2	Value 0.73	Remarks			
Parameter Minimum Thick Thickness at po Thickness at po	int no. 1	0.73 0.88 0.73	Remarks			
Parameter Minimum Thick Thickness at po Thickness at po Thickness at po	kness sint no. 1 sint no. 2 sint no. 3	0.73 0.88 0.73 0.97	Remarks			
Parameter Minimum Thick Thickness at po Thickness at po Thickness at po Thickness at po	kness sint no. 1 sint no. 2 sint no. 3 sint no. 4	0.73 0.88 0.73 0.97	Remarks			

Fully customizable report format with color coded Pass /Fail for tolerance parts. Confirm to your ISO specifications and send data directly to an ASCII, Excel or any SPC program.

### Width Deviation analysis



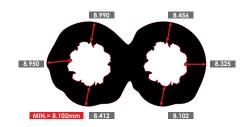
An advance feature to analyze the width at more than 10,000 points on the sample helps in understanding the width variation in the complete sample.

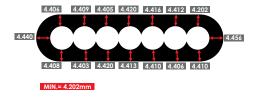
### More then 10,000 pts



An advance feature to analyze the width at more than 10,000 points on the sample helps in understanding the width variation in the

### RESULT Display on IMAGE

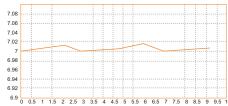






complete sample.

### INTEGERATED SPC



Inbuilt Trend Monitoring and Statistical Evaluation of any measured quantity is a prominent feature of the software.

This includes: The Trend Analysis of any measured variable with the different parts which is important to understand the variation in the batch being inspected.

### Tolerance types

Supports more than 5 types of tolerance settings with display in color coded pass and fail output. If there's a part or feature that doesn't measure up, you will know it immediately. All out of tolerance features displayed in red.

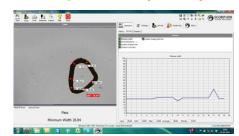
- Circularity
- Concentricity
- Eccentricity
- Ovality
- Cross-sectional Area

### Color Coded Tolerance



The software provides the flexibility to make new programs for special types of cable samples which are not part of standard software menu. The new software can be easily linked to the data management module for generating reports according to the any latest standard.

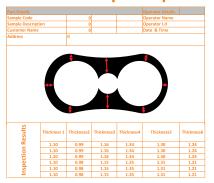
### Easy to do Programming



The software provides the flexibility to make new programs for special types of cable samples which are not part of standard software menu. The new software can be easily linked to the data management module for generating reports according to the any latest standard.

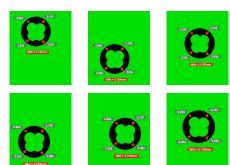
### **MEASURING-SOFTWARE**

### **BATCH REPORTING**



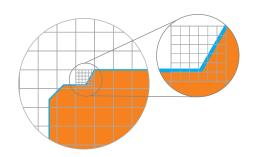
Reports of multiple cable samples are possible in one excel sheet which is very much helpful for comparative analysis.

### **AUTO ALINGMENT**



The location and the orientation of the part are automatically adjusted. There is no need of manual alignment or preparation of any jig or fixture to start the measurement. So keep the sample any where and press inspect button.

### 1/100 Pixel IMAGE PROCESSING



With Sub-pixel Image Processing you can measure by one hundredth or less of a pixel which results is very good accuracy of measurements.

### **DUAL CAMERA**



Field of View: 120mm



Field of View: 30mm

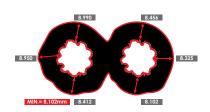
With dual camera configuration you can measure bigger cable samples in one F.O.V. (magnification) and small samples details in other (magnification). There by maintaining accuracy in both.

### Colour MEASUREMENT



The software is capable for different types of colour measurements. Also the colour matching of standard RAL colour is also possible with optional colour matcher module. You can analyse variation of colour in different batch.

### Profile Tolerance



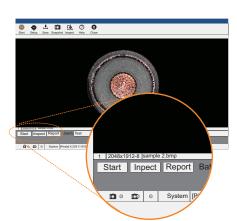
The software provides the flexibility to make new programs for new parts which are not part of standard software menu. The new software can be easily linked to the data management module for generating reports according to the any latest standard.

### Compatibility with Pneumatic Control



Our software is compatible with Pneumatic control system, with help of RS232 interface. Also we can collect the foot switch or an alarm system with the serial interface.

### Three Step Inspection



### STEP 1: START

Place the sample on the machine

### **STEP 2: INSPECT**

Click inspect to get results

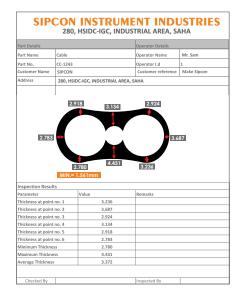
### **STEP3: REPORT**

Click Report to get all results in excel or any other desired format.

# Reporting Formats

EN60811-1-1, IS10810-1-1 IEC 60811-201, 202 & 203

Any kind of reporting format is possible according to the standards available world over.



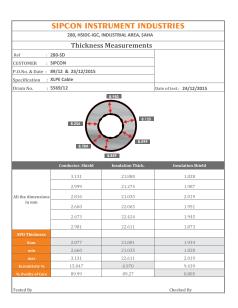
		INSPECTION R	EPORT	Sample no:-	
Size (s	qmm)	4.0 Sqmm	Yellow	Type of PVC	
Supplier Name		ne SIPCON		Tc No /Batch no	
		CABLE QUICKIE		Date & Shift:	
s.NO.		Maharastra	UNIT	OBS VALUE	
		THICKNESS MEASUREMENT			
	- 1	Thickness of point at 0°	mm	0.688	
1	2	Thickness of point at 60°	mm	0.761	
	3	Thickness of point at 120°	mm	0.772	
	4	Thickness of point at 180°	mm	0.704	
	5	Thickness of point at 240°	mm	0.713	
	6	Thickness of point at 300°	mm	0.912	
		Outer Diameter	mm	4.140	
	7	Thickness of point at 0°	mm	1.136	
	8	Thickness of point at 60°	mm	0.803	
	9	Thickness of point at 120°	mm	0.719	
2	10	Thickness of point at 180°	mm	0.737	
	-11	Thickness of point at 240°	mm	0.813	
	12	Thickness of point at 300°	mm	0.801	
		Outer Diameter	mm	4.087	
	13	Thickness of point at 0°	mm	0.730	
3	14	Thickness of point at 60°	mm	0.771	
	15	Thickness of point at 120°	mm	0.806	
	16	Thickness of point at 180°	mm	0.829	
	17	Thickness of point at 240°	mm	0.819	
	18	Thickness of point at 300°	mm	0.693	
		Outer Diameter	mm	4.088	
4		Minimum Thickness	mm	0.688	
5		Maximum Thickness	mm	1.136	
6		Average Thickness	mm	0.789	
7		Average Outer Diameter	mm	4.105	
9		Concetricity	%	75.439	

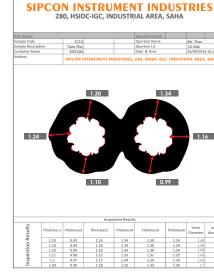
### **One Sample Report**

### **Three Samples in One Report**

Mr. Thor 12-56A 20/08/2016 16:15

1.16





### **XLPE Sample Report**

**Comparative Report of Multiple Sample** 

### Note: The above modules will work with top light which is optional.

# **Optional Modules**

### **Color Percentage Module**



The colour percentage modules is a very hand add-on, which measure the percentage of both the colours present in the wire. The reporting format is also fully customizable e.g. a yellow green sample when inspected on the machine within one click the complete diameter, ovality measurements are done along with the percentage value of both colour presents

### **XLPE Cable Analysis Module**





With XLPE Module we can measure any diameter of the cable sample (according to machine capability), Total eighteen measurements are performed for the sample; 6 in outer insulation shield thickness, 6 in insulation thickness and 6 in inner conductor shield thickness. The report consists of all the 18 thickness measurements along with Max. and Min. in each area. Average thickness ovality, diameters results are all possible.

# **Technical Specifications**

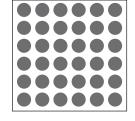
Model	SVI-CQ-16	SVI-CQ-36	SCI-CQ-48	SVI-CQ-64	SVI-CQ-120	SVI-CQ-144		
Max. Sample Diameter	16mm	36mm	48mm	64mm	120mm	144mm		
No. of Cameras	1							
Camera	5MP Industrial Camera (optionally upto 16MP)							
Accuracy	±10µm	±10μm			±15µm			
Repeatability	±5μm ±10μm			±10µm	0μm			
Least Count	0.1µm							
Illumination-Surface (optional)	LED							
Illumination-Countour	LED							
Focusing Range	Optional(30mm)							
Power Supply	110/220V @ 50Hz ±5%							
Machine Weight	25Kgs.	35Kgs.	42Kgs.	50Kgs.	80Kgs.	95Kgs.		
Interface	USB/Ethernet							
Optional Hardware	Laptop/PC with WIN7/8 operating system							
Base Platform & Column	Metal							
Auto Alignment	360° Compensation							
Max. Measurement Point	10,000							
XLPE Cable	Optional							
Color percentage Module	Optional							
Touch Screen Monitor	Optional							
Table	Optional N.A. (Floor Standing)							
Software Features								
Element Tools	Element Tools Point / Line / Circle / Arc / Distance / Angle							
GD&T	Concentricity / Eccentricity / Ovality / Cross-Sectional Area							
Edge Detection	AutoTools / Auto Edge Detection							
Manual Measurement	Yes							
Coordinate System Configuration	Yes							
Element List Editing	Yes							
Colour Measurement System	Optional							
Measurement of Images Yes								
Report Format	Customizable							
Foot Switch Optional								

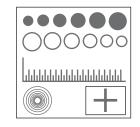
Note: Dual Camera mode also available, Customized sizes are available from 8mm diameter to 150mm diameter.





**TOP LIGHT** 







CALIBRATION MASTER: GRID

**CALIBRATION MASTER: UNIVERSAL** 





### **OTHER PRODUCTS**



VISION MEASURING MICROSCOPE



TABLE TOP MAGNIFIER



TOOL MAKER MICROSCOPE



**PROFILE PROJECTOR** 



**AUTOMATIC VISION MEASURING SYSTEM** 



COORDINATE MEASURING MACHINE

# **SIPCON INSTRUMENT INDUSTRIES**

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