

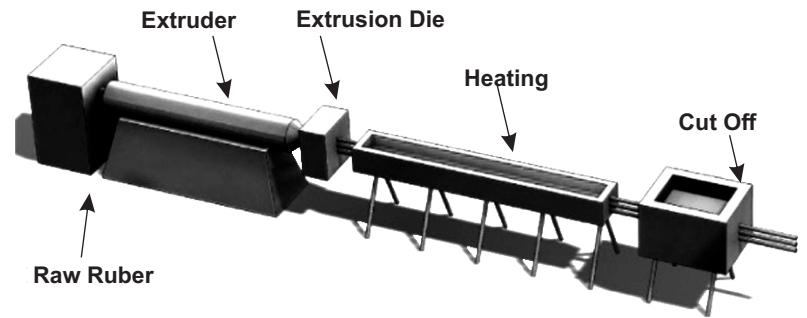
SEAL GENIE

→ One Click **Automotive**
Rubber Seal Measurement
System

Zero Operator Dependence
Measurement in **3 seconds**



WHY SEAL MEASUREMENT IS IMPORTANT



RUBBER
EXTRUSION
PROCESS

- Zero defect manufacturing
- Dimensional Accuracy is proportional to Life cycle
- Die in flow rate is proportional to Dimensional accuracy
- Measurement effect the STL, CLD & NVH characteristics.
- Goal is to reduce the production costs due to manual labour
- Reduce cost due to defective parts - Product recall
- Ensure consistent product quality
- Feedback to production loss should be fast so that the production time loss is less
- Reporting - Automated and unlimited storage for any time for reference.
- Flexibility, Reliability, Better speed, Consistency & Objectivity

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SOURCES OF ERROR IN RUBBER SEAL MANUFACTURING

- 1 Viscous Modulus
- 2 Elastic Modulus
- 3 Die Swell
- 4 Heat History
- 5 Mix Dispersion
- 6 Die Flow Balance
- 7 Screen Contamination
- 8 Feed Interruption
- 9 Screw Speed
- 10 Ratio Control
- 11 Barrel & Scree Temperature
- 12 Puller speed
- 13 Air Inflation pressure
- 14 Vulcanizing temperature
- 15 Mechanical guides

PROFILE PROJECTOR

v/s

SEAL GENIE



SPEED



SETUP TIME IS HIGH
NEED TO SETUP DATUM FOR MEASUREMENT
FOR ACCURACY NEED TO TAKE MORE POINTS (TIME CONSUMING)
REPORTING TAKES TIME

JUST PLACE AND MEASURE
AUTO DATUMMING
1000 POINTS IN ONE SECOND
AUTO REPORTING



OPERATOR DEPENDANCE

ERROR DUE TO ORIENTATION
WRONG DATA ENTRY BY OPERATORS
CASE OF CONTACT MEASUREMENT
ERROR DUE TO FOCUSING
OPERATOR SKILLS BASED RESULTS

KEEP PART ANY WHERE
AUTOMATIC REPORTING
NO NEED TO FOCUS
OPERATOR HAS NO ROLE IN MEASUREMENT



EASE OF USE

REQUIRED SKILLED OPERATORS
MEASUREMENT FROM IMAGINARY FEATURES IS DIFFICULT
TRAINING NEW STAFF IS HEADACHE

EVEN MACHINE SHOP OPERATORS CAN MEASURE
VERY SIMPLE
3 CLICK OPERATION

MEASURE ANY TYPE OF SEAL

SPONGE RUBBER PROFILES

Dust Seals Rubber
Sealing Profile
Tube / Insulation

FLOCKED WAISTLINE SEALS

Glass Run Channels
Sliding Window Run Channels
Waistline Seals

SOLID RUBBER SEALS

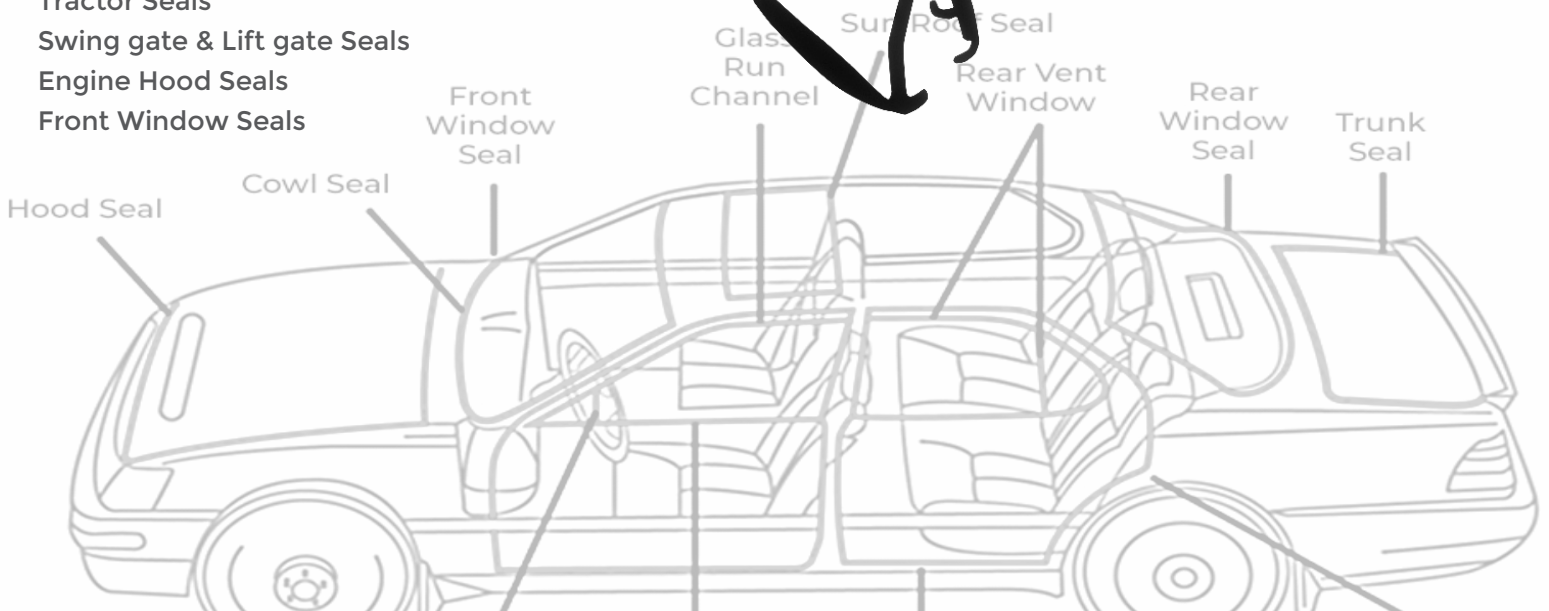
Rubber Container Seals
Rubber Edge Protectors
Rubber Sealing Profiles
Sliding Window Rubber Profiles
Rubber Straps
Rubber Windshield Profiles

DUAL HARDNESS RUBBER PROFILES

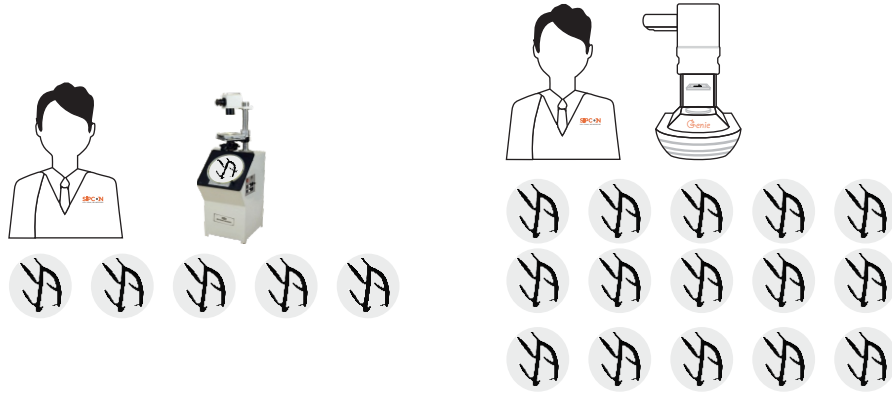
Glass Run Channels
Pasted Glass Edge protectors
Roof Gap Hiders
Waistline Seals
Wind Shield Profiles

BOOT / BONNET / TRUCK SEALS

Door Seals
Panel Seals
Seals with Slip Coating
Single and Double Bulb Inner
Tractor Seals
Swing gate & Lift gate Seals
Engine Hood Seals
Front Window Seals



ADVANTAGES - SEAL GENIE



- 1 Reduce inspection time and the number of person
- 2 Reduces training time
- 3 Reduce the man-hours needed to create inspection records
- 4 Expedites shipping inspection for short lead-time orders
- 5 Detection of early signs of problems within the process
- 6 Improved precision in equipment adjustment



ADVANTAGES - SEAL GENIE ...

Improved Quality

Cost Efficiency

Shorter Measurement Time

REPEATABILITY / ACCURACY - 90% IMPROVED

As compared to traditional methods like shadowgraph and profile projector you get improved accuracy and repeatability.

MULTIPLE REFERENCE CAPABILITY

Parts with multiple reference are measured without realigning / operator involvement.

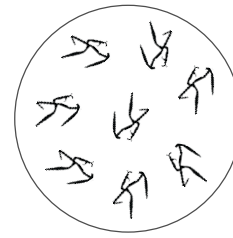


NO OPERATION VARIATION - EXCELLENT GAUGE R&R

The complete process from keeping the part measurement and reporting is absolutely operator independent.

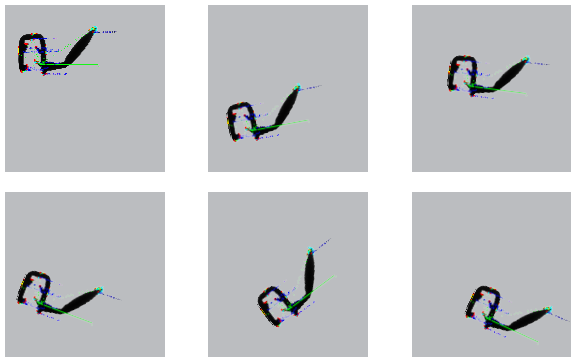
MULTIPLE PART MEASUREMENT

Measure multiple parts in field of view to increase throughput.



AUTO ALIGNMENT

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.



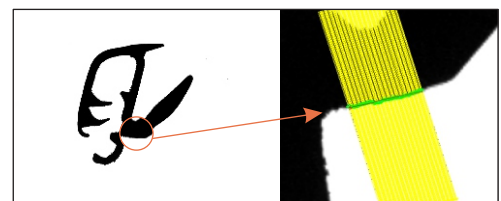
AUTO FOCUSING & AUTO ILLUMINATION

No need to focus the part before measurement. Even the illumination is controlled automatically (best suitable illumination algorithm)



AUTOMATIC EDGE DETECTION FOR BETTER ACCURACY

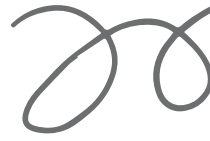
Sub pixel edge detection at 1/100 level.



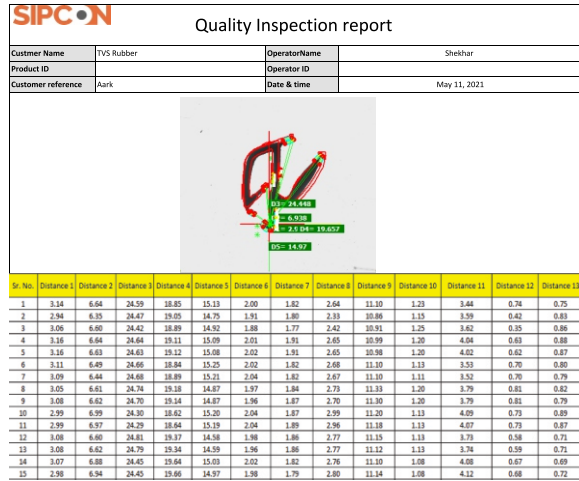
UNLIMITED STORAGE-SAVE PHYSICAL SPACE

No need to store your samples and result sheets in a separate room. Results and images are save in HDD permanently.

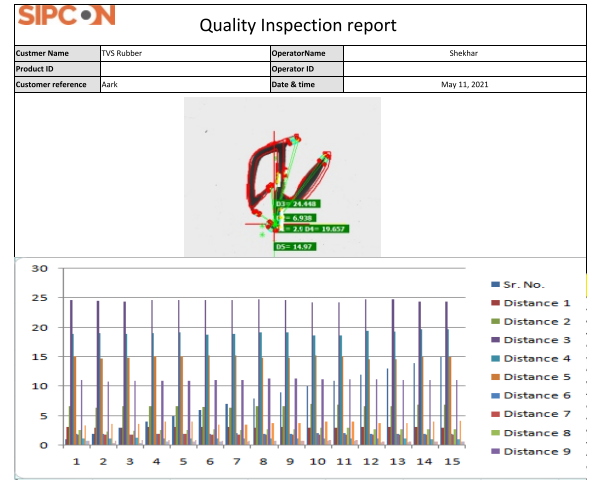
AUTOMATIC INSPECTION REPORTS



BATCH [10PCS-100PCS AT A TIME]



SPC REPORTS [XBAR, RBAR, CP, CRK]



VISUAL REPORT [COLOR CODED PASS & FAIL ON DESKTOP]



SINGLE PART REPORT



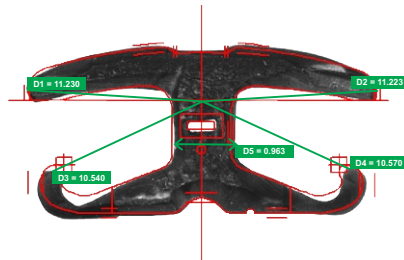
FEATURES AT A GLANCE

DXF OVERLAY



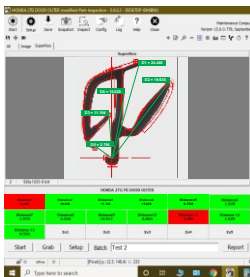
Display DXF file as an overlay on the live video image. Translate and rotate of your DXF import for fit against the video image.

RESULT ON IMAGE



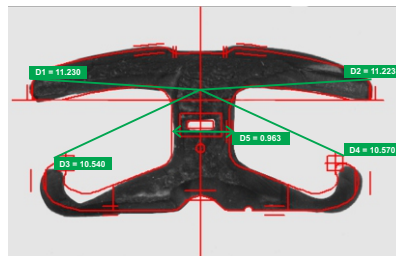
The graphical display of the results of on the image simplifies the process of identification of the measurements done.

EASY TO DO PROGRAMMING



The software provides the flexibility to make new programs for special types of rubber seal samples which are not part of standard software menu.

PROFILE TOLERANCE



Measure profile tolerances by overlapping measured points on DXF files.



TECHNICAL SPECIFICATIONS

Model	SVI-SG-64	SVI-SG-80
FOV Length X Width	64x48mm	80x60mm
No. of Cameras	1	
Camera	5MP Industrial Camera (optionally upto 16MP)	
Accuracy	±15µm	
Repeatability	±10µm	
Least Count	0.1µm	
Illumination-Surface (optional)	Ring LED Light	
Illumination-Countour	Telecentric LED Light	
Focusing Range	Optional(30mm)	
Power Supply	110/220V @ 50Hz ±5%	
Machine Weight	40Kgs.	40Kgs.
Interface	USB/Ethernet	
Optional Hardware	Laptop/PC with WIN10 operating system	
Base Platform & Column	Metal	
Auto Alignment	360° Compensation	
Touch Screen Monitor	Optional	
Table	Optional	
Software Features		
Tools	Point / Line / Circle / Arc / Distance / Angle / Extreme High Point	
Advance Features	AutoTools / Auto Edge Detection / DXF Overlay / Result on Images	
Multiple Reference Dimensions	Yes	
Coordinate System Configuration	Yes	
Deviation Analysis By DXF overlay	Yes	
Result on Images	Yes	
Report Format	Customizable	
Foot Switch	Optional	

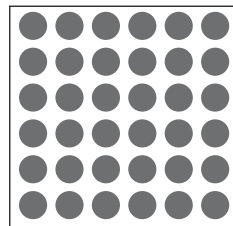
Note: Customized sizes are available from 8mm diameter to 150mm diameter.



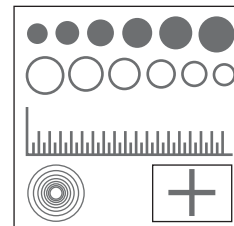
FOOT SWITCH



TOP LIGHT



CALIBRATION MASTER: GRID



CALIBRATION MASTER : UNIVERSAL



ALARM LIGHT

ABOUT SIPCON

SIPCON has been helping organizations meet their quality goals by providing industrial metrology systems that are not only reliable but also match the industry benchmark standards set by some of the big brands in the field.



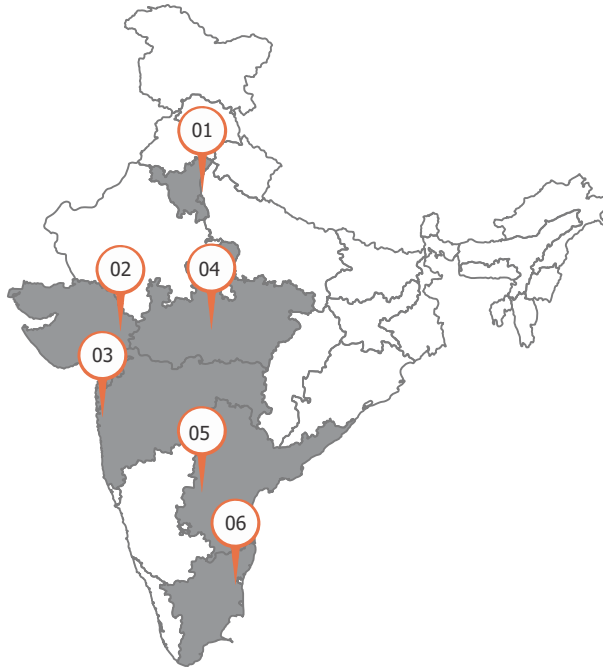
5000+ satisfied customers



24x7 Customer Support



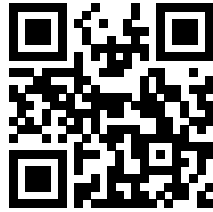
Accurate & Precise Measuring Systems



SERVICE CENTERS

01	Delhi Sector-23, Dwarka Pochanpur New Delhi Contact Person: Ashish Rajput - 92156 99673
02	Rajkot 304 Diwali Chambers, dhebar Road, Rajkot, Gujarat-02 Contact Person: Arun Kumar - 89500 99611
03	Mumbai M/s Technical Resources C-19/20, Dahisar (W) Mumbai Contact Person: Gaurav - 89500 99633
04	Indore 403, City Centre, 570 M.G. Road, Indore - 452003 (M.P) Contact Person: Shekhar Kumar - 89500 99633
05	Bangalore #328, Third Main Road, Bangalore- 71, Karnataka Contact Person: Sunil Sehgal- 9008006149
06	Chennai F.No.110, Mugalivakkam Main Road, Chennai-600 Contact Person: Sahil- 7056799662





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