

VisioCablePro[®] represented in India by



ALPHA BASIC

HIGH-PRECISION CABLE MEASUREMENT

With the compact and simultaneously highly precise measuring device for **cross section measurements of cables and hoses**, you receive new possibilities in your quality assurance process. Configure your measuring device individually adapted to your extrusion line. **Save your time and material costs** with maximum flexibility.



Max. Sample Diameter
190 MM

Measurement uncertainty
 $0.6 \mu\text{M} + 1 * 10^{-5} * l$

Least Count
0.001 MM

Included Software
VELOX BASIC

Illumination
INTELLIGENT
COLORED LIGHT

FEATURES AT A GLANCE.

The new **AlphaBASIC** – The combination of precision and flexibility.

DEVICE FEATURES

DEVICE INCLUDING SOFTWARE
QUICK AND EASY MEASUREMENT
COMPACT DESIGN
EXTENSIVE FEATURE LIBRARY
COMPUTER INTERFACE
REPORT EXPORT (XLSX, CSV, PDF, ...)
IEC 60811 -201; -202; -203
ICEA S-94-649
LV112
MASTER CALIBRATION GAUGES
ONLINE SUPPORT

MEASUREMENT VALUES

WALL THICKNESS OF EVERY LAYER
MINIMUM WALL THICKNESS
AVERAGE WALL THICKNESS
MAXIMUM WALL THICKNESS
OUTER DIAMETER
INNER DIAMETER
CONCENTRICITY
ECCENTRICITY
OVALITY
CROSSECTION
FIXED ANGLE MEASUREMENTS
...



MONEY SAVING



TIME SAVING



MATERIAL SAVING



COMPACT &
ROBUST DESIGN



LOW TRAINING
EFFORT



LOW OPERATOR
INFLUENCE



REMOTE SUPPORT &
LITTLE MAINTENANCE

TRADITIONAL MEASUREMENT SYSTEMS VS. ALPHA BASIC.

The new **AlphaBASIC** – Reduction of time expenditure and measurement mistakes.



PROFILE PROJECTOR

- Knowledge about measurement procedure and standards required
- High user influence
- High time expenditure for:
 - Point-by-Point Measurement
 - Setup

ALPHA BASIC

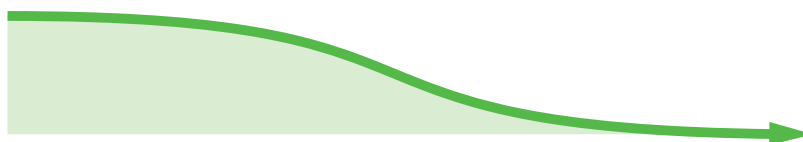
- No knowledge about measurement procedure and standards required
- No user influence on measurement
- Immediate results within seconds
- Automatic report generation



REDUCED MEASUREMENT TIME



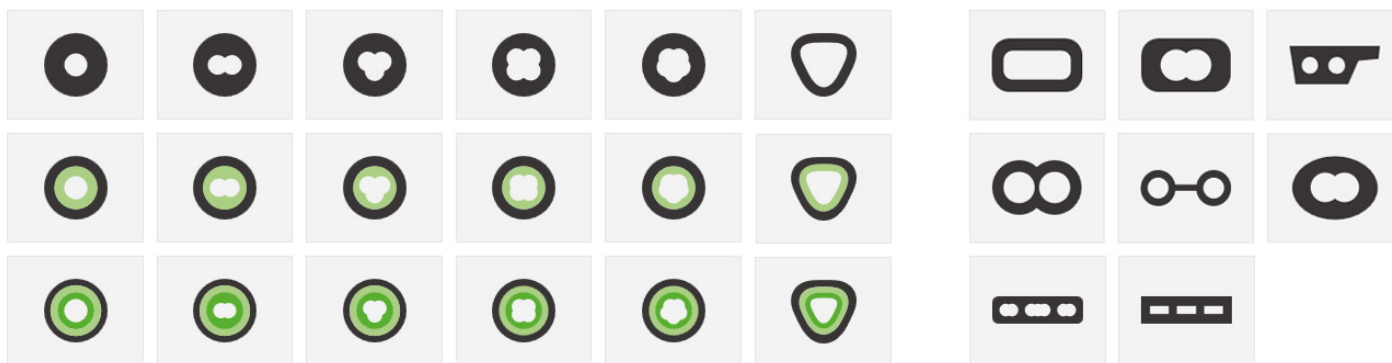
Several hours of working time



Less than one minute working time

1-CLICK MEASUREMENT

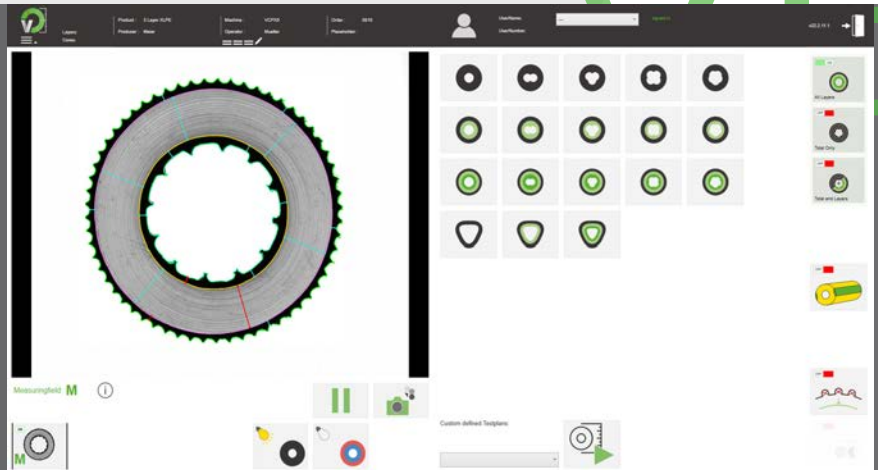
of an extensive variation of shapes.





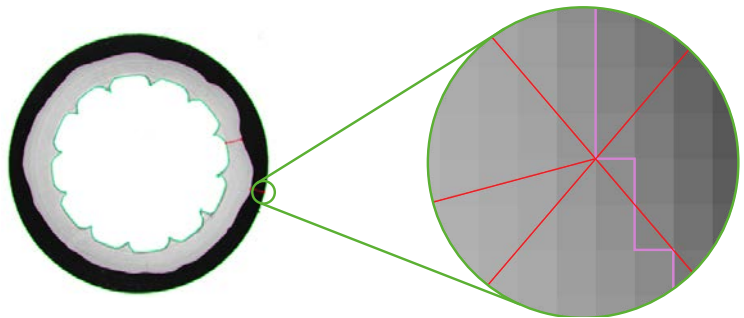
VELOX BASIC

Our software **VELOX BASIC** helps you evaluate obtained test results from our cable measuring devices securely and is always **included**, when buying one of our products from the **VisioCablePro® Alpha series**. Therefore, **VELOX BASIC** is your guarantee for secure quality testing of geometrical attributes of cables, isolated conductors, hoses and pipes.



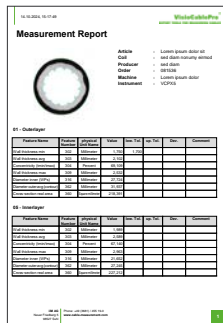
Several tens of thousands MEASURING POINTS

An advanced function that analyses the width at several tens of thousands points in the sample. It provides a comprehensive understanding of width variations across the entire sample.

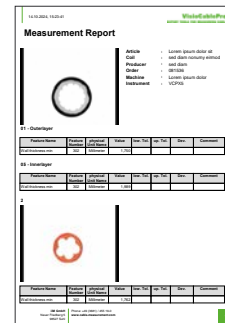


REPORT GENERATION

The report format is fully customisable and features colour-coded pass/fail indicators for tolerance parts. It complies with ISO specifications and allows direct data export to .pdf, .txt, .xlsx, .csv and .xlm. Multiple cable sample reports can be consolidated into a single Report, making comparative analysis significantly easier.



SINGLE REPORT



BATCH REPORT

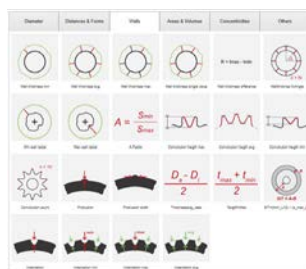
Integrated analysis DATABASE EXPORT

The software includes powerful trend monitoring and statistical analysis for each measured variable. Key features include trend analysis of each measured variable across different parts, which is essential for understanding deviations within the tested batch.

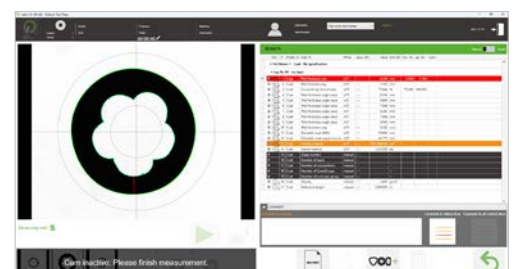


Wire recipes TOLERANCES

VELOX includes all common types of tolerance settings with colour-coded pass and fail output. If a part or feature is out of tolerance, you will know immediately. All out of tolerance features are displayed in red.



EXTENSIVE LIBRARY

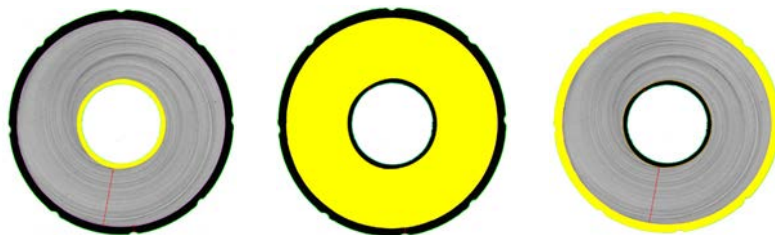


TOLERANCE EXCEED

LOX BASIC

REAL CROSS-SECTION

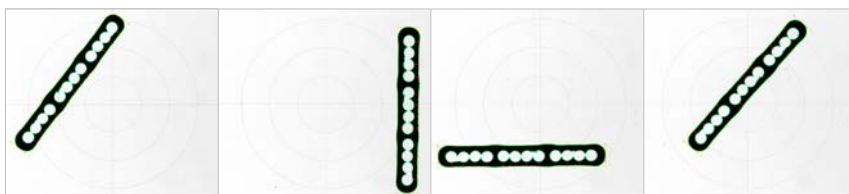
VisioCablePro® devices place tens of thousands of measurement points around the samples on several layers. Based on these, the device can determine the real-cross sectional area of each layer for material consumption calculations and precise material planning.



MM² / SQ INCH FOR INDIVIDUAL LAYERS WITH ONE CLICK

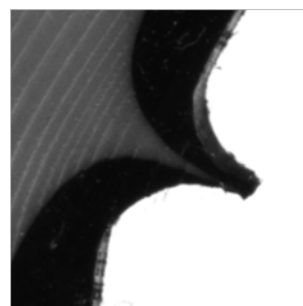
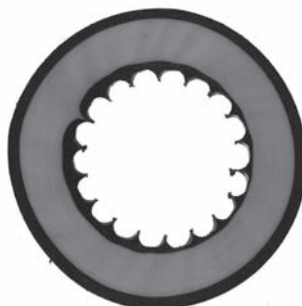
FREE POSITIONING

The position and orientation of the sample are automatically adjusted, so there is no need to manually align or set up a fixture before measuring. Simply place the sample anywhere and press the 'Measure' button to start.



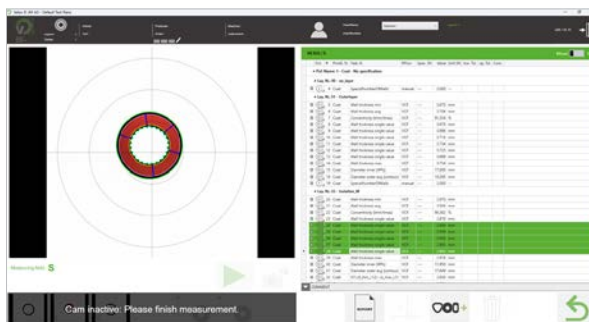
ZOOM FUNCTION

Zoom into any position of the sample for further inspection. Find defects and measure these manually.



COLOUR MEASUREMENT

The software supports various types of colour measurement and enables colour image acquisition by RGB lighting.



1-CLICK INSPECTION

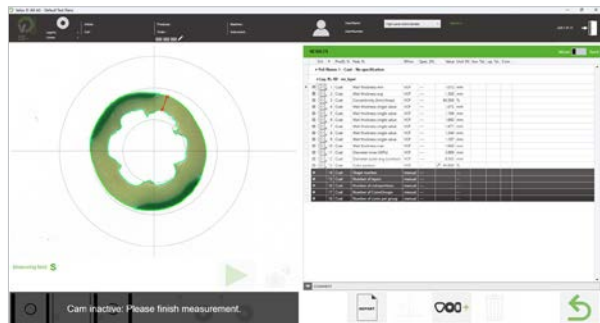
Place the sample on the device, click on the corresponding geometry and get results.





COLOUR PORTION

Automatically determine colour portion of up to six stripes on the cable.



XLPE CABLE ANALYSIS

3 layer XLPE cable analysis integrated.



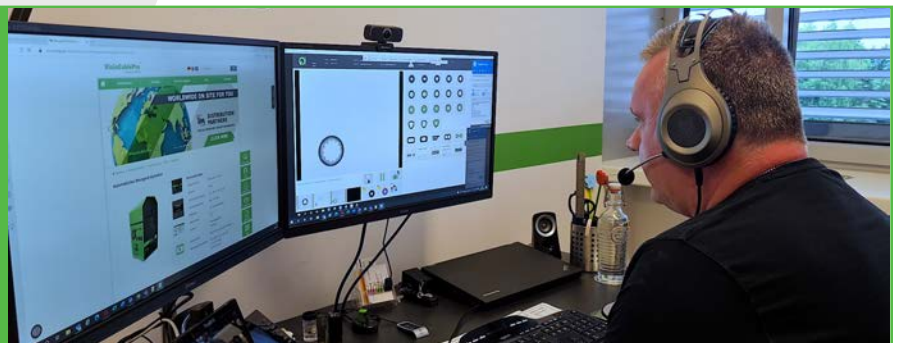
CALIBRATION SERVICE

Inhouse calibration by your own technical team with VisioCablePro® calibration scales and corresponding certificates.



ONLINE SUPPORT

VisioCablePro® offers a strong english speaking technical support.



VELOX BASIC


REPORTING FORMATS.

VELOX automatically creates and outputs clear and well-arranged reports.

ONE SAMPLE

14.10.2024, 15:17:49 VisioCablePro[®]
REPORT TOOL FOR MEASURING CABLES

Measurement Report



Article : Lorem ipsum dolor sit
Coil : sed diam nonumy eirmod
Producer : sed diam
Order : 081536
Machine : Lorem ipsum dolor
Instrument : VCPX5

01 - Outerlayer

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.750	1.700			
Wall thickness avg	303	Millimeter	2.102				
Concentricity (min/max)	304	Percent	69.109				
Wall thickness max	309	Millimeter	2.532				
Diameter inner (WPs)	316	Millimeter	27.724				
Diameter outer avg (contour)	362	Millimeter	31.937				
Cross-section real area	360	Square millimeter	218.391				

05 - Innerlayer


Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.989				
Wall thickness avg	303	Millimeter	2.589				
Concentricity (min/max)	304	Percent	67.140				
Wall thickness max	309	Millimeter	2.963				
Diameter inner (WPs)	316	Millimeter	21.652				
Diameter outer avg (contour)	362	Millimeter	27.245				
Cross-section real area	360	Square millimeter	227.212				

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MULTIPLE SAMPLE

14.10.2024, 15:23:41 VisioCablePro[®]
REPORT TOOL FOR MEASURING CABLES

Measurement Report



Article : Lorem ipsum dolor sit
Coil : sed diam nonumy eirmod
Producer : sed diam
Order : 081536
Machine : Lorem ipsum dolor
Instrument : VCPX5

01 - Outerlayer

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.750				

05 - Innerlayer

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.989				

2


Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.762				

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TOLERANCE VIOLATION

14.10.2024, 15:19:59 VisioCablePro[®]
REPORT TOOL FOR MEASURING CABLES

Measurement Report



Article : Lorem ipsum dolor sit
Coil : sed diam nonumy eirmod
Producer : sed diam
Order : 081536
Machine : Lorem ipsum dolor
Instrument : VCPX5

01 - Outerlayer

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.750	1.800		-0.050	
Wall thickness avg	303	Millimeter	2.102				
Concentricity (min/max)	304	Percent	69.109				
Wall thickness max	309	Millimeter	2.532				
Diameter inner (WPs)	316	Millimeter	27.724				
Diameter outer avg (contour)	362	Millimeter	31.937				
Cross-section real area	360	Square millimeter	218.391				

05 - Innerlayer

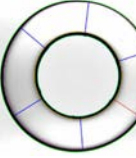
Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	1.989				
Wall thickness avg	303	Millimeter	2.589				
Concentricity (min/max)	304	Percent	67.140				
Wall thickness max	309	Millimeter	2.963				
Diameter inner (WPs)	316	Millimeter	21.652				
Diameter outer avg (contour)	362	Millimeter	27.245				
Cross-section real area	360	Square millimeter	227.212				

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XLPE SAMPLE

12.11.2024, 12:15:30 VisioCablePro[®]
REPORT TOOL FOR MEASURING CABLES

Measurement Report



Article :
Coil :
Producer :
Order :
Machine :
Instrument :

01 - Outerlayer

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	0.466				
Wall thickness avg	303	Millimeter	0.908				
Concentricity (min/max)	304	Percent	36.757				
Wall thickness single value	308	Millimeter	0.466				
Wall thickness single value	308	Millimeter	0.819				
Wall thickness single value	308	Millimeter	1.065				
Wall thickness single value	308	Millimeter	1.268				
Wall thickness single value	308	Millimeter	1.132				
Wall thickness single value	308	Millimeter	0.699				
Wall thickness max	309	Millimeter	1.268				
Diameter inner (WPs)	316	Millimeter	57.009				
Diameter outer avg (contour)	362	Millimeter	58.911				

03 - Isolation M

Feature Name	Feature Number	physical Unit Name	Value	low. Tol.	up. Tol.	Dev.	Comment
Wall thickness min	302	Millimeter	11.177				
Wall thickness avg	303	Millimeter	11.538				
Concentricity (min/max)	304	Percent	94.282				
Wall thickness single value	308	Millimeter	11.177				
Wall thickness single value	308	Millimeter	11.500				
Wall thickness single value	308	Millimeter	11.855				

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TECHNICAL HARDWARE SPECIFICATIONS.

MODEL	VCP Alpha Basic-2	VCP Alpha Basic-5	VCP Alpha Basic-9	VCP Alpha Basic-12	VCP Alpha Basic-18	VCP Alpha Basic-24	VCP Alpha Basic-34	VCP Alpha Basic-95	VCP Alpha Basic-130	VCP Alpha Basic-190
Max. Sample Diameter	2 mm	5 mm	9 mm	12 mm	18 mm	24 mm	34 mm	95 mm	130 mm	190 mm
No. of cameras	1									
Measurement uncertainty of the system	0.6 μm + 1 * 10 ⁻⁵ * l									
Least Count	0.001 mm									
Intelligent colored light mode for complicated multilayer samples	included									
Illumination-Surface	LED									
Illumination-Contour	LED									
Power Supply	110/220 V @ 50 Hz \pm 5 %									
Size (width x length x height)	400 x 520 x 820 mm 15.75 x 20.47 x 32.28 inch									
Machine Weight	22 kg									
Interface	USB 3.0									
Base Platform & Column	Metal									
Auto Allignment	360° compensation									
Measurement Points	several tens of thousands									
XLPE Cable	Included									
Color Percentage Module	Included									
Recipes with tolerances (ok, nok)	Included									
Optional Hardware	Laptop/PC with Win11 OS									
Dust and extraneous light Protection	Yes									
Touch Screen Monitor	Optional									
Table	Optional									

* The smaller the cable sample diameter, the lower the measurement uncertainty: For the VCPAlphaBASIC-34 model, the measurement accuracy is $\pm 10\mu\text{m}$ and the repeatability is $\pm 5\mu\text{m}$; for variants 9, 12, 18 and 24 the values are even lower.

TECHNICAL SOFTWARE SPECIFICATIONS.

SOFTWARE	VELOX BASIC	VELOX+
Features Round geometries, 1 - 3 layers, inclusive XLPE	✓	✓
Manual Measurement Sector geometries, 1 - 3 layers, inclusive XLPE	✓	✓
Measuring of cut samples	✓	✓
Intelligent Clour Lighting	✓	✓
Individual Recipes with tolerances	✓	✓
Automatic colour portion	✓	✓
Reports (pfd, xlsx, txt, csv, xlm)	✓	✓
Clear feature library	✓	✓
Material consumption calculation	✓	✓
Manual Measurement tools	✓	✓
Customizable user interface	✓	✓
Different user levels for tamper-proof operation	✓	✓
Live Zoom	✓	✓
Feature display in the live image	✓	✓
Flatcable, Oval, Speaker and other special geometries	✗	✓

ADDITIONAL EQUIPMENT.

VisjoCablePro® provides a complete portfolio for **perfekt sample preparation** for a wide range of cable types.



CABLE STRIPPER
CS100

For separating cable jackets / -insulations from the electrical conductor



O-RING CUTTER
ORC Micro

For very small samples up to 3.5 mm



O-RING CUTTER
ORC VC65

For samples up to 65 mm



O-RING CUTTER
ORC VC100

For samples of hard materials up to 100 mm



O-RING CUTTER
ORC 150

For large samples up to 200 mm



FLAT CABLE CUTTER
FCC 75

For flat cable samples up to 75 mm



SAMPLE PICKER

Easy positioning of small samples

FREE FEASIBILITY STUDY.

We offer **FREE of charge Feasibility Studies** on VisioCablePro® devices.

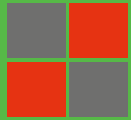
At VisioCablePro®, we guarantee that our equipment and software will meet your specific requirements. We invite you to send your product samples, which will be checked thoroughly on our devices.

- ✓ **Preparation of specimens** for the set task.
- ✓ **Detailed measurements** will be performed and returned to you for analysis, along with the physical samples.
- ✓ The entire process **can be demonstrated online**, giving you the opportunity to **ask any relevant questions**.
- ✓ **Your data confidentiality is assured**. An NDA can be signed upon request.



CONTACT.

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