

dLab 3

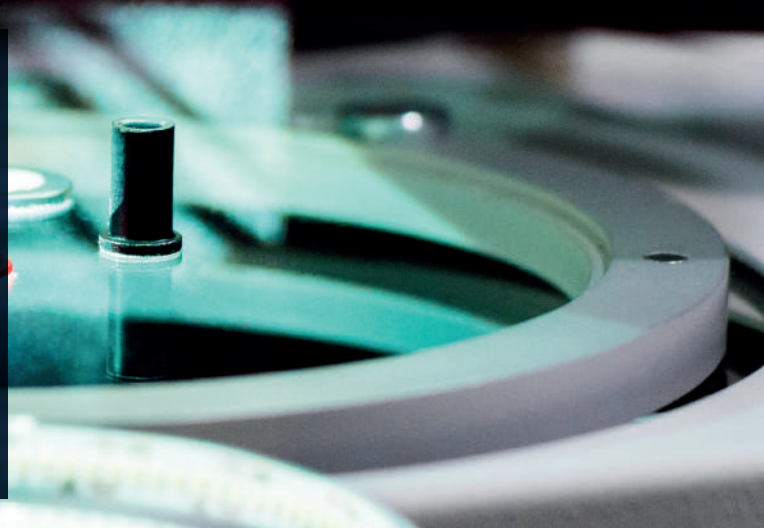
OPTICAL 2D AND THICKNESS
MEASURING INSTRUMENT FOR
O-RINGS AND TECHNICAL PARTS

PIECES

O-RING
TECH. PART

DIMENSION

2 MM ID – 200 MM OD



**SURFACE
CONTROL**



**DIMENSIONAL
CONTROL**

TO CORRECTLY DEFINE A DEFECT, A DEFECT MUST HAVE AT LEAST 30 GRAY LEVELS OF CONTRAST COMPARED TO THE NON-DEFECTIVE AREA.

DESCRIPTION

THE INSTRUMENT CONSISTS OF A 2D MEASURING SYSTEM (DIMENSIONAL AND SURFACE CONTROL BY A TELECENTRIC CAMERA) AND A THICKNESS MEASURING SYSTEM (BY A LASER).

2D MEASURING: THE OPERATOR PLACES THE PARTS TO BE INSPECTED UNDER THE CAMERA WHICH PROVIDES TWO IMAGES WITHOUT DISTORTION.

THE FIRST IMAGE IS PROCESSED WITH A DIMENSIONAL TOOL, THE SECOND ONE IS PROCESSED WITH A DEFECT SEARCHING TOOL.

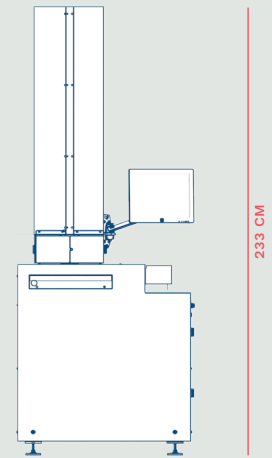
THICKNESS MEASURING: THE OPERATOR PLACES THE PARTS ONTO A MOVING PLATE THROUGH THE LASER STATION.

THE ACQUIRED DATA IS TRANSFERRED AND AVAILABLE TO THE OPERATOR THANKS TO A GRAPHICAL INTERFACE.

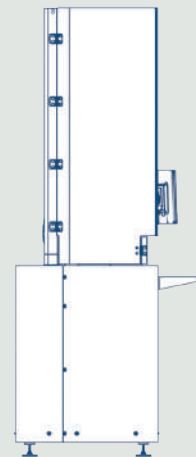


PIECE	TYPE	ELASTOMERS, RIGID MATERIALS
	COLOUR	ALL, NON-TRANSPARENT
	TYPICAL PIECE	O-RING, TECH. PART
	CHARACTERISTICS	CLEAN, FREE OF DUST OR PARTICLES THAT MAY ALTER THE PART'S PROFILE
	MAX WEIGHT	NA
	SIZE	2 MM ID – 200 MM OD
	CROSS SECTION/HEIGHT	1-50 MM
VISION	RESOLUTION	0.08 MM/PIXEL
	FRAME FIELD	210 MM
	CAMERA RESOLUTION	9 MPX
PERFORMANCES	CYCLE TIME	1 PC/SEC (CAMERA) 24 SEC (LASER)
	REPEATABILITY	± 0.013 MM
	WORKING TEMPERATURE	NA
	ACCURACY	± 0.027 MM
	SINGLE PHASE POWER SUPPLY	230 V – 50 HZ
	MAX INSTALLED POWER	0.5 KW
	ELECTRICAL PROTECTION	IP 44
	AVERAGE CONSUMPTION	0.02 KW
	RESOLUTION	(A) 0.5 µM, (B) 1.5 µM
LASER	WORKING FIELD	(A) 0.1 - 8 MM (B) 0.1 - 16 MM
	MEASURING STEP	0.01 MM
	LINEARITY	(A) 8 µM, (B) 16 µM

DIMENSION



90 CM



95 CM

CHARACTERISTICS



STATISTIC AND
REPORT



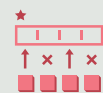
TRACEABILITY OF
PRODUCTION LOTS



REMOTE
MANAGEMENT



M.E.S.
COMPATIBLE



CUSTOMIZABLE FOR
SPECIAL PROJECTS