

# AUTOMATED BALLOON VISUAL INSPECTION SYSTEM



## AUTOMATED BALLOON VISUAL INSPECTION SYSTEM FOR IMMEDIATE PASS/FAIL RESULTS

- Single operation provides balloon visual inspection and dimensional measurements
- Sophisticated vision system and analysis program
- Intuitive user interface and set-up
- Fast cycle times with immediate detailed visual and data reporting

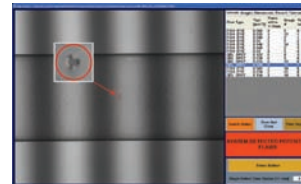
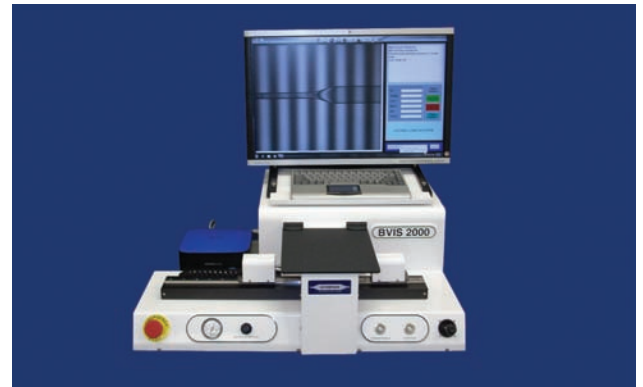
### DESCRIPTION

Interface Catheter Solutions' automated balloon visual inspection system, Model BVIS-2000, provides both visual inspection and dimensional measurements of medical balloons in a single operation. Inspection includes classification and size of defects with pass/fail analysis based on user-selected criteria. The BVIS-2000 operates with a sophisticated vision system and analysis program with an intuitive user interface. The BVIS-2000 has a high speed camera and includes a telecentric measuring lens for precise measurements and superior image quality. Fast cycle times with immediate detailed visual and data reporting make the BVIS-2000 ideal for production and research and development.

### HOW IT WORKS

The Interface BVIS-2000 is simple to operate and program. The set-up screen allows the user to enter criteria including nominal balloon specifications, flaw inspection criteria (such as fish eyes, gel spots), air pressure, rotational requirements and balloon dimensional measurements. The operator also has the option of using a pre-programmed recipe.

The balloon to be inspected is inserted into a precision clamping fixture and tightened. The balloon is pressurized by hitting the Pressure Enable button. The Start button initiates the inspection process. The Interface balloon visual inspection system then captures images moving from one side to the next and rotating the balloon as pre-programmed. The BVIS-2000 automatically inspects all balloon images by running them through image processing algorithms. The results of the inspection are summarized in a defect table and dimensional table. The defect table provides details such as TAPI size and type. Close-up images of the potential flaws can be viewed by clicking on the table entries.



### SPECIFICATIONS

Inspection Area:	Diameter 2 to 12 mm Length 10 to 200 mm Cone length 1.5 to 13 mm
Measurement Points:	Main body diameter and length Cone lengths and angles Stem diameters
Programmable Inspection Parameters:	Nominal dimensions with tolerances Flaw inspection criteria, including type, size and spacing Balloon pressure Rotational selection
Balloon Defects:	Fish eyes, gel spots, foreign particulates, bubbles, scratches, crow's feet, zipper lines, stem defects
Minimum Size Defect:	0.005 mm
Rotational Options:	6x60° or 4x90°
Balloon Pressure:	Up to 7 atm
Resolution:	11 µm
Camera:	High-speed, 5 megapixel resolution
Magnification:	20x Telecentric Lens
PC Controlled:	Wireless keyboard and flat screen USB port Large storage capacity
Dimensions:	28.7" W x 28.3" D x 28" H 729 mm W x 719 mm D x 711 mm H
Weight:	~ 90 lbs
Electrical: IA733043-1 IA733043-2	150 Watts 100-130 VAC 50/60 Hz 150 Watts 200-240 VAC 50/60 Hz
Air Supply:	90-120 PSI @ 0.5 LPM