

## EPA - End Profile Analyzer

### Description

The **EPA - End Profile Analyzer** is a Sanitary can end measurement system, which uses laser profiling technology in order to measure the sanitary can end.

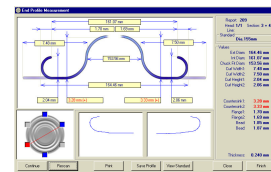
Incorrect values on the ends can often cause major issues like deadheads, stuck ends, false seams and bad double seams. Also, can end curl specifications are very difficult to measure and confirm today without the End Profile Analyzer.

The End Profile Analyzer (EPA) replaces "go-no-go" gauges and destructive measurement methods for sanitary ends, which are inaccurate, time consuming and give different results for different operators. With laser profiling technology, the EPA is able to measure all important end specifications using a non-contact optical laser measurement system:

- End Material Thickness
- Outside diameter
- Inside Diameter
- Chuck Fit Diameter (an actual measurement, not go-no-go)
- Curl Width (for the first time, non destructive!)
- Curl Height
- External Curl Radius
- Countersink
- End flanges
- Pin Fit
- First bead
- New: Overall height
- New: Second countersink
- New: Chuck wall angle (optional)
- New: Countersink bottom radius (optional)



End Profile Analyzer unit



End Profile Analyzer - measurement screen

## Features

- End curl specification verification!
- Quick measurements (under 1 second)
- High accuracy material thickness gauge
- High accuracy
- Automatic measurement ensures repeatability
- Non-contact, non-destructive measurements
- Non-destructive measurement of Curl Width
- Can measure previously difficult to measure values, such as curl width and curl radius
- Multilingual! Translations available to most languages
- Runs under Windows™
- CE certified
- Prefocused, precalibrated
- Accurate material Thickness gauge
- Provides its own reports and also interfaces with SPC systems
- **New: Chuck wall angle and countersink bottom radius measurements (optional)**

### Inner Bead Gauge (Optional)

- Measures positive and negative inner beads
- 0.01mm (0.0005") measurement resolution
- Easily adjustable slider position



## Specification

<b>Optical Resolution:</b>	10 microns or better
<b>Cover Thickness Resolution:</b>	1 micron
<b>Can End diameter range:</b>	48mm - 250mm
<b>Max End countersink depth:</b>	4.5mm

Inner bead attachment specifications

<b>Bead type:</b>	Positive and Negative
<b>Resolution:</b>	0.01mm (10 microns)
<b>Slider:</b>	Easily adjustable positioning
<b>Optical Resolution:</b>	0.0004" (4 ten thousandths) or better
<b>Cover Thickness Resolution:</b>	0.00005" (50 millionths)
<b>Can End diameter range:</b>	2"-10"
<b>Max End countersink depth:</b>	0.18"

Inner bead attachment specifications

<b>Bead type:</b>	Positive and Negative
<b>Resolution:</b>	0.0005" (5 ten thousandths)
<b>Slider:</b>	Easily adjustable positioning

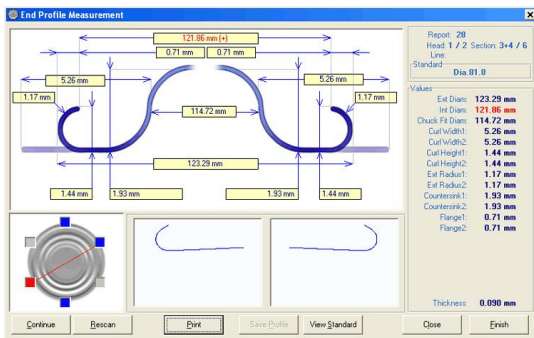
Pictures



High accuracy end material thickness gauge



EPA optical unit



EPA measurement screen



Profiling in action

Measurement report

End Profile Analyzer - Quality By Vision LTD  
Operator: Ross M.  
SKU:  
Comments: 1st Prod Run. Yes

Report number: 178 Studied name: H1 (Hollow)  
Report date: 16/05/2004 14:25  
Setup last calibration date: 16/05/2004  
Operator last calibration date: 01/01/2003

	Min	Max	Set	Dev	Dev%	Dev/Std	Comments	Flag
Min	0.210	81.75	80.20	72.35	1.90	3.00	0.75	
Max	0.220	81.90	80.30	72.70	6.00	2.00	3.00	0.00
Flag	0.230	82.00	80.40	73.00	6.00	2.00	3.00	0.00

Section	Distance	Set Pos	Set Pos1	Dev	Dev%	Dev/Std	Comments	Flag	Int
1	0.220	81.82	80.20	72.35	6.00	2.00	3.00	0.75	0.04
2					3.99	2.00	3.04	0.76	0.10
3		81.79	80.24	72.65	6.00	1.90	3.04	0.75	0.04
4					3.99	2.00	3.00	0.81	0.14
5		81.74*	80.19*	72.60	6.00	1.90	3.04	0.75	0.04
6					3.98	2.00	3.02	0.82	0.14
7		81.81	80.21	72.35	6.00	1.90	3.02	0.76	0.10
8					6.00	2.00	3.00	0.80	0.12
9					3.98	2.00	3.04	0.77	0.04
10		81.74*	80.19*	72.60*	6.00	2.04	3.00	0.82	0.13

Average: 0.220 81.78 80.24 72.82 6.00 2.00 3.02 0.77 0.14  
 DevCV: 0.000 0.04 0.06 0.06 0.02 0.00 0.02 0.02 0.00 0.01  
 Flag: 0.000 0.08 0.16 0.11 0.09 0.08 0.04 0.10 0.04

EPA report