RDDS1 after DB
Microsense measurement at Kure

DATA16 MS one column kgdata
AS RECEIVED - RESULTS IN MM.

MEASUREMENT ON EVERY CELL - 270DEG ARC - THETA. -135DEG TO 135DEG
18 FEB 2000 TIME: 10:49 TEMP: 72 39F
ACS1_009 - 2ND STRAIGHTNESS CHECK - 90 CW ROTATION

SLAC MET Inspection Department
060
Established 1982

CELLSTACK DEVIATIONS
RDDS1 STRAIGHTNESS

- 5 supports
- original y position
- 3 supports
RDDS1 Microsense meas at Tokyo
Horizontal deviation from a line connecting two support points

 RDDS1 Microsense meas at Tokyo
Vertical deviation from a line connecting two support points
RDDS1 FORM ERROR

Form Microns vs Z Axis MM
Bookshelfing

$k \approx 1 \text{ m}$

No Bookshelfing

No Bookshelfing

After bending
\[ h = \frac{x}{D-h} - R \]

\[ \frac{x}{1} = \frac{61 \text{ mm}}{x} \]

\[ \Theta = \frac{1}{R} = \frac{1 \times 10^{-6}}{6.1 \times 10^3} \text{ rad} = \frac{1}{6.1 \times 10^3} \]

\[ R^2 \mu m \times 67 \times 10^3 \text{ m} = 6 \times 10^3 \text{ m} \]

\[ h = \frac{\mu m}{2 \times 6 \times 10^{-2}} \]

\[ h = 1.0 \times 10^{-3} \text{ m} ; \text{ Systematic} \]

\[ h = 100 \mu \text{ m} ; \text{ Random} \]