Ultra Digital® by GPA
for HP Indigo Digital Presses

Ultra Digital® Layflat Photo Pages with FlexBind® Technology

for HP Indigo Digital Presses

FlexBind® Integrity Testing

Flex Tester - 40

Procedure:

- The book is opened and all pages and cover on each side are clamped down on bed. Page being tested is fed between two round steel shafts.
- A clamp is attached to end of sheet being tested.
- Attached to the clamp is a rope that goes over two pulleys and is fastened at the end to a 2 lb. weight.
- The two round shafts and rectangular blocks on each end form an assembly that oscillates back and forth through the opening in the bed.
- The action of oscillation raises and lowers the 2 lb. weight

Machine cycles at about 40 - 60 cycles/min. (adjustable)

Industry Standard:
300 cycles is considered a successful binding.

Results:
The FlexBind® page ran for 1,760 cycles before the test was manually ended.
No visible damage to the sheet or hinge was noted.

Flex Tester 40 testing a FlexBind® page in a book.

ASK GPA

GPA®
Specialty Substrate Solutions
800-395-9000
www.askgpa.com

Ultra Digital® by GPA
for HP Indigo Digital Presses

Ultra Digital® Layflat Photo Pages with FlexBind® Technology

for HP Indigo Digital Presses

FlexBind® Integrity Testing

Page Pull Tester - 80

Procedure

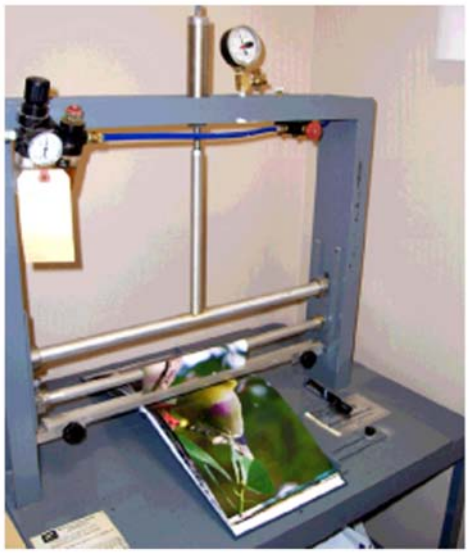
- One page is fed through the thin slot on the rectangular bar.
- Page is then fed through a thin slot in the round bar directly above.
- Round bar is rotated so that sheet is wrapped completely around bar. This causes the spine to be pulled up to bottom of rectangular bar.
- Air pressure is fed into air cylinder and increased until either sheet breaks or to maximum of 80 p.s.i. One lb. of pull per 1 p.s.i.

Industry Standard:
4 p.l.i. (pounds per linear inch) is considered exceptional

Results:
The FlexBind® bound pages reached the maximum test capability of 80 lbs. of pressure without failing.To ensure repeatability, the test was performed multiple times without failing. No visible damage to the sheet or hinge was noted.

The FlexBind® page was 8.5" wide. Therefore: 80 lbs./8.5" = 9.4 p.l.i. without failing

Holmberg Co. Inc. maintains an internal manufacturing specification of strength across the laminated hinge of 20 p.l.i.



Page Pull Tester 80 testing a FlexBind® page in a book.

ASK GPA

GPA®
Specialty Substrate Solutions
800-395-9000
www.askgpa.com