

## ภาคผนวก ข

## ผลการทดลองด้วยการออกแบบเชิงแฟกทอเรียลบางส่วน

| Term                               | P     |
|------------------------------------|-------|
| Constant                           | 0.000 |
| Mount Head Height                  | 0.008 |
| Pin Head Height                    | 0.010 |
| UV1 Curetime                       | 0.026 |
| UV2 Curetime                       | 0.072 |
| Adhesive Dotsize                   | 0.003 |
| PSA Mean                           | 0.005 |
| Mount Head Y-axis Speed            | 0.012 |
| Mount Head Z-axis Speed            | 0.080 |
| Mount Head Height*Pin Head Height  | 0.001 |
| Mount Head Height*UV1 Curetime     | 0.004 |
| Mount Head Height*UV2 Curetime     | 0.687 |
| Mount Head Height*Adhesive Dotsize | 0.010 |
| Mount Head Height*PSA Mean         | 0.004 |
| Mount Head Height*                 | 0.008 |
| Mount Head Y-axis Speed            |       |
| Mount Head Height*                 | 0.010 |
| Mount Head Z-axis Speed            |       |
| Ct Pt                              | 0.003 |

S = 6.434542E-06    R-Sq = 99.94%    R-Sq(adj) = 99.45%

Estimated Coefficients for Sigma\_1 using data in uncoded units

| Term                               | Coef         |
|------------------------------------|--------------|
| Constant                           | 0.000149860  |
| Mount Head Height                  | -7.99063E-07 |
| Pin Head Height                    | -1.04838E-06 |
| UV1 Curetime                       | -2.10531E-04 |
| UV2 Curetime                       | 4.71250E-06  |
| Adhesive Dotsize                   | -1.75104E-07 |
| PSA Mean                           | -1.81875E-05 |
| Mount Head Y-axis Speed            | 3.75062E-09  |
| Mount Head Z-axis Speed            | 2.93625E-09  |
| Mount Head Height*Pin Head Height  | -2.74375E-08 |
| Mount Head Height*UV1 Curetime     | -3.22812E-06 |
| Mount Head Height*UV2 Curetime     | -1.87500E-08 |
| Mount Head Height*Adhesive Dotsize | 6.65625E-09  |
| Mount Head Height*PSA Mean         | -1.55000E-06 |
| Mount Head Height*                 | 4.58125E-11  |
| Mount Head Y-axis Speed            |              |
| Mount Head Height*                 | 8.01250E-11  |
| Mount Head Z-axis Speed            |              |
| Ct Pt                              | -7.50083E-05 |

ภาพที่ ข.1

ผลการวิเคราะห์ความแปรปรวนของผลตอบสนองคือค่าเบี่ยงเบนมาตรฐานของตำแหน่งหัวอ่าน  
เป็นผลตอบสนองที่ 1

| Term                               | P     |
|------------------------------------|-------|
| Constant                           | 0.000 |
| Mount Head Height                  | 0.006 |
| Pin Head Height                    | 0.010 |
| UV1 Curetime                       | 0.122 |
| UV2 Curetime                       | 0.023 |
| Adhesive Dotsize                   | 0.000 |
| PSA Mean                           | 0.132 |
| Mount Head Y-axis Speed            | 0.071 |
| Mount Head Z-axis Speed            | 0.021 |
| Mount Head Height*Pin Head Height  | 0.045 |
| Mount Head Height*UV1 Curetime     | 0.183 |
| Mount Head Height*UV2 Curetime     | 0.011 |
| Mount Head Height*Adhesive Dotsize | 0.267 |
| Mount Head Height*PSA Mean         | 0.937 |
| Mount Head Height*                 | 0.102 |
| Mount Head Y-axis Speed            |       |
| Mount Head Height*                 | 0.017 |
| Mount Head Z-axis Speed            |       |
| Ct Pt                              | 0.003 |

S = 0.0000122826    R-Sq = 99.95%    R-Sq(adj) = 99.57%

Estimated Coefficients for Mean\_1 using data in uncoded units

| Term                               | Coef         |
|------------------------------------|--------------|
| Constant                           | 0.0481882    |
| Mount Head Height                  | -2.89846E-06 |
| Pin Head Height                    | -2.60375E-07 |
| UV1 Curetime                       | 7.83906E-05  |
| UV2 Curetime                       | 1.74406E-05  |
| Adhesive Dotsize                   | -2.84448E-06 |
| PSA Mean                           | -1.81094E-05 |
| Mount Head Y-axis Speed            | 1.21875E-11  |
| Mount Head Z-axis Speed            | -1.59313E-09 |
| Mount Head Height*Pin Head Height  | 6.98750E-09  |
| Mount Head Height*UV1 Curetime     | 7.70313E-07  |
| Mount Head Height*UV2 Curetime     | 7.42813E-07  |
| Mount Head Height*Adhesive Dotsize | 1.94792E-09  |
| Mount Head Height*PSA Mean         | 1.71875E-08  |
| Mount Head Height*                 | 2.20937E-11  |
| Mount Head Y-axis Speed            |              |
| Mount Head Height*                 | -1.16062E-10 |
| Mount Head Z-axis Speed            |              |
| Ct Pt                              | -1.34142E-04 |

## ภาพที่ ข.2

ผลการวิเคราะห์ความแปรปรวนของผลตอบสนองคือค่าเฉลี่ยของตำแหน่งหัวอ่านเป็น

ผลตอบสนองที่ 1