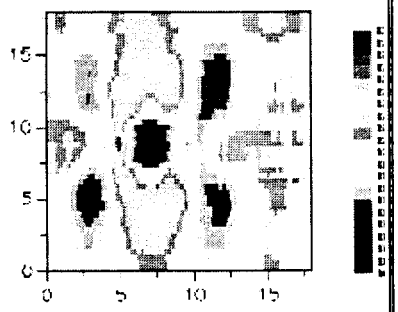
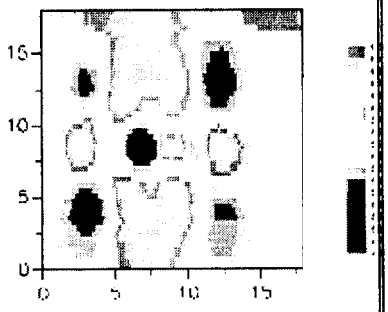
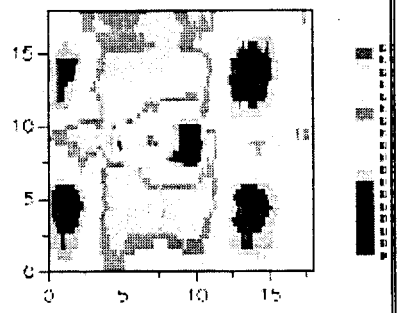
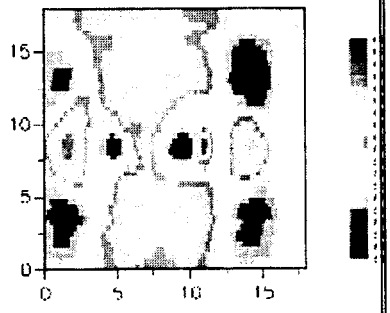
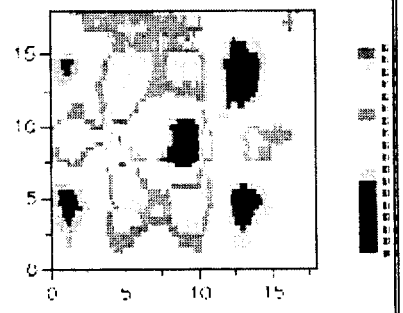
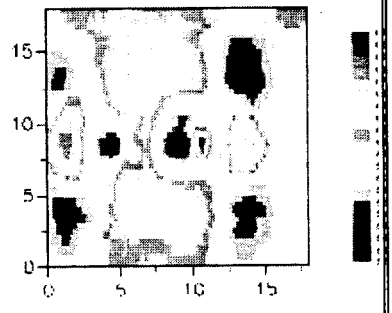
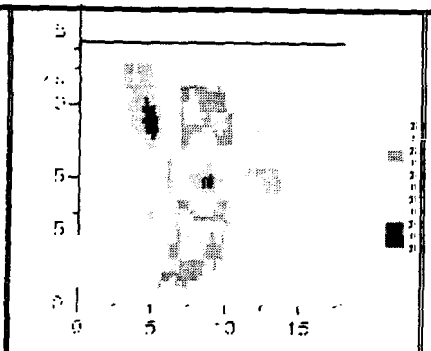
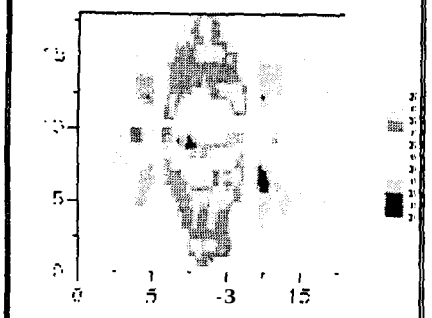
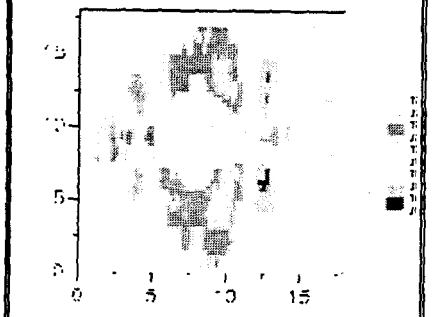
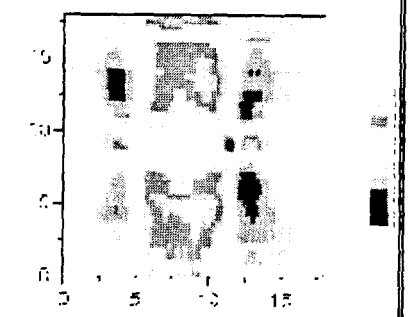
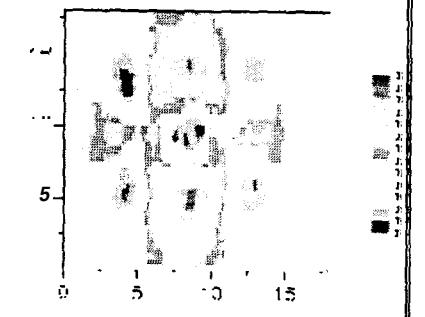
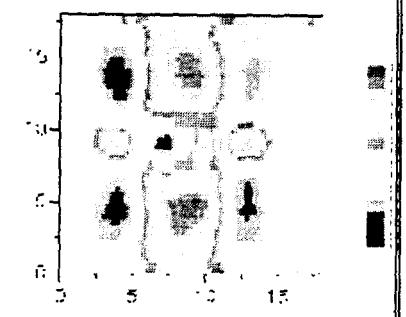
# Defect Set 5 - Pull Rig Defects
# MFL Data

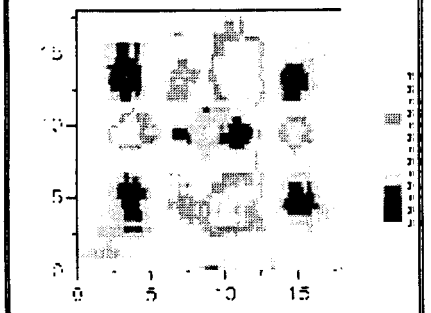
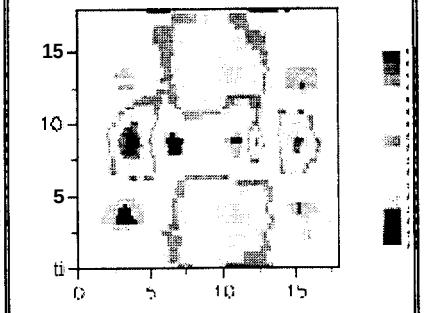
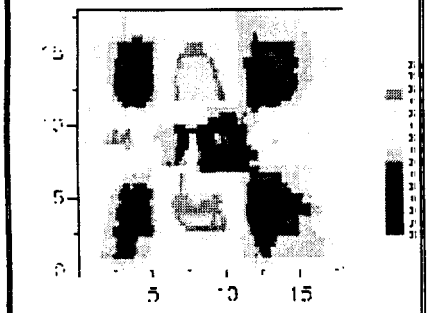
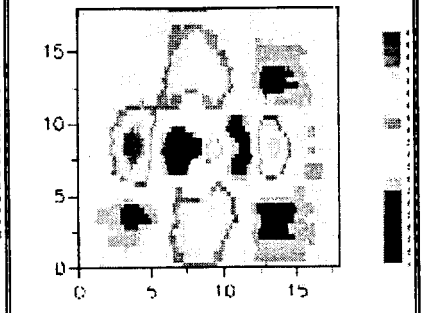
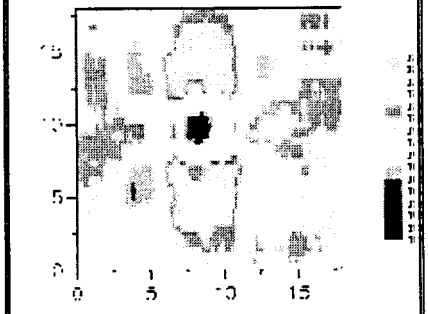
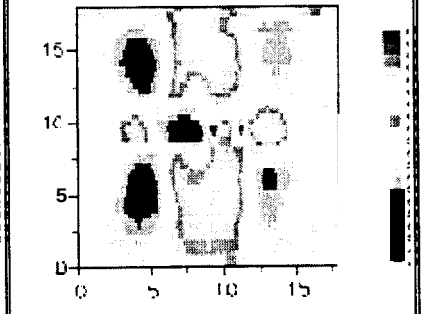
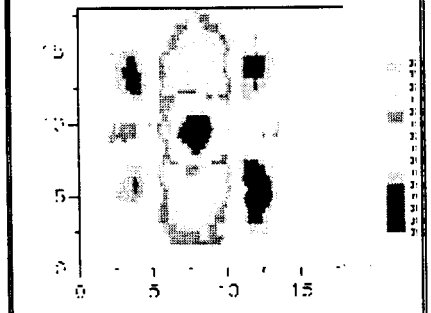
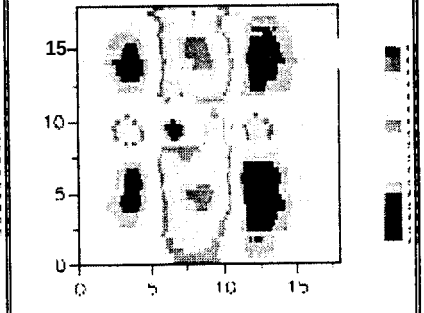
This defect set was used in the pull rig. For a layout map of the defects, click here. For a description of the variables included in this table, see the legend at the bottom of this page.

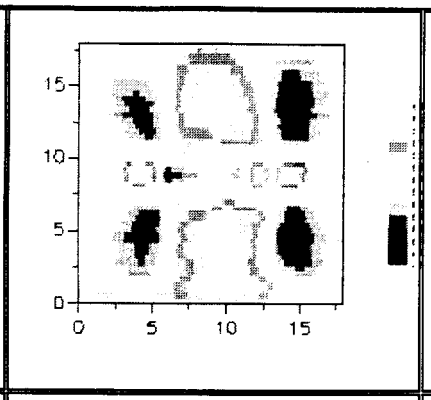
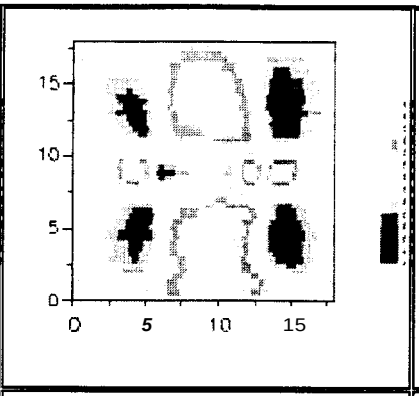
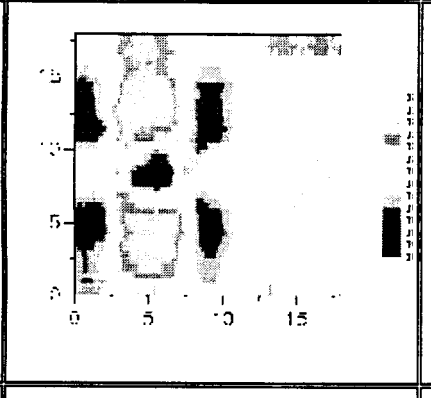
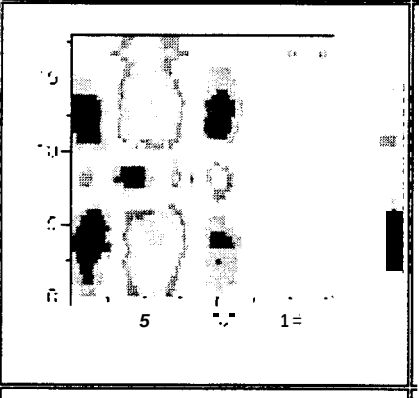
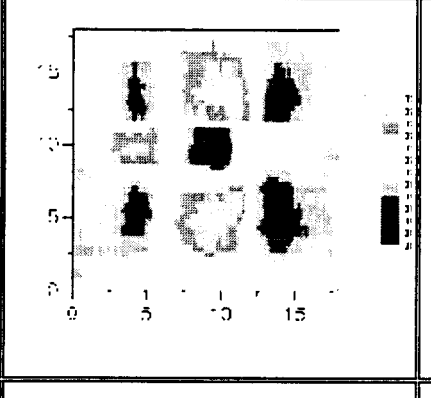
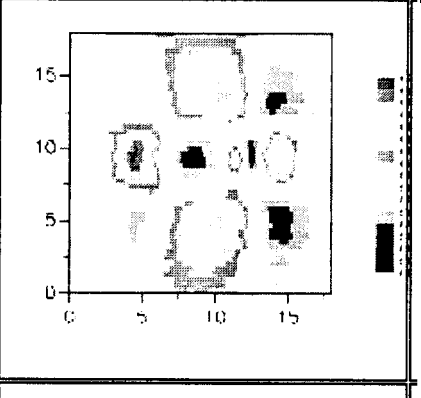
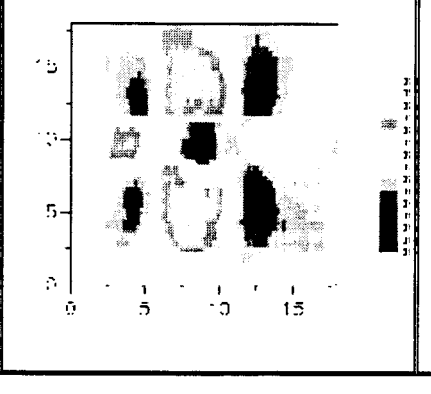
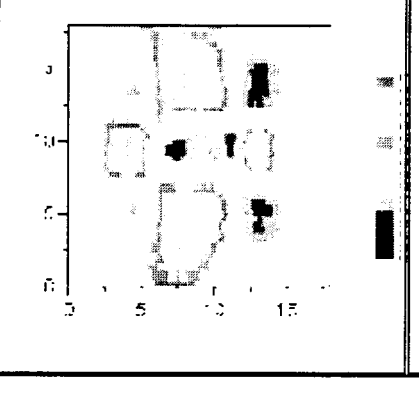
| # | **High** Level MFL **Signal** | Low Level MFL **Signal** | D | L | RB | RI | RO | S | IL | P | S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 |  |  | 3 | 6 | 3 | 0 | 3 | 5% | 5% | 60% | S |
| 102 |  |  | 3 | 6 | 0 | 6 | 3 | 5% | 5% | 60% | S |
| 102r |  |  | 3 | 6 | 0 | 6 | 0 | 5% | 5% | 60% | S |

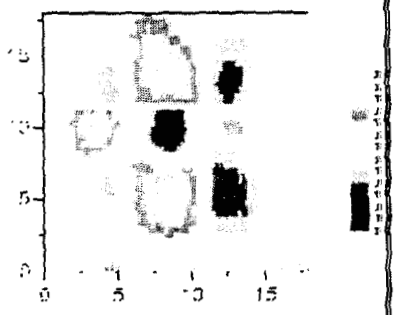
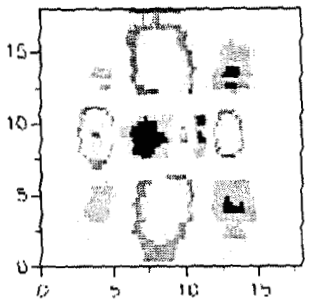
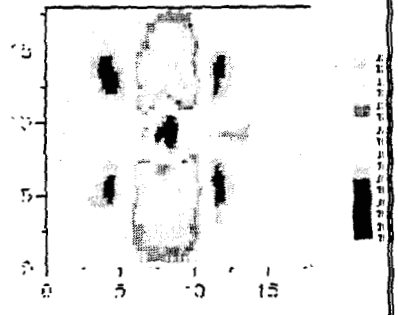
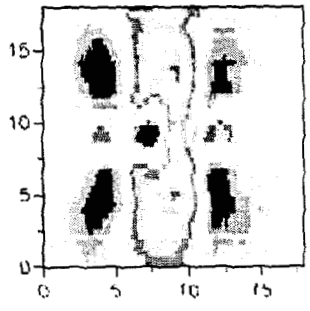
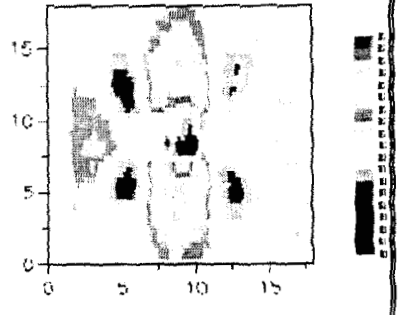
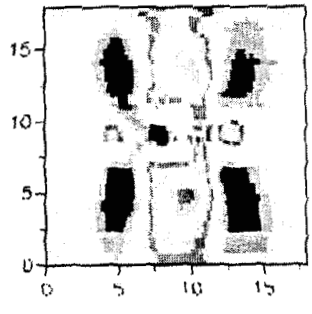
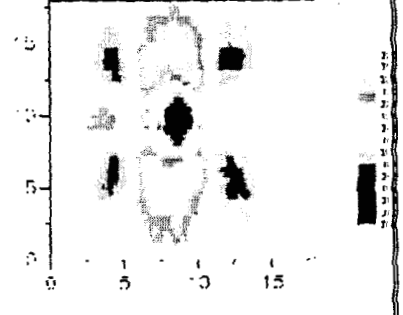
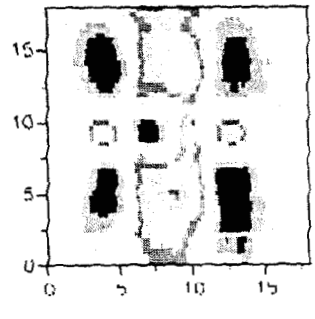
| 102r r | 103 | 104 | 105 |
|---|---|---|---|
|  |  |  |  |
| 3 | 3 | 6 | 1 |
| **6** | **6** | 2 | 4 |
| 0 | 0 | 0 | 1 |
| 6 | 6 | 2 | Z |
| 0 | 0 | 0 | 1 |
| 10% | 0% | 0% | 1 |
| 10% | 0% | 0% | 1 |
| 60% | 60% | 60% | 60% |
| S | S | S | S |

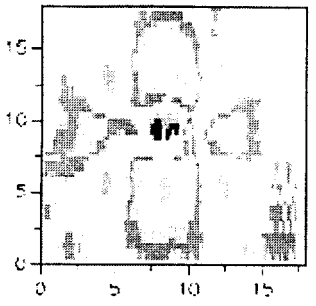
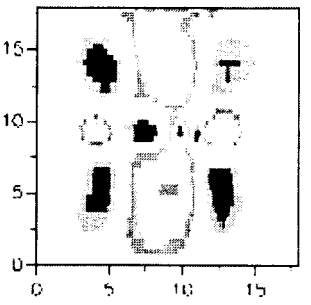
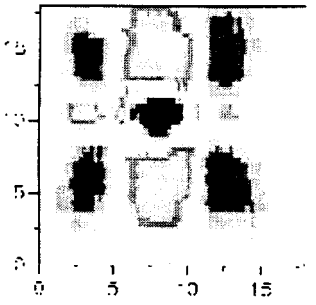
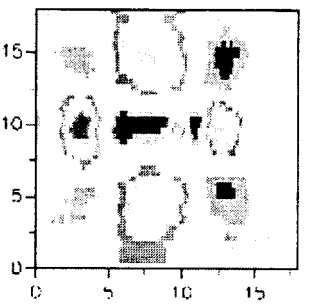
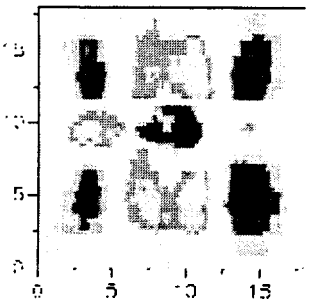
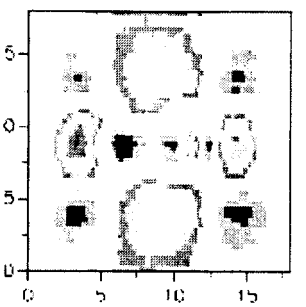
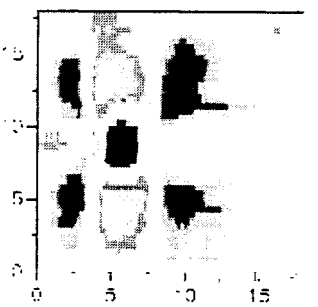
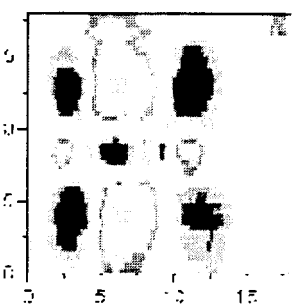
| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 106 |  |  | 1 | 6 | 2 | 2 | 2 | 1 | 1 | 60% | S |
| 107 |  |  | 1 | 6 | 1 | 4 | 1 | 1 | 1 | 60% | S |
| 108 |  |  | 1 | 8 | 2 | 4 | 2 | 1 | 1 | 60% | S |
| 109 |  |  | 2 | 6 | 2 | 2 | 2 | 1 | 1 | 60% | S |

| 110 | | 111 | | 113 | | 114 | |
|---|---|---|---|---|---|---|---|
| S | S | S | S | S | S | S | S |
| 60% | 60% | 60% | 60% | 60% | 60% | 60% | 60% |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1.5 | 1.5 | 4 | 4 | 1.5 | 1.5 | 1.5 | 1.5 |
| 3 | 3 | 0 | 0 | 1.5 | 1.5 | 3 | 3 |
| 6 | 6 | 8 | 8 | E | E | 6 | 6 |
| 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 115 |  |  | 2 | 8 | 2 | 5 | 1 | 1 | 1 | 60% | S |
| 116 |  |  | 3 | 6 | 1.5 | 1.5 | 3 | 1 | 1 | 60% | S |
| 117 |  |  | 3 | 6 | 3 | 0 | 3 | 1 | 1 | 60% | F |
| 118 |  |  | 2 | 6 | 2 | 2 | 2 | 1 | 1 | 60% | F |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 118 |  |  | 2 | 8 | 2 | 4 | 2 | 1 | 1 | 30% | S |
| 120 |  |  | 2 | 6 | 2 | 2 | 2 | 1 | 1 | 30% | S |
| 121 |  |  | 2 | 8 | 4 | 2 | 2 | 1 | 0.5 | 60% | S |
| 122 |  |  | 2 | 6 | 2 | 2 | 2 | 1 | 0.5 | 60% | S |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 124 |  |  | 2 | 6 | 2 | 2 | 2 | 1 | 1 | 60% | S |
| 125 |  |  | 2 | 4 | 1 | 1 | 2 | 1 | 1 | 60% | S |
| 126 |  |  | 2 | 4 | 1 | 2 | 1 | 0.5 | 1 | 60% | S |
| 126r |  |  | 2 | 4 | 1 | 2 | 1 | 1 | 1 | 60% | S |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **127** |  |  | 2 | 6 | 2 | 2 | 2 | 0.5 | 1 | 60% | S |
| 128 |  |  | 2 | 6 | 1 | 3 | 2 | 1 | 1 | 60% | S |
| **129** |  |  | 2 | 8 | 2 | 4 | 2 | 1 | 1 | 60% | S |
| I31 |  |  | 2 | 6 | 2 | 2 | 2 | 0% | 0% | 60% | S |

**Legend:**

- # = Defect # is an arbitrary number identifying each defect
- D = Depth is the dent depth in percent of the diameter.
- L = Overall Length is the total length of the gouge in inches.
- FB = Flat Bottom Length is the length of the flat bottom portion of the gouge in inches.
- RI = Ramp In and RO = Ramp Out are the distances on either side of the flat bottom used to ramp the indentor into and out of the pipe (the overall gouge length is the sum of the flat bottom length and the ramp in and ramp out lengths).
- IW = Indentor Width and IL = Indentor Length are the footprint dimensions of the indentor in inches; where x% is shown, the indentor was a 4-inch sphere with a sharp protruding cutter that extended x% of the wall thickness.
- P = Pressure is the internal pipe pressure in percent of specified minimum yield strength.
- S = Speed refers to the rate of axial movement of the indentor (S is 1 inch per second; F is 5 inches per second).