**Calibrating the 5kg load cells**

The upper plate to support the weight plus one M4 screw = 78.3 gram. However, in the calibration program, we set it zero. Then, place 3kg or 4kg weight on it for another load point. So, in the actual calculation, we need to subtract 78.3.

**Also, the gain value almost does not affect the calibrated parameters!**

The channel number of the 1046 card (#0 ~ #3) has no effect in the calibration

|  |  |  |
| --- | --- | --- |
| Loadcell Number | Gain | y = m (slope) x + b (offset) [gram] |
| 01 | 128 | Y = 5130196.9x + 473.9 |
| 02 | 128 | Y = 5085683.3x + -444.9 |
| 03 | 128 | Y = 5364988.6x + 89.6 |
| 04 | 128 | Y = 5198447.9x + 323.2 |
| 05 | 128 | Y = 5085683.3x + -363.6 |
| 06 | 128 | Y = 6137434.6x +-160.5 |
| 07 | 128 | Y = 5210000.0x + -77.4 |
| 08 | 128 | Y = 5635817.3x + 394.5 |
| 09 | 128 | Y = 5130196.9x + 176.4 |
| 10 | 128 | Y = 5107843.1x + 502.9 |
| 11 | 128 | Y = 5256726.5x + 168.3 |
| 12 | 128 | error |
| 13 | 128 | Y =4014554.8x + 363.9 |
| 14 | 128 | Y = 5020342.6x + 279.7 |
| 15 | 128 | Y = 5292325.1x + 253.5 |
| 16 | 128 | Y = 5074675.3x +-570.7 |
| 17 | 128 | Y = 4736363.6x + -366.3 |
| 18 | 128 | Y = 5074675.3x + 322.5 |
| 19 | 128 | Y = 5352739.7x + 277.0 |
| 20 | 128 | Y = 5118995.6x + -315.3 |
| 21 | 128 | Y = 5041935.5x + 326.0 |
| 22 | 128 | Y = 5465035.0x + 647.3 |
| 23 | 128 | Y = 5052801.7x + 321.4 |
| 24 | 128 | Y = 4231949.4x + 260.9 |
| 25 | 128 | Y = 5328409.1x + 84.2 |
| 26 | 128 | Y = 4956659.7x + -282.9 |
| 27 | 128 | Y = 3733280.3x + -275.8 |
| 28 | 128 | Y = 5118995.6x + -376.7 |
| 29 | 128 | Y = 5427083.3x +513.1 |
| 30 | 128 | Y = 4956659.6x +-144.1 |
| 31 | 128 | Y = 4977707.0x +138.6 |
| 32 | 128 | Y = 5041935.5x +-440.4 |
| 33 | 128 | Y =3900998.3 x +0.9 |
| 34 | 128 | Y =5041935.5 x +396.5 |
| 35 | 128 | Y =5198447.9x +-186.2 |
| 36 | 128 | Y =5031115.9x +441.1 |
| 37 | 128 | Y =5041935.5x +280.6 |
| 38 | 128 | Y =5280405.4x +353.5 |
| 39 | 128 | Y =5085683.3x +501.0 |
| 40 | 128 | Y =4915094.3x +-289.7 |
| 41 | 128 | Y =5031115.9x +-157.6 |
| 42 | 128 | Y =5085683.3x +-43.2 |
| 43 | 128 | Y =5130197.0x +-444.4 |
| 44 | 128 | Y =5186946.9x +213.8 |
| 45 | 128 | Y =5118995.6x +421.9 |
| 46 | 128 | Y =5085683.3x +-205.9 |
| 47 | 128 | Y =4967161.0x +491.2 |
| 48 | 128 | Y =5141447.4x +-296.4 |
| 49 | 128 | Y =5085683.3x +-73.7 |
| 50 | 128 | Y =4967161.0x +-651.3 |
| 51 | 128 | Y =4946202.5x +425.1 |