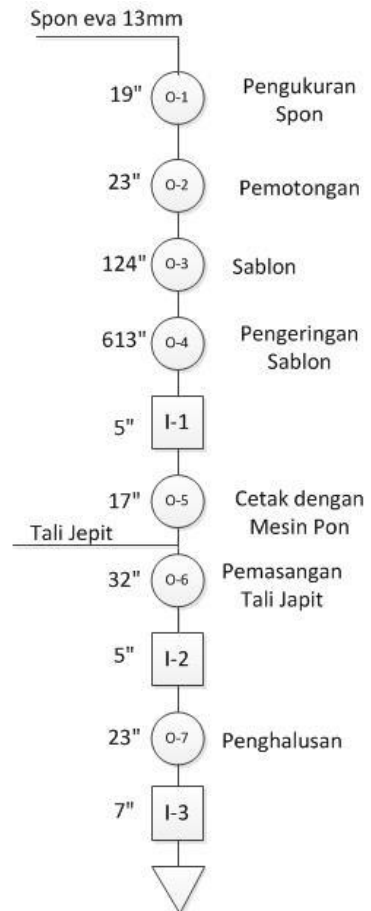


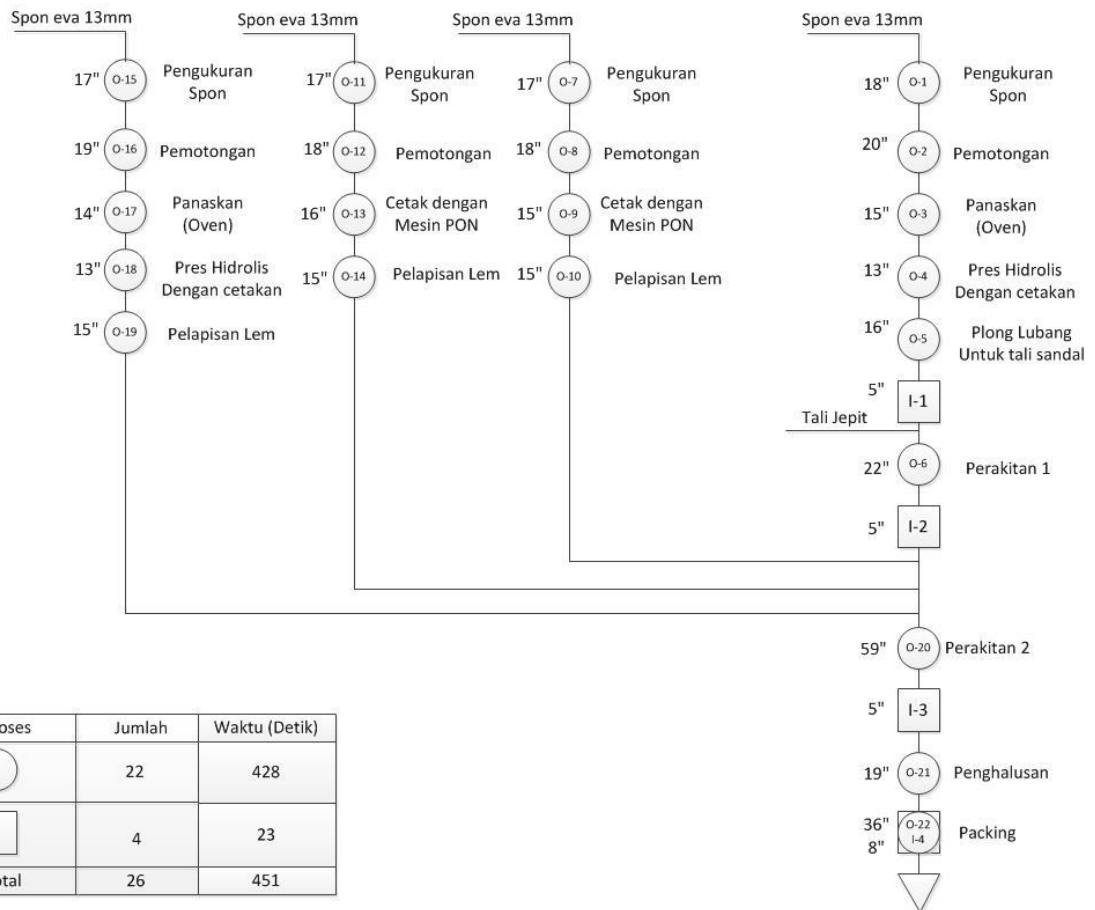
LAMPIRAN 1

- Gambar dari OPC Sandal Jepit

| Proses | Jumlah | Waktu (Detik) |
|--------|--------|---------------|
| ○ | 7 | 851 |
| □ | 3 | 17 |
| Total | 10 | 861 |



- **Gambar dari OPC Sandal Fashion**



| Proses | Jumlah | Waktu (Detik) |
|--------------|-----------|---------------|
| ○ | 22 | 428 |
| □ | 4 | 23 |
| Total | 26 | 451 |

LAMPIRAN 2

Hasil Peramalan dengan Win.QSB

- Sandal Jepit

- Gambar hasil peramalan dari Metode Double Exponential Smoothing With Trend (DEST)

| 07-12-2018 Month | Actual Data | Forecast by DEST | Forecast Error | CFE | MAD | MSE | MAPE (%) | Tracking Signal | R-square |
|---------------------|----------------|---------------------|-------------------|----------|----------|------------|----------|--------------------|----------|
| 1 | 2350.0000 | | | | | | | | |
| 2 | 2420.0000 | 2350.0000 | 70.0000 | 70.0000 | 70.0000 | 4900.0000 | 2.8926 | 1.0000 | |
| 3 | 2620.0000 | 2476.0010 | 143.9995 | 213.9995 | 106.9998 | 12817.9300 | 4.1944 | 2.0000 | |
| 4 | 2510.0000 | 2791.9000 | -281.9001 | -67.9006 | 165.2999 | 35034.5200 | 6.5399 | -0.4108 | |
| 5 | 2600.0000 | 2457.8190 | 142.1809 | 74.2803 | 159.5201 | 31329.7400 | 6.2721 | 0.4656 | |
| 6 | 2690.0000 | 2658.7460 | 31.2539 | 105.5342 | 133.8669 | 25259.1500 | 5.2500 | 0.7884 | |
| 7 | 2720.0000 | 2775.1700 | -55.1697 | 50.3645 | 120.7507 | 21556.5800 | 4.7131 | 0.4171 | |
| 8 | 2780.0000 | 2761.3460 | 18.6541 | 69.0186 | 106.1655 | 18526.7800 | 4.1356 | 0.6501 | |
| 9 | 2810.0000 | 2835.7190 | -25.7185 | 43.3000 | 96.1096 | 16293.6100 | 3.7331 | 0.4505 | |
| 10 | 2920.0000 | 2845.3300 | 74.6702 | 117.9702 | 93.7274 | 15102.7200 | 3.6024 | 1.2587 | |
| 11 | 2900.0000 | 3014.8080 | -114.8079 | 3.1624 | 95.8355 | 14910.5400 | 3.6381 | 0.0330 | |
| 12 | 3090.0000 | 2903.7080 | 186.2922 | 189.4546 | 104.0588 | 16710.0100 | 3.8554 | 1.8206 | |
| 13 | | 3241.5940 | | | | | | | |
| 14 | | 3395.0510 | | | | | | | |
| 15 | | 3548.5080 | | | | | | | |
| 16 | | 3701.9650 | | | | | | | |
| 17 | | 3855.4220 | | | | | | | |
| 18 | | 4008.8790 | | | | | | | |
| 19 | | 4162.3360 | | | | | | | |
| 20 | | 4315.7940 | | | | | | | |
| 21 | | 4469.2510 | | | | | | | |
| 22 | | 4622.7080 | | | | | | | |
| 23 | | 4776.1650 | | | | | | | |
| 24 | | 4929.6220 | | | | | | | |
| CFE | | 189.4546 | | | | | | | |
| MAD | | 104.0588 | | | | | | | |
| MSE | | 16710.0100 | | | | | | | |
| MAPE | | 3.8554 | | | | | | | |
| Trk.Signal | | 1.8206 | | | | | | | |
| R-square | | | | | | | | | |
| | | Alpha=0.9 | | | | | | | |
| | | F(0)=2350 | | | | | | | |
| | | F'(0)=2350 | | | | | | | |

b. Gambar hasil peramalan dari Metode Holth-Winters Additive Algorithm (HWA)

| 07-12-2018 Month | Actual Data | Forecast by HWA | Forecast Error | CFE | MAD | MSE | MAPE (%) | Tracking Signal | R-square |
|---------------------|----------------|--------------------|-------------------|----------|----------|------------|----------|--------------------|----------|
| 1 | 2350.0000 | | | | | | | | |
| 2 | 2420.0000 | 2350.0000 | 70.0000 | 70.0000 | 70.0000 | 4900.0000 | 2.8926 | 1.0000 | |
| 3 | 2620.0000 | 2422.8000 | 197.2000 | 267.2000 | 133.6000 | 21893.9100 | 5.2096 | 2.0000 | |
| 4 | 2510.0000 | 2634.1880 | -124.1880 | 143.0120 | 130.4626 | 19736.8300 | 5.1223 | 1.0962 | |
| 5 | 2600.0000 | 2529.0810 | 70.9194 | 213.9314 | 115.5768 | 16060.0100 | 4.5237 | 1.8510 | |
| 6 | 2690.0000 | 2615.7080 | 74.2920 | 288.2234 | 107.3199 | 13951.8700 | 4.1713 | 2.6856 | |
| 7 | 2720.0000 | 2712.2260 | 7.7744 | 295.9978 | 90.7290 | 11636.6300 | 3.5237 | 3.2624 | |
| 8 | 2780.0000 | 2746.2510 | 33.7488 | 329.7466 | 82.5889 | 10136.9700 | 3.1938 | 3.9926 | |
| 9 | 2810.0000 | 2807.9900 | 2.0100 | 331.7566 | 72.5166 | 8870.3510 | 2.8035 | 4.5749 | |
| 10 | 2920.0000 | 2839.7580 | 80.2424 | 411.9990 | 73.3750 | 8600.1840 | 2.7973 | 5.6150 | |
| 11 | 2900.0000 | 2953.0680 | -53.0679 | 358.9312 | 71.3443 | 8021.7850 | 2.7006 | 5.0310 | |
| 12 | 3090.0000 | 2934.9570 | 155.0427 | 513.9739 | 78.9532 | 9477.8270 | 2.9112 | 6.5099 | |
| 13 | | 3128.5060 | | | | | | | |
| 14 | | 3174.7630 | | | | | | | |
| 15 | | 3221.0210 | | | | | | | |
| 16 | | 3267.2790 | | | | | | | |
| 17 | | 3313.5360 | | | | | | | |
| 18 | | 3359.7940 | | | | | | | |
| 19 | | 3406.0520 | | | | | | | |
| 20 | | 3452.3090 | | | | | | | |
| 21 | | 3498.5670 | | | | | | | |
| 22 | | 3544.8250 | | | | | | | |
| 23 | | 3591.0830 | | | | | | | |
| 24 | | 3637.3400 | | | | | | | |
| CFE | | 513.9739 | | | | | | | |
| MAD | | 78.9532 | | | | | | | |
| MSE | | 9477.8270 | | | | | | | |
| MAPE | | 2.9112 | | | | | | | |
| Trk.Signal | | 6.5099 | | | | | | | |
| R-square | | | | | | | | | |
| | | c=1 | | | | | | | |
| | | Alpha=0.9 | | | | | | | |
| | | Beta=0.1 | | | | | | | |
| | | Gamma=0.5 | | | | | | | |
| | | F(0)=2350 | | | | | | | |
| | | T(0)=0 | | | | | | | |
| | | S(1)=0 | | | | | | | |

- Sandal Fashion

- a. Gambar hasil peramalan dari Metode Double Exponential Smoothing With Trend (DEST)

| 07-12-2018 Month | Actual Data | Forecast by DEST | Forecast Error | CFE | MAD | MSE | MAPE (%) | Tracking Signal | R-square |
|---------------------|----------------|---------------------|-------------------|-----------|----------|----------|----------|--------------------|----------|
| 1 | 1240 | | | | | | | | |
| 2 | 1300 | 1240 | 60 | 60 | 60 | 3600 | 4.615385 | 1 | |
| 3 | 1310 | 1348 | -38.00024 | 21.99976 | 49.00012 | 2522.009 | 3.758083 | 0.4489735 | |
| 4 | 1280 | 1328.2 | -48.19983 | -26.20007 | 48.73336 | 2455.747 | 3.760593 | -0.537621 | |
| 5 | 1350 | 1259.26 | 90.74036 | 64.54028 | 59.23511 | 3900.264 | 4.500822 | 1.089561 | |
| 6 | 1150 | 1401.37 | -251.3699 | -186.8296 | 97.66206 | 15757.57 | 7.972308 | -1.913021 | |
| 7 | 1380 | 1001.181 | 378.8185 | 191.989 | 144.5215 | 37048.56 | 11.21869 | 1.328446 | |
| 8 | 1310 | 1531.722 | -221.7222 | -29.73322 | 155.5502 | 38778.87 | 12.03393 | -0.1911487 | |
| 9 | 1250 | 1288.133 | -38.13306 | -67.86627 | 140.873 | 34113.28 | 10.91102 | -0.4817549 | |
| 10 | 1500 | 1195.409 | 304.5909 | 236.7247 | 159.0639 | 40631.32 | 11.95491 | 1.488236 | |
| 11 | 1530 | 1688.701 | -158.7007 | 78.02399 | 159.0276 | 39086.78 | 11.79668 | 0.4906318 | |
| 12 | 1590 | 1594.786 | -4.785889 | 73.2381 | 145.0056 | 35535.52 | 10.75162 | 0.5050708 | |
| 13 | | 1649.371 | | | | | | | |
| 14 | | 1708.694 | | | | | | | |
| 15 | | 1768.017 | | | | | | | |
| 16 | | 1827.339 | | | | | | | |
| 17 | | 1886.662 | | | | | | | |
| 18 | | 1945.985 | | | | | | | |
| 19 | | 2005.308 | | | | | | | |
| 20 | | 2064.631 | | | | | | | |
| 21 | | 2123.954 | | | | | | | |
| 22 | | 2183.276 | | | | | | | |
| 23 | | 2242.599 | | | | | | | |
| 24 | | 2301.922 | | | | | | | |
| CFE | | 73.2381 | | | | | | | |
| MAD | | 145.0056 | | | | | | | |
| MSE | | 35535.52 | | | | | | | |
| MAPE | | 10.75162 | | | | | | | |
| Trk.Signal | | 0.5050708 | | | | | | | |
| R-square | | | | | | | | | |
| | | Alpha=0.9 | | | | | | | |
| | | F(0)=1240 | | | | | | | |
| | | F'(0)=1240 | | | | | | | |

b. Gambar hasil peramalan dari Metode Holth-Winters Additive Algorithm (HWA)

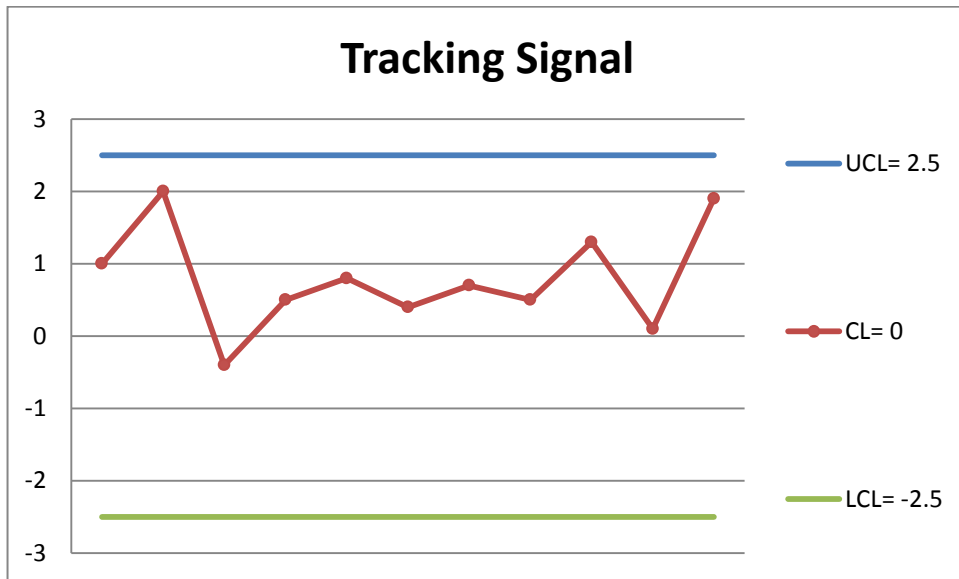
| 07-12-2018 Month | Actual Data | Forecast by HWA | Forecast Error | CFE | MAD | MSE | MAPE (%) | Tracking Signal | R-square |
|---------------------|----------------|--------------------|-------------------|-----------|----------|----------|----------|--------------------|-----------|
| 1 | 1240 | | | | | | | | |
| 2 | 1300 | 1240 | 60 | 60 | 60 | 3600 | 4.615385 | 1 | |
| 3 | 1310 | 1302.4 | 7.599976 | 67.59998 | 33.79999 | 1828.88 | 2.597768 | 2 | |
| 4 | 1280 | 1315.704 | -35.70398 | 31.896 | 34.43465 | 1644.178 | 2.661636 | 0.9262761 | |
| 5 | 1350 | 1284.656 | 65.34412 | 97.24011 | 42.16202 | 2300.597 | 3.206303 | 2.306344 | |
| 6 | 1150 | 1355.484 | -205.4845 | -108.2444 | 74.82652 | 10285.25 | 6.138686 | -1.446605 | 0.4120061 |
| 7 | 1380 | 1150.532 | 229.4678 | 121.2234 | 100.6001 | 17346.96 | 7.886921 | 1.205003 | 0.8864481 |
| 8 | 1310 | 1379.437 | -69.43665 | 51.78674 | 96.14814 | 15557.6 | 7.517434 | 0.5386141 | |
| 9 | 1250 | 1318.133 | -68.13269 | -16.34595 | 92.64621 | 14193.15 | 7.259081 | -0.1764341 | |
| 10 | 1500 | 1251.936 | 248.0645 | 231.7185 | 109.9149 | 19453.47 | 8.290031 | 2.108163 | 0.5958568 |
| 11 | 1530 | 1508.451 | 21.54858 | 253.2671 | 101.0783 | 17554.55 | 7.601869 | 2.505653 | 0.7618259 |
| 12 | 1590 | 1551.717 | 38.28333 | 291.5504 | 95.36964 | 16091.92 | 7.129676 | 3.057057 | 0.8164282 |
| 13 | | 1614.325 | | | | | | | |
| 14 | | 1640.565 | | | | | | | |
| 15 | | 1666.804 | | | | | | | |
| 16 | | 1693.044 | | | | | | | |
| 17 | | 1719.284 | | | | | | | |
| 18 | | 1745.523 | | | | | | | |
| 19 | | 1771.763 | | | | | | | |
| 20 | | 1798.002 | | | | | | | |
| 21 | | 1824.242 | | | | | | | |
| 22 | | 1850.481 | | | | | | | |
| 23 | | 1876.721 | | | | | | | |
| 24 | | 1902.96 | | | | | | | |
| CFE | | 291.5504 | | | | | | | |
| MAD | | 95.36964 | | | | | | | |
| MSE | | 16091.92 | | | | | | | |
| MAPE | | 7.129676 | | | | | | | |
| Trk. Signal | | 3.057057 | | | | | | | |
| R-square | | 0.8164282 | | | | | | | |
| | | c=1 | | | | | | | |
| | | Alpha=0.9 | | | | | | | |
| | | Beta=0.1 | | | | | | | |
| | | Gamma=0.5 | | | | | | | |
| | | F(0)=1240 | | | | | | | |
| | | T(0)=0 | | | | | | | |
| | | S(1)=0 | | | | | | | |

LAMPIRAN 3

Uji Verifikasi

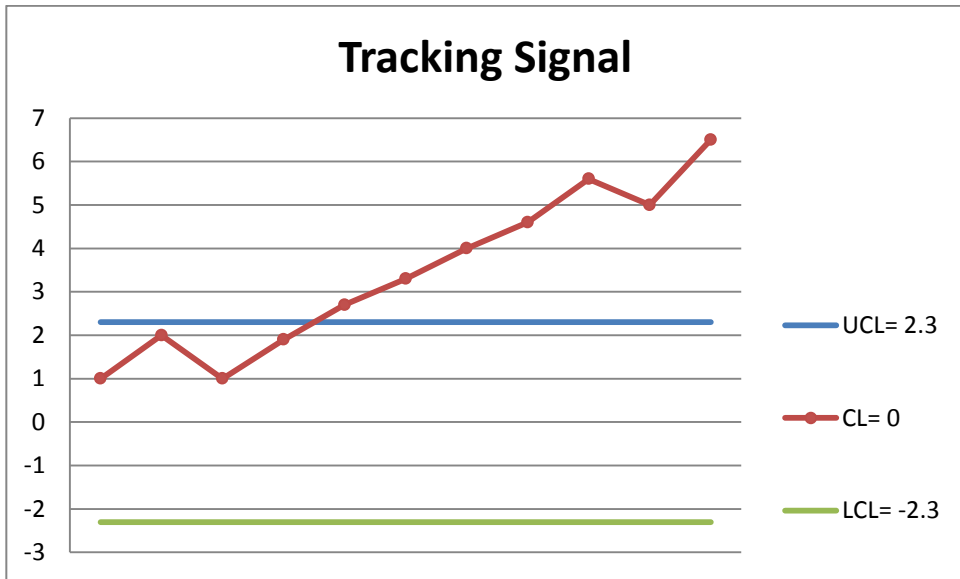
- **Sandal Jepit**

- a. Diagram Hasil Uji Verifikasi dengan Metode Double Exponential Smoothing With Trend (DEST)



Dari gambar 4.7 diatas terlihat sebaran nilai tracking signal berada diantara Batas Kontrol Atas (+2.5) dan Batas Kontrol Bawah (-2.5). Sehingga hasil peramalan permintaan Sandal Gunung dengan metode Double Exponential Smoothing with Trend dapat diterima.

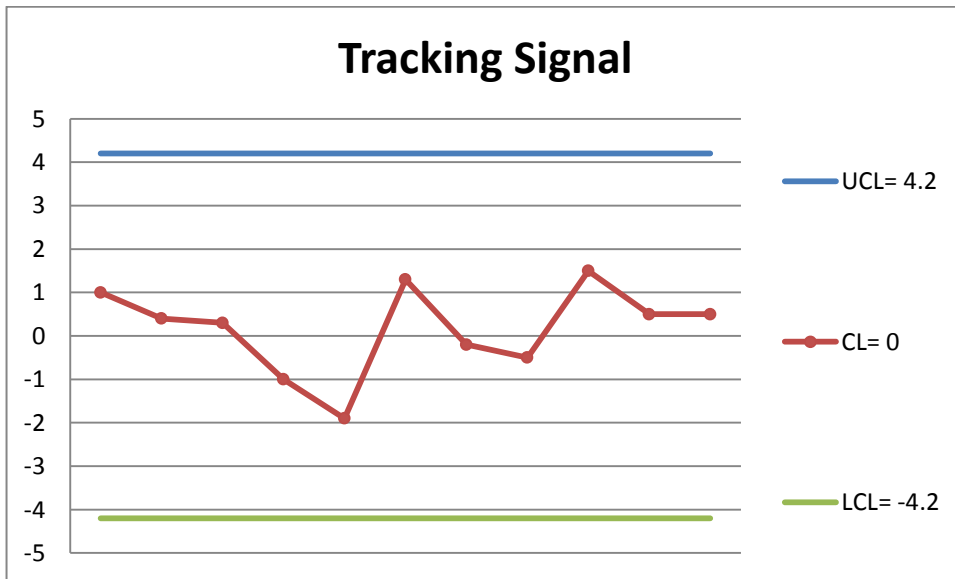
- b. Diagram Hasil Uji Verifikasi dengan Metode Holth-Winters Additive Algorithm (HWA)



Dari gambar 4.6 diatas terlihat sebaran nilai tracking signal berada diatas Batas Kontrol Atas (+2.3) dan berada pada Bata Kontrol Bawah (-2.3). Sehingga hasil peramalan permintaan Sandal Gunung dengan metode Holth-Winters Additive Algorithm tidak dapat diterima.

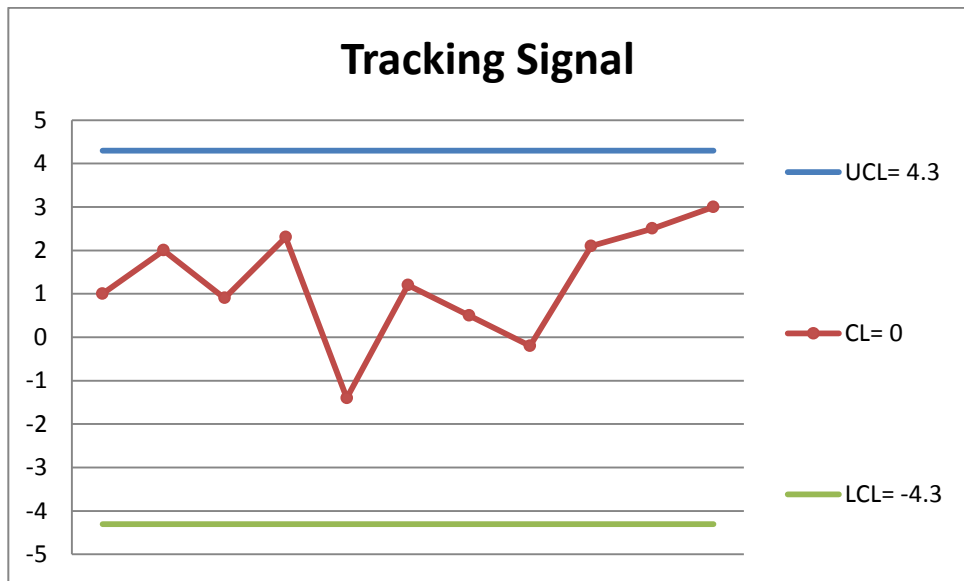
- **Sandal Fashion**

- a. Diagram Hasil Uji Verifikasi dengan Metode Double Exponential Smoothing With Trend (DEST)



Dari gambar 4.7 diatas terlihat sebaran nilai tracking signal berada diantara Batas Kontrol Atas (+4.2) dan Batas Kontrol Bawah (-4.2) dan 3 buah titik berada pada daerah A. Sehingga hasil peramalan permintaan Sandal Gunung dengan metode Double Exponential Smoothing with Trend dapat diterima.

- b. Diagram Hasil Uji Verifikasi dengan Metode Holth-Winters Additive Algorithm (DEST)



Dari gambar 4.8 diatas terlihat sebaran nilai tracking signal berada diantara Batas Kontrol Atas (+2.6) dan Batas Kontrol Bawah (-2.6) tetapi tidak ada yang cocok dengan aturan out of control. Sehingga hasil peramalan permintaan Sandal Gunung dengan metode Holth-Winters Additive Algorithm tidak dapat diterima.