

## HYDRAULIC TWO PLATEN INJECTION MOLDING MACHINE

Management system as per  
GB/T 19001-2016 / ISO 9001: 2015



WINTEC - North America  
Sales & Service Center  
3740 Board Rd., York, Pennsylvania USA, 17406  
tel: +1 717-764-6818  
fax: +1 717-767-1738  
e-mail: info@wintec-machines.com

WINTEC-HQ  
ENGEL MACHINERY (CHANGZHOU) CO., LTD.  
No. 9 Longfan Road, Wujin National Hi-Tech Industrial Zone,  
Changzhou 213166, Jiangsu Province, P.R. China  
tel: +86 519 8159 5300  
fax: +86 519 8159 5388  
e-mail: info@wintec-machines.com

[www.wintec-machines.com](http://www.wintec-machines.com)



**WINTEC**  
MEMBER OF THE ENGEL GROUP

WINTEC is based in Changzhou (Jiangsu Province) in China.  
The local experienced WINTEC sales team is your partner - in Asia, Americas, Middle East, Africa, Europe, and is expanding continually. We offer standard, still customized solutions to enhance your competitiveness, meanwhile focusing on what matters to you -state-of-the-art efficiency and reliability.

ENGEL GROUP  
9 PRODUCTION PLANTS  
30 SUBSIDIARIES  
60 REPRESENTATIVES



WINTEC, MEMBER OF THE ENGEL GROUP, offers injection molding machines for standard applications. The streamlined portfolio is targeted to best meet the requirements of standard plastics production. Designed and engineered in Europe, the WINTEC product lines offer great benefits of decades of expertise in injection molding: most reliable and efficient machines with an extended service life. As a 100% ENGEL owned brand, WINTEC is committed to the high quality standards of the group. Leading after sales support is guaranteed by the local service network and an in-house spare parts supply.

WINTEC

- EFFICIENT
- STABLE
- ENERGY-SAVING
- INTELLIGENT





# t-win

## YOUR ADVANTAGES AT A GLANCE

### HIGHER PRODUCTIVITY

The servo hydraulic two-platen t-win is focused on fast and high efficient production. Fast movements, short clamping force build-up time and synchronized locking device movement reduce total cycle time. and increase productivity.

### INCREASED AVAILABILITY

The reliable and proven design as well as features allow fast access for maintenance and increase machine availability and output.

### SMALLER FOOTPRINT

The two-platen machine concept allows a compact design for less space requirements.

### HIGHER ENERGY EFFICIENCY

The servo drive system servowin guarantees fast acceleration and low energy consumption.

### LONGER SERVICE LIFE

Premium components and a design concepts that reduce wear on the machine – and on your mold – guarantee an extended service life of 15 to 20 years and more.

### SMARTER CONTROL UNIT

Future-oriented technologies with long-term availability and retrofittability. Powerful extending function for future challenges. C3 controller keeps you on top of processes that continue to become more and more complex.



| t-win Clamping Unit                   |            |                       |                      |                      |                       |                       |                       |                       |                       |
|---------------------------------------|------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                       |            | t-win 4500            | t-win 6500           | t-win 8500           | t-win 9500            | t-win 10500           | t-win 14000           | t-win 16000           | t-win 18000           |
| Clamping force                        | kN / USton | 4500 / 500            | 6500 / 720           | 8500 / 940           | 9500 / 1050           | 10500 / 1160          | 14000 / 1540          | 16000 / 1760          | 18000 / 1980          |
| Opening force with pressure pad       | kN / USton | 260 / 28.7            | 370 / 40.8           | 510 / 56.2           | 620 / 68.3            | 620 / 68.3            | 760 / 83.8            | 1000 / 110.2          | 1000 / 110.2          |
| Opening force with moving cylinder    | kN / USton | 156 / 17.2            | 192 / 21.2           | 192 / 21.2           | 284 / 31.3            | 284 / 31.3            | 284 / 31.3            | 393 / 43.3            | 393 / 43.3            |
| Opening stroke                        | mm / in    | 1050 / 41.3           | 1350 / 53.1          | 1400 / 55.1          | 1600 / 62.9           | 1600 / 62.9           | 1800 / 70.8           | 2350 / 92.5           | 2350 / 92.5           |
| Mold height min                       | mm / in    | 350 / 13.8            | 400 / 15.8           | 450 / 17.8           | 500 / 19.7            | 500 / 19.7            | 600 / 23.7            | 700 / 27.6            | 700 / 27.6            |
| Mold height max                       | mm / in    | 850 / 33.4            | 950 / 37.4           | 950 / 37.4           | 1100 / 43.3           | 1100 / 43.3           | 1200 / 47.2           | 1400 / 55.1           | 1400 / 55.1           |
| Total daylight max.                   | mm / in    | 1400 / 55.1           | 1750 / 68.8          | 1850 / 72.8          | 2100 / 82.6           | 2100 / 82.6           | 2400 / 94.4           | 3050 / 120.0          | 3050 / 120.0          |
| Platen size hor. x vert.              | mm / in    | 1100x1180 / 43.1x46.7 | 1380x1320 / 55.1x52  | 1480x1380 / 59x55.5  | 1630x1610 / 65x63     | 1630x1610 / 65x63     | 1870x1960 / 74.4x77.2 | 2290x2130 / 91x84.8   | 2290x2130 / 91x84.8   |
| Distance between tie bar hor. x vert. | mm / in    | 810x800 / 31.9x31.5   | 1040x910 / 40.9x35.8 | 1120x960 / 44.1x37.8 | 1270x1100 / 50x43.3   | 1270x1100 / 50x43.3   | 1470x1360 / 57.9x53.5 | 1680x1520 / 66.1x59.8 | 1680x1520 / 66.1x59.8 |
| Mold weight max.                      | kg / lbs   | 6500 / 14330          | 9500 / 20944         | 11000 / 24251        | 13000 / 28660         | 13000 / 28660         | 21000 / 46297         | 30000 / 66138         | 30000 / 66138         |
| Ejector stroke                        | mm / in    | 250 / 9.8             | 250 / 9.8            | 300 / 11.8           | 300 / 11.8            | 300 / 11.8            | 300 / 11.8            | 300 / 11.8            | 300 / 11.8            |
| Ejector force forward/retrun          | kN / USton | 105 / 51 11.5 / 5.6   | 105 / 51 11.5 / 5.6  | 195 / 92 21.4 / 10.1 | 230 / 108 25.3 / 11.9 | 230 / 108 25.3 / 11.9 | 260 / 123 28.6 / 13.5 | 260 / 123 28.6 / 13.5 | 260 / 123 28.6 / 13.5 |
| Dry operation (Euromap 6) time        | sec        | 3.1                   | 3.7                  | 4.0                  | 4.6                   | 4.6                   | 5.1                   | 5.7                   | 5.7                   |
| Dry operation (Euromap 6) stroke      | mm / in    | 550 / 21.6            | 700 / 27.5           | 750 / 29.5           | 850 / 33.4            | 850 / 33.4            | 1000 / 39.3           | 1150 / 45.2           | 1150 / 45.2           |
| Weight CU                             | t / US ton | 11 / 12.1             | 15 / 16.5            | 19 / 20.9            | 28 / 30.8             | 28 / 30.8             | 44 / 48.4             | 56 / 61.6             | 56 / 61.6             |

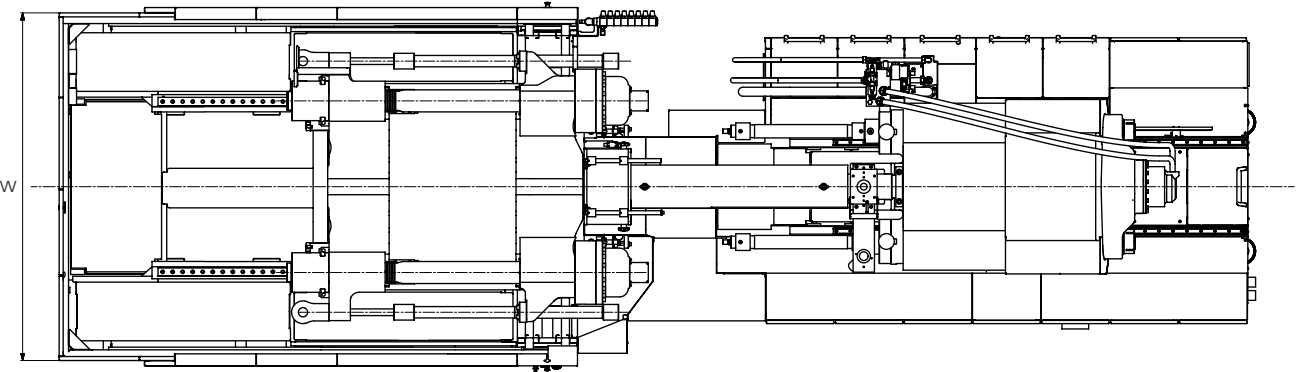
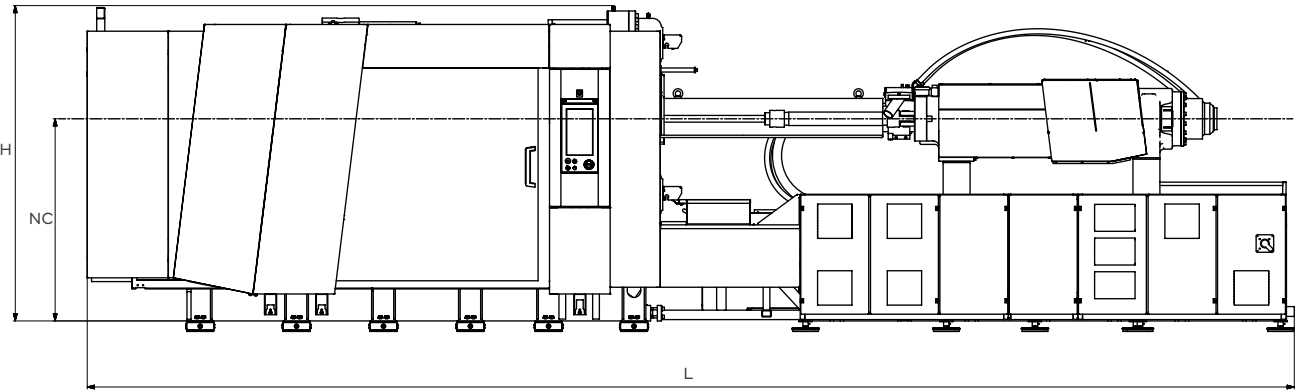
| t-win Injection Unit                |                        |           |           |           |           |           |            |           |            |            |            |            |            |            |            |            |            |            |             |             |
|-------------------------------------|------------------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|-------------|
|                                     |                        | 2000      |           |           | 3300      |           |            | 4800      |            |            | 7000       |            |            | 11000      |            |            | 15000      |            |             |             |
| Screw diameter                      | mm                     | 55        | 60        | 70        | 60        | 70        | 80         | 70        | 80         | 90         | 80         | 90         | 105        | 90         | 105        | 120        | 105        | 120        | 135         | 150         |
| Screw stroke                        | mm/in                  | 330/12.9  | 350/13.7  | 350/13.7  | 360/14.1  | 420/16.5  | 430/16.9   | 420/16.5  | 480/18.8   | 480/18.8   | 480/18.8   | 540/21.2   | 550/21.6   | 540/21.2   | 630/24.8   | 630/24.8   | 630/24.8   | 720/28.3   | 730/28.7    | 730/28.7    |
| Injection capacity                  | cm³/in³                | 784/47.8  | 990/60.4  | 1347/82.1 | 1018/62.1 | 1616/98.6 | 2161/131.8 | 1616/98.6 | 2413/147.2 | 3054/186.3 | 2413/147.2 | 3435/209.6 | 4762/290.5 | 3435/209.6 | 5455/332.8 | 7125/434.7 | 5455/332.8 | 8143/496.9 | 10449/637.6 | 12900/787.2 |
| Shot weight (PS)*                   | g/oz.                  | 721/25.4  | 910/32.1  | 1239/43.7 | 936/33.0  | 1487/52.4 | 1989/70.1  | 1487/52.4 | 2220/78.3  | 2809/99.1  | 2220/78.3  | 3161/111.4 | 4831/154.5 | 3161/111.4 | 5019/177   | 6555/231.2 | 5019/177.0 | 7492/264.2 | 9613/339.0  | 11868/418.6 |
| Screw speed                         | min <sup>-1</sup> /rpm | 220       |           |           | 200       |           |            | 160       |            |            | 140        |            |            | 120        |            |            | 90         |            |             |             |
| L/D ratio                           | L/D                    | 22        |           |           | 22        |           |            | 22        |            |            | 22         |            |            | 22         |            |            | 22         |            |             |             |
| Plasticizing rate (3 zones)*        | g/s oz./sec            | 40.0/1.41 | 49.9/1.76 | 74.2/2.61 | 45.3/1.59 | 67.5/2.38 | 92.4/3.25  | 54.0/1.9  | 73.9/2.6   | 101.8/3.59 | 64.7/2.28  | 89.1/3.14  | 132.7/4.68 | 76.4/2.69  | 113.7/4.01 | 159.5/5.62 | 85.3/3.0   | 119.6/4.21 | 161.4/5.69  | 210.8/7.43  |
| Injection rate max.**               | cm³/s mm/s             | 246/104   | 293/104   | 399/104   | 277/98    | 377/98    | 493/98     | 347/90    | 453/90     | 573/90     | 424/84     | 537/84     | 730/84     | 471/74     | 641/74     | 837/74     | 790/91     | 1031/91    | 1305/91     | 1612/91     |
| Injection rate @ max. inj. pressure | cm³/s mm/s             | 188/79    | 223/79    | 304/79    | 204/72    | 277/72    | 362/72     | 258/67    | 337/67     | 426/67     | 327/65     | 414/65     | 563/65     | 388/61     | 528/61     | 690/61     | 563/65     | 735/65     | 930/65      | 1149/65     |
| Injection pressure                  | bar                    | 1990      | 1730      | 1270      | 1940      | 1690      | 1290       | 1960      | 1710       | 1350       | 2020       | 1760       | 1290       | 1900       | 1650       | 1270       | 1860       | 1450       | 1150        | 930         |
|                                     | psi                    | 28862     | 25091     | 18419     | 28137     | 24511     | 18709      | 28428     | 28401      | 19580      | 29297      | 25526      | 18709      | 27557      | 23931      | 18419      | 26977      | 21030      | 16679       | 13488       |
| Injection pressure max.             | bar                    | 2300      | 2000      | 1469      | 2300      | 2000      | 1531       | 2300      | 2000       | 1580       | 2300       | 2000       | 1469       | 2300       | 2000       | 1531       | 2300       | 1800       | 1422        | 1152        |
|                                     | psi                    | 33358     | 29007     | 21306     | 33358     | 29007     | 22205      | 33358     | 29007      | 22915      | 33358      | 29007      | 21306      | 33358      | 29007      | 22205      | 33358      | 26106      | 20624       | 16708       |
| Nozzle stroke                       | mm/in                  | 600/23.62 |           |           | 600/23.62 |           |            | 800/31.49 |            |            | 800/31.49  |            |            | 800/31.49  |            |            | 800/31.49  |            |             |             |
| Nozzle contact pressure             | kN/US ton              | 110/12.1  |           |           | 110/12.1  |           |            | 150/16.5  |            |            | 150/16.5   |            |            | 150/16.5   |            |            | 150/16.5   |            |             |             |
| Heating wattage (incl. nozzle)      | kW                     | 20        | 21        | 24        | 21        | 24        | 27         | 23        | 26         | 29         | 26         | 29         | 34         | 45         | 51         | 57         | 51         | 57         | 66          | 72          |
| Heating zones (incl. nozzle)        |                        | 5         | 6         | 6         | 6         | 6         | 6          | 6         | 6          | 7          | 6          | 7          | 7          | 6          | 6          | 7          | 6          | 7          | 7           | 8           |
| Drive power                         | kW                     | 53        |           |           | 53        |           |            | 73(90***) |            |            | 90         |            |            | 96         |            |            | 115        |            |             |             |
| Oil reservoir capacity              | l/gal                  | 550/145   |           |           | 550/145   |           |            | 760/200   |            |            | 760/200    |            |            | 1150/303   |            |            | 1150/303   |            |             |             |
| Weight IU                           | t/US ton               | 5.4/5.9   |           |           | 6/6.6     |           |            | 7.1/7.8   |            |            | 8/8.8      |            |            | 13.1/14.4  |            |            | 14.5/16.0  |            |             |             |

\*Values for polystyrene

\*\*at (min.) 80% injection pressure

\*\*\* in combination with CU 1600 & 1800

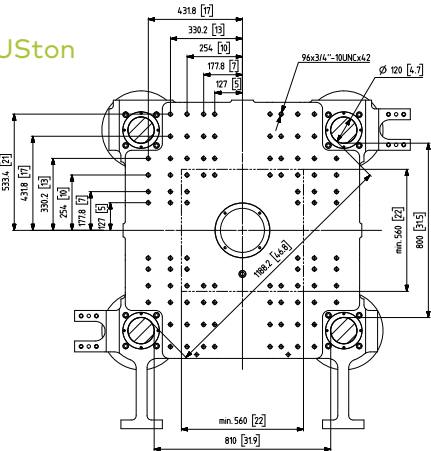
| t-win Injection Unit |       | 2000 |    |    | 3300 |    |    | 4800 |    |    | 7000 |    |     | 11000 |     |     | 15000 |     |     |     |
|----------------------|-------|------|----|----|------|----|----|------|----|----|------|----|-----|-------|-----|-----|-------|-----|-----|-----|
| Screw Diameter       | mm/in | 55   | 60 | 70 | 60   | 70 | 80 | 70   | 80 | 90 | 80   | 90 | 105 | 90    | 105 | 120 | 105   | 120 | 135 | 150 |
| t-win 4500           |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 6500           |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 8500           |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 9500           |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 10500          |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 14000          |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 16000          |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |
| t-win 18000          |       |      |    |    |      |    |    |      |    |    |      |    |     |       |     |     |       |     |     |     |



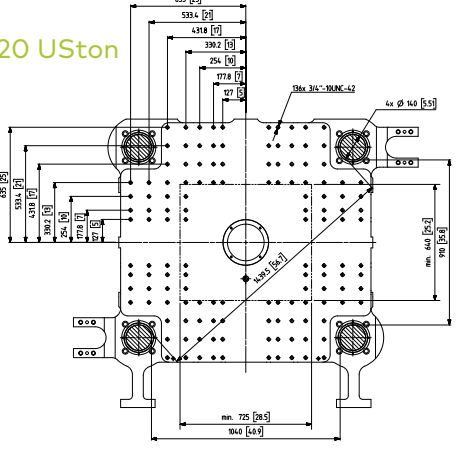
| t-win Machine Dimensions  |       | t-win 4500 |  | t-win 6500 |            | t-win 8500 |            | t-win 9500/t-win 10500 |             | t-win 14000 |             | t-win 16000/t-win 18000 |             |
|---------------------------|-------|------------|--|------------|------------|------------|------------|------------------------|-------------|-------------|-------------|-------------------------|-------------|
|                           |       | 2000/3300  |  | 2000/3300  | 4800/7000  | 3300       | 4800/7000  | 4800/7000              | 11000       | 4800/7000   | 11000/15000 | 4800/7000               | 11000/15000 |
| Length (L)                | mm/in | 7200/283.5 |  | 7600/299.2 | 8800/346.5 | 7700/303.1 | 8900/350.4 | 9400/370.1             | 10400/409.4 | 9800/385.8  | 10800/425.2 | 11500/425.8             |             |
| Width (W)                 | mm/in | 2300/90.6  |  | 2700/106.3 |            | 2700/106.3 |            | 3000/118.1             |             | 3100/122.0  |             | 3600/141.7              |             |
| Height (H)                | mm/in | 2400/94.5  |  | 2400/94.5  |            | 2400/94.5  |            | 2600/102.4             |             | 2800/110.2  |             | 3100/122.0              |             |
| Height nozzle center (NC) | mm/in | 1400/55.1  |  | 1400/55.1  |            | 1500/59.1  |            | 1500/59.1              |             | 1700/66.9   |             | 1800/70.9               |             |

t-win Platen Dimesions - SPI

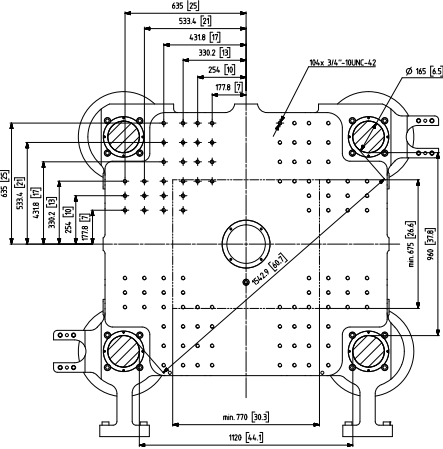
4500 kN / 500 USton



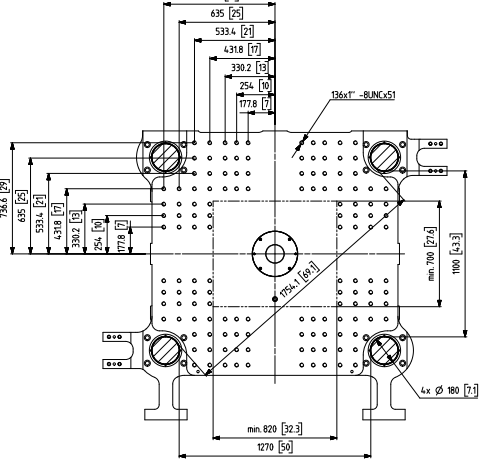
6500 kN / 720 USton



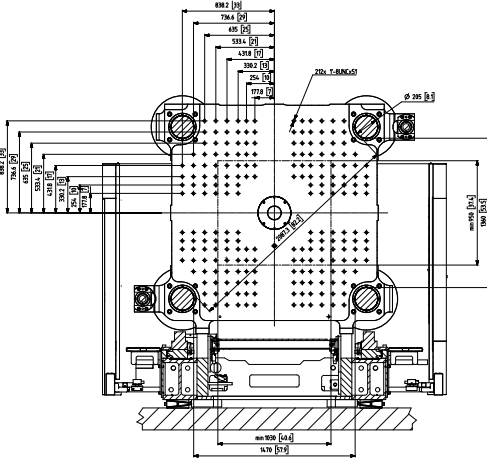
8500 kN / 940 USton



9500 kN / 1050 USton 10500 kN / 1160 USton



14000 kN / 1540 USton



16000 kN / 1760 USton 18000 kN / 1980 USton

