

t-win

HYDRAULIC TWO PLATEN INJECTION MOLDING MACHINE

2023\_03\_US\_EN



Website



LinkedIn

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

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



# Production Locations



— Located in Changzhou, Jiangsu Province, China, WINTEC is the second brand established by ENGEL Group in 2014, insisting on high quality products and reliable services for the commodity segment of injection molding.

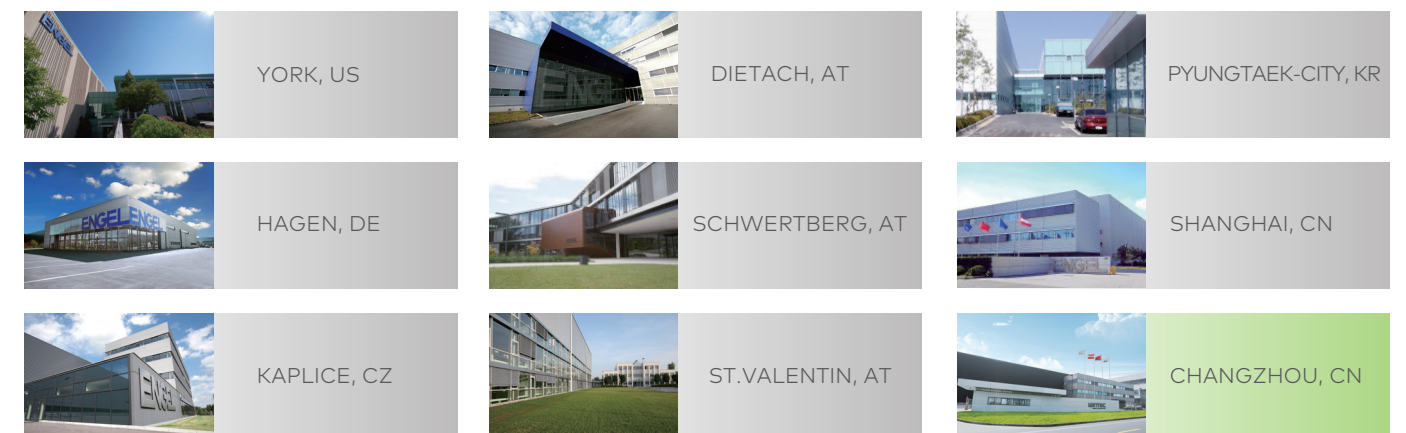
After several years of sustainable growth and continuous development of our portfolio, WINTEC has completed the global rollout by adding Europe in 2021. The worldwide sales and service network of the ENGEL Group provides you with high quality injection molding machines for standard applications while ensuring fast and effective after-sales support.

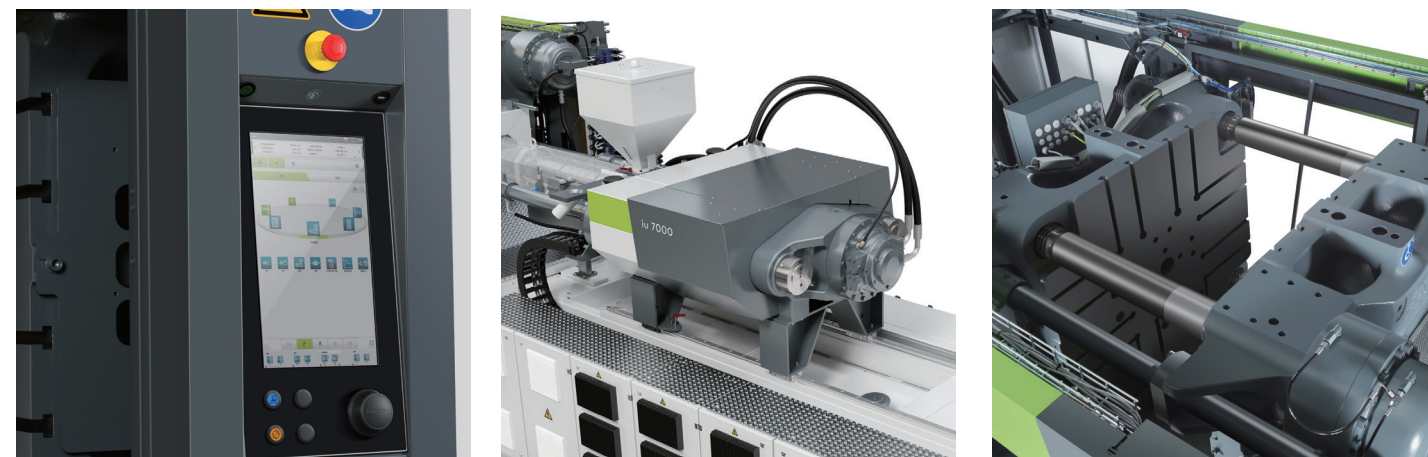
## ENGEL GROUP

9 PRODUCTION PLANTS

30 SUBSIDIARIES

60 REPRESENTATIVES





---

ENGEL, as the world's leading supplier of injection molding machines, represents stability and continuity in the industry. As a 100% owned subsidiary of ENGEL, WINTEC will spare no effort to create efficient and stable injection molding machines.

At the same time, WINTEC relies on the strength of its parent company and its comprehensive global sales and service network to provide fast and effective after-sales support while ensuring the quality of its products, making it a reliable partner for your successful international development.

---

# 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.

### SMART CONTROL UNIT

Future-oriented technologies with long-term availability and transformation. 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
Clamping force	kN / US ton	4500 / 500	6500 / 720	8500 / 940	9500 / 1050
Opening force with pressure pad	kN / US ton	260 / 28.7	370 / 40.8	510 / 56.2	620 / 68.3
Opening force with moving cylinder	kN / US ton	156 / 17.2	192 / 21.2	192 / 21.2	284 / 31.3
Opening stroke	mm / in	1050 / 41.3	1350 / 53.1	1400 / 55.1	1600 / 63
Mold height min.	mm / in	350 / 13.8	400 / 15.7	450 / 17.7	500 / 19.7
Mold height max.	mm / in	850 / 33.5	950 / 37.4	950 / 37.4	1100 / 43.3
Total daylight max.	mm / in	1400 / 55.1	1750 / 68.9	1850 / 72.8	2100 / 82.7
Platen size hor. x vert.	mm / in	1075x1175 / 42.3x46.3	1380x1320 / 54.3x52	1480x1380 / 58.3x54.3	1630x1610 / 64.2x63.4
Distance between tie bar hor. x vert.	mm / in	810x800 / 31.9x31.5	1040x910 / 40.9x35.8	1120x960 / 44.1x37.8	1270x1100 / 50x43.3
Mold weight max.	kg / lbs	6500 / 14300	9500 / 20944	11000 / 24251	13000 / 28660
Ejector stroke	mm / in	250 / 9.8	250 / 9.8	300 / 11.8	300 / 11.8
Ejector force forward/return	kN / US ton	105 / 51 11.5 / 5.6	105 / 51 11.5 / 5.6	195 / 92 21.4 / 10.1	230 / 108 25.3 / 11.9
Dry operation (Euromap 6) time	sec	3.1	3.7	4.0	4.6
Dry operation (Euromap 6) stroke	mm / in	550 / 21.6	700 / 27.5	750 / 29.5	850 / 33.4
Weight CU	t / US ton	11 / 12.1	15 / 16.5	19 / 20.9	28 / 30.8

t-win Injection Unit		2000			3300			4800		
Screw diameter	mm	55	60	70	60	70	80	70	80	90
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
Injection capacity	cm <sup>3</sup> / in <sup>3</sup>	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
Shot weight (PS) <sup>①</sup>	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
Screw speed	min <sup>-1</sup> / rpm	220			200			160		
L / D ratio	L / D	22			22			22		
Plasticizing rate (3 zones) <sup>①</sup>	g / s oz. / s	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
Injection rate max. <sup>②</sup>	cm <sup>3</sup> / s mm / s	246 / 104	293 / 104	399 / 104	277 / 98	377 / 98	493 / 98	347 / 90	453 / 90	573 / 90
Injection rate @ max. inj. pressure	cm <sup>3</sup> / s mm / s	188 / 79	223 / 79	304 / 79	204 / 72	277 / 72	362 / 72	258 / 67	337 / 67	426 / 67
Injection pressure	bar	1990	1730	1270	1940	1690	1290	1960	1710	1350
	psi	28862	25091	18419	28137	24511	18709	28428	28401	19580
Injection pressure max.	bar	2300	2000	1469	2300	2000	1531	2300	2000	1580
	psi	33358	29007	21306	33358	29007	22205	33358	29007	22915
Nozzle stroke	mm / in	600 / 23.62			600 / 23.62			800 / 31.49		
Nozzle contact force	kN / US ton	110 / 12.1			110 / 12.1			150 / 16.5		
Heating wattage (incl. nozzle)	kW	20	21	24	21	24	27	23	26	29
Heating zones (incl. nozzle)		5	6	6	6	6	6	6	6	7
Drive power SHV1/SHV2 <sup>③</sup>	kW	38 / 53			46 / 53			61 / 73		
Oil reservoir capacity	l / gal	550 / 145			550 / 145			760 / 200		
Weight IU	t / US ton	5.4 / 5.9			6 / 6.6			7.1 / 7.8		

① Values for polystyrene  
 ② Theoretical values: at min. 80% injection pressure  
 ③ SHV1 standard / SHV2 option  
 Subject to technical alterations

t-win Clamping Unit		t-win 10500	t-win 14000	t-win 16000	t-win 18000	t-win 21000
Clamping force	kN / US ton	10500 / 1160	14000 / 1540	16000 / 1760	18000 / 1980	21000 / 2310
Opening force with pressure pad	kN / US ton	620 / 68.3	760 / 83.8	1000 / 110.2	1000 / 110.2	1350 / 992.5
Opening force with moving cylinder	kN / US ton	284 / 31.3	284 / 31.3	393 / 43.3	393 / 43.3	614 / 67.6
Opening stroke	mm / in	1600 / 63	1800 / 70.9	2350 / 92.5	2350 / 92.5	3000 / 118.1
Mold height min.	mm / in	500 / 19.7	600 / 23.6	700 / 27.6	700 / 27.6	800 / 31.5
Mold height max.	mm / in	1100 / 43.3	1200 / 47.2	1400 / 55.1	1400 / 55.1	1800 / 70.9
Total daylight max.	mm / in	2100 / 82.7	2400 / 94.5	3050 / 120.1	3050 / 120.1	3800 / 149.6
Platen size hor. x vert.	mm / in	1630x1610 / 64.2x63.4	1870x1960 / 73.6x77.2	2290x2130 / 90.2x83.9	2290x2130 / 90.2x83.9	2520x2220 / 99.2x87.4
Distance between tie bar hor. x vert.	mm / in	1270x1100 / 50x43.3	1470x1360 / 57.9x53.5	1680x1520 / 66.1x59.8	1680x1520 / 66.1x59.8	1920x1480 / 75.6x58.3
Mold weight max.	kg / lbs	13000 / 28660	21000 / 46297	30000 / 66138	30000 / 66138	50000 / 110230
Ejector stroke	mm / in	300 / 11.8	300 / 11.8	300 / 11.8	300 / 11.8	400 / 15.7
Ejector force forward/return	kN / US ton	230 / 108 25.3 / 11.9	260 / 123 28.6 / 13.5	260 / 123 28.6 / 13.5	260 / 123 28.6 / 13.5	385 / 168 42.3 / 18.5
Dry operation (Euromap 6) time	sec	4.6	5.1	5.7	5.7	6.9
Dry operation (Euromap 6) stroke	mm / in	850 / 33.4	1000 / 39.3	1150 / 45.2	1150 / 45.2	1250 / 48.8
Weight CU	t / US ton	28 / 30.8	44 / 48.4	56 / 61.6	56 / 61.6	80 / 88.0

t-win Injection Unit		7000			11000			15000			
Screw diameter	mm	80	90	105	90	105	120	105	120	135	150
Screw stroke	mm / in	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	cm <sup>3</sup> / in <sup>3</sup>	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) <sup>①</sup>	g / oz.	2220 / 78.3	3161 / 111.4	4381 / 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	140			120			90			
L / D ratio	L / D	22			22			22			
Plasticizing rate (3 zones) <sup>①</sup>	g / s oz. / s	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. <sup>②</sup>	cm <sup>3</sup> / s mm / s	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	cm <sup>3</sup> / s mm / s	327 / 65	414 / 65	563 / 65	388 / 61	528 / 61	690 / 61	563 / 65	735 / 65	930 / 65	1149 / 65
Injection pressure	bar	2020	1760	1290	1900	1650	1270	1860	1450	1150	930
	psi	29297	25526	18709	27557	23931	18419	26977	21030	16679	13488
Injection pressure max.	bar	2300	2000	1469	2300	2000	1531	2300	1800	1422	1152
	psi	33358	29007	21306	33358	29007	22205	33358	26106	20624	16708
Nozzle stroke	mm / in	800 / 31.49			800 / 31.49			800 / 31.49			
Nozzle contact force	kN / US ton	150 / 16.5			150 / 16.5			150 / 16.5			
Heating wattage (incl. nozzle)	kW	26	29	34	45	51	57	51	57	66	72
Heating zones (incl. nozzle)		6	7	7	6	6	7	6	7	7	8
Drive power SHV1/SHV2 <sup>③</sup>	kW	75(90 <sup>④</sup> ) / 90			90(115 <sup>④</sup> ) / 96			115 / 115			
Oil reservoir capacity	l / gal	760 / 200 (1150 / 303 <sup>④</sup> )			1150 / 303			1150 / 303			
Weight IU	t / US ton	8 / 8.8 ( 12.6 / 13.9 <sup>④</sup> )			13.1 / 14.4			14.5 / 16.0			

① Values for polystyrene  
 ② Theoretical values: at min. 80% injection pressure  
 ③ SHV1 standard / SHV2 option  
 Subject to technical alterations

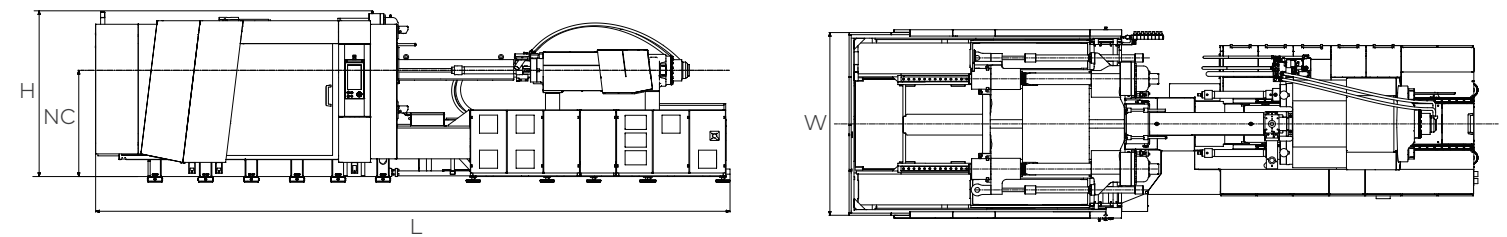
④ in combination with CU 1600 & 1800  
 ⑤ in combination with CU 2100 & 2400

t-win Clamping Unit		
		t-win 24000
Clamping force	kN / US ton	24000 / 2640
Opening force with pressure pad	kN / US ton	1600 / 1176.3
Opening force with moving cylinder	kN / US ton	614 / 67.6
Opening stroke	mm / in	3000 / 118.1
Mold height min.	mm / in	800 / 31.5
Mold height max.	mm / in	1800 / 70.9
Total daylight max.	mm / in	3800 / 149.6
Platen size hor. x vert.	mm / in	2680x2420 / 105.5x95.3
Distance between tie bar hor. x vert.	mm / in	2020x1620 / 79.5x63.8
Mold weight max.	kg / lbs	62000 / 136685
Ejector stroke	mm / in	500 / 19.7
Ejector force forward/return	kN / US ton	420 / 184 46.2 / 20.2
Dry operation (Euromap 6) time	sec	7.9
Dry operation (Euromap 6) stroke	mm / in	1400 / 55
Weight CU	t / US ton	88 / 96.8

t-win Injection Unit				
		22000		
Screw diameter	mm	135	150	160
Screw stroke	mm / in	680 / 26.8	680 / 26.8	680 / 26.8
Injection capacity	cm <sup>3</sup> / in <sup>3</sup>	9733 / 593.8	12017 / 733.1	13672 / 834.1
Shot weight (PS) <sup>①</sup>	g / oz.	8954 / 315.8	11056 / 389.9	12578 / 443.6
Screw speed	min <sup>-1</sup> / rpm	90		
L / D ratio	L / D	22		
Plasticizing rate (3 zones) <sup>①</sup>	g / s oz. / s	161.4 / 5.69	210.8 / 7.43	240.6 / 8.49
Injection rate max. <sup>②</sup>	cm <sup>3</sup> / s mm / s	1335 / 93	1648 / 93	1875 / 93
Injection rate @ max. inj. pressure	cm <sup>3</sup> / s mm / s	1031 / 72	1272 / 72	1448 / 72
Injection pressure	bar	2070	1677	1474
	psi	30021	24322	21377
Injection pressure max.	bar	2200	1850	1626
	psi	31907	26831	23582
Nozzle stroke	mm / in	1100 / 43.31		
Nozzle contact force	kN / US ton	150 / 16.5		
Heating wattage (incl. nozzle)	kW	76	86	91
Heating zones (incl. nozzle)		7	7	7
Drive power SHV1/SHV2 <sup>③</sup>	kW	2x78 / 2x95		
Oil reservoir capacity	l / gal	1550 / 408		
Weight IU	t / US ton	19.6 / 21.6		

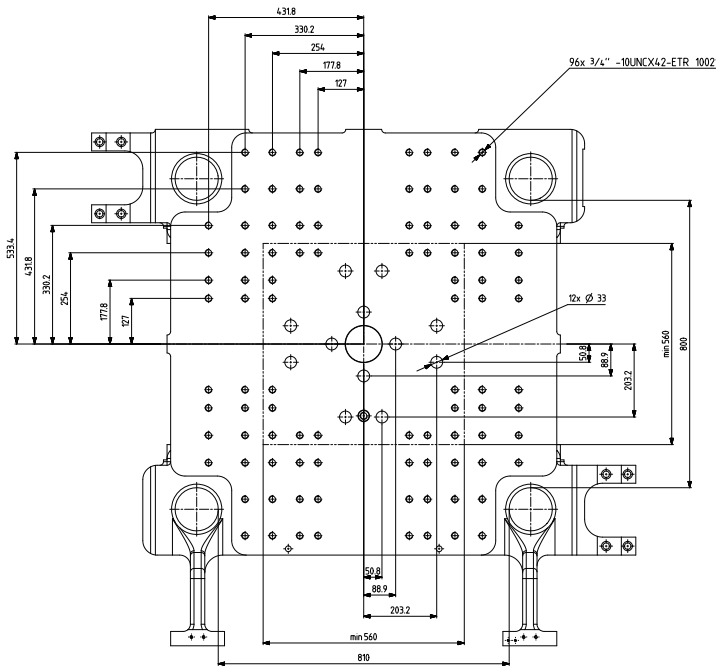
① Values for polystyrene  
 ② Theoretical values: at min. 80% injection pressure  
 ③ SHV1 standard / SHV2 option  
 Subject to technical alterations

t-win Injection Unit	2000	3300	4800	7000	11000	15000	22000
Screw Diameter mm	55 60 70	60 70 80	70 80 90	80 90 105	90 105 120	105 120 135 150	135 150 160
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 21000							
t-win 24000							

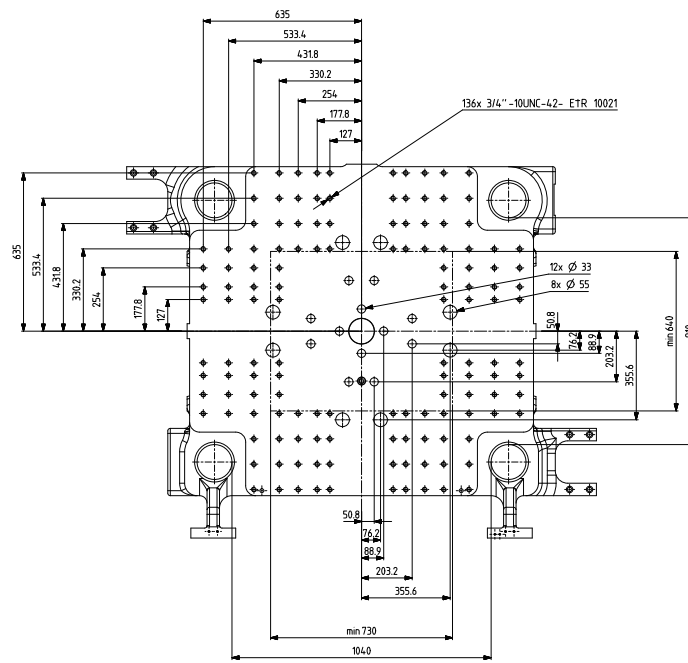


t-win Machine Dimensions					
Clamping unit	Injection unit	Length(L) mm/in	Width(W) mm/in	Height(H) mm/in	Height nozzle center(NC) mm/in
t-win 4500	2000 / 3300	7200 / 283.5	2300 / 90.6	2400 / 94.5	1400 / 55.1
t-win 6500	2000 / 3300	7600 / 299.2	2700 / 106.3	2400 / 94.5	1400 / 55.1
	4800 / 7000	8800 / 346.5			
t-win 8500	3300	7700 / 303.1	2700 / 106.3	2400 / 94.5	1500 / 59.1
	4800 / 7000	8900 / 350.4			
t-win 9500 / t-win 10500	11000	9900 / 389.8	3000 / 118.1	2600 / 102.4	1500 / 59.1
	4800 / 7000	9400 / 370.1			
t-win 14000	11000 / 15000	10400 / 409.4	3100 / 122.0	2800 / 110.2	1700 / 66.9
	4800 / 7000	9800 / 385.8			
t-win 16000 / t-win 18000	7000	11500 / 452.8	3600 / 141.7	3100 / 122.0	1800 / 70.8
	11000 / 15000	10800 / 425.2			
t-win 21000 / t-win 24000	22000	13050 / 513.8	4250 / 167.3	3400 / 133.8	2000 / 78.8
	11000 / 15000	13450 / 529.6			
	22000	14620 / 575.7			

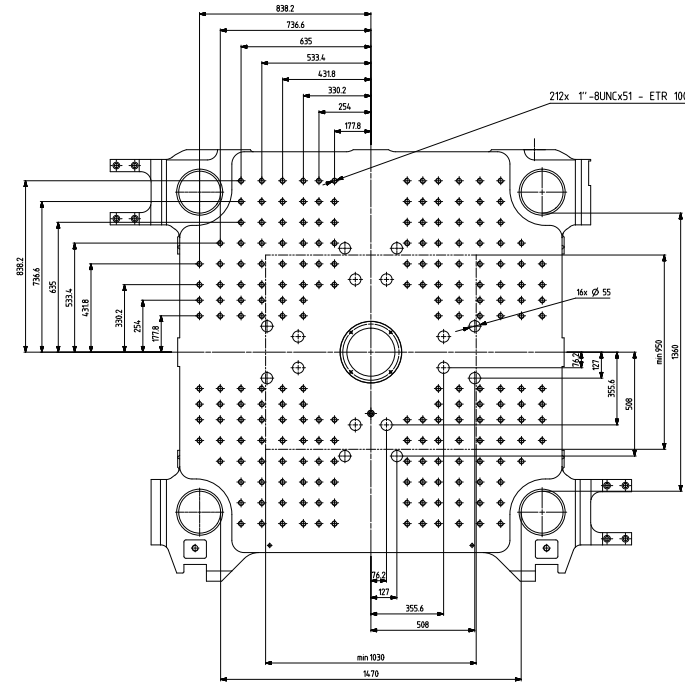
4500 kN / 500 USton



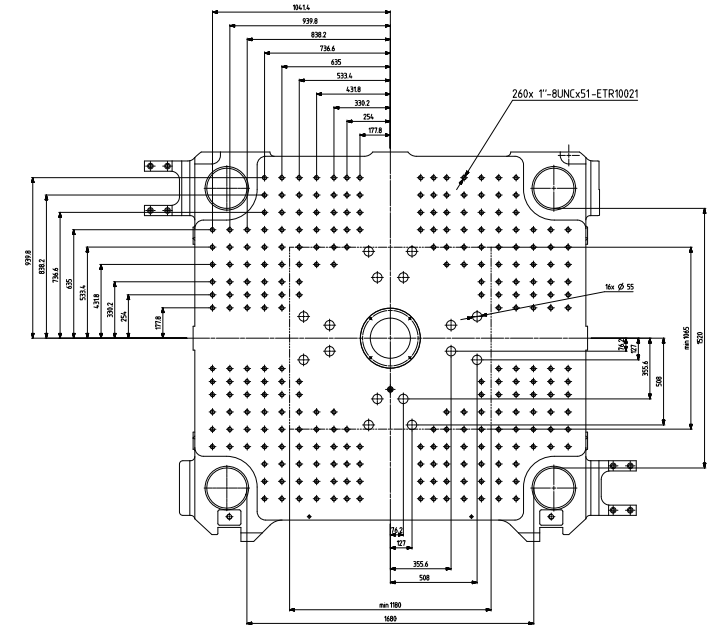
6500 kN / 720 USton



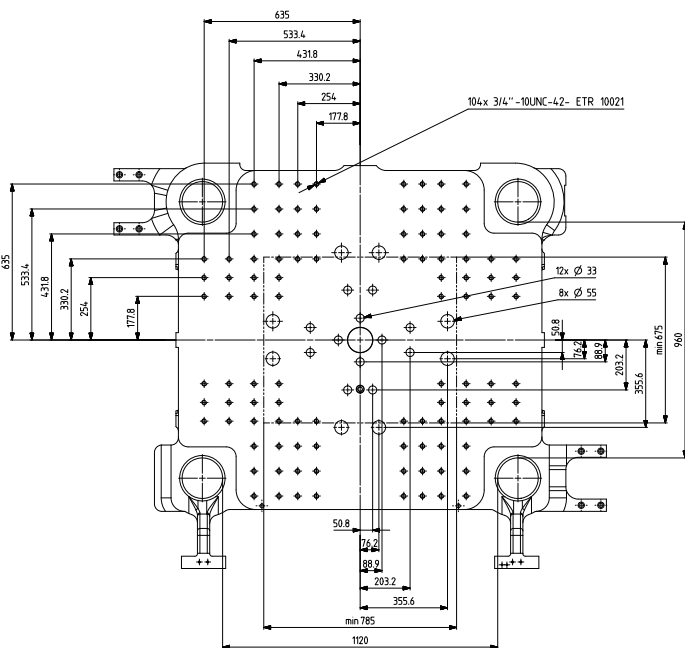
14000 kN / 1540 USton



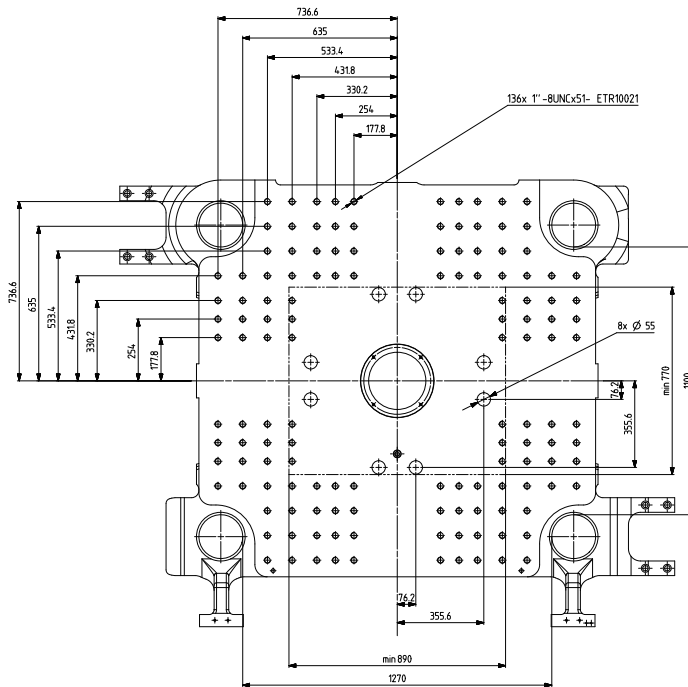
16000 kN / 1760 USton 18000 kN / 1980 USton



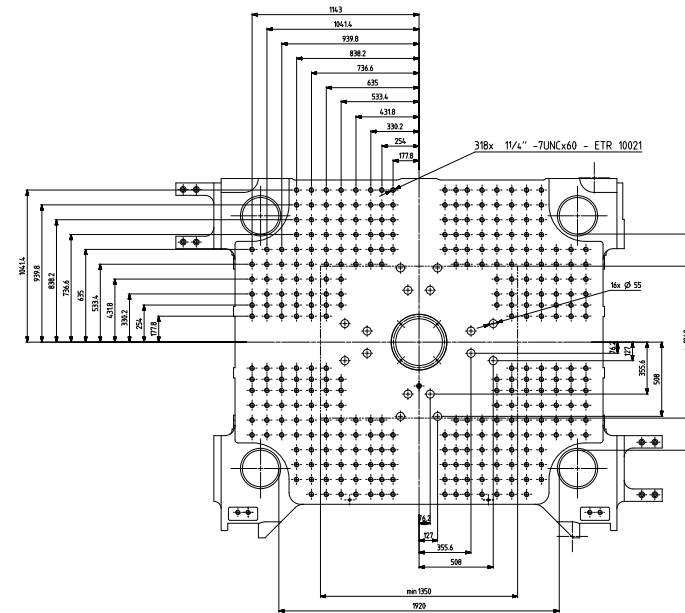
8500 kN / 940 USton



9500 kN / 1050 USton 10500 kN / 1160 USton



21000 kN / 2130 USton



24000 kN / 2640 USton

