The whiz kid machine

Technical Description

Systec

Sumitomo SHI DEMAG

Technical Data Systec 35/320

Sumitomo (SHI) Demag		Systec 35/320											
Model description		35/320-35			35/320-80			35/320-120			35/320-200		
International size description		350-35			350-80			350-120			350-200		
Clamping unit		**35/320**											
Clamping force	[kN]	350											
Locking force	[kN]	350											
Max. mould opening stroke	[mm]	350						350			350		
Min. mould height	[mm]	(0)180 [1]						(+50)230			(+100)280		
Daylight between platens, max.	[mm]	(0)530 [1]						(+50)580			(+100)630		
Mould platen (h x v)	[mm]	460x460											
Distance between tie bars (h x v)	[mm]	320x320											
Min. permissible mould diameter	[mm]	160											
Ejection stroke	[mm]	100											
Ejection force	[kN]	33											
Retraction force	[kN]	13											
Injection unit		**35**			**80**			**120**			**200**		
Screw diameter	[mm]	14	18	22	18	22	25	22	25	30	25	30	35
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2755	2099	1570	2868	2061	1596	2591	2006	1393	2800	1995	1466
Cylinder head volume, max.	[cm³]	14	23	34	23	42	54	42	61	88	61	106	144
Max. shot weight (PS)	[g]	12	20	30	20	37	48	37	54	78	54	94	128
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	37/54/75	61/89/123	92/132/184	47/68/94	70/101/140	90/130/181	56/80/112	72/104/144	103/149/207	50/72/101	72/104/145	98/142/197
> with accumulator	[cm³/s]	94	155	232	154	231	299	231	299	431	299	431	587
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	1,4/1,6/1,7	5/6/6	8,5/9/10	5/6/6	8/9/10	14/16/17	7/8/10	11/13/16	19/22/27	9/11/15	15/18/25	20/24/34
> motor 2 (120 bar) [3]	[g/s]	1,1/1,3/1,6	4/5/6	7/8/10	4/5/6	7/8/9	11/13/16	5/6/9	9/11/15	15/18/25	7/8/12	12/14/20	16/19/27
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	90	90	90	90	110	110	110	125	125	125	150	150
Max. distance of nozzle retraction [4]	[mm]	250			250			250			250		
Max. nozzle dipping depth (SVO)	[mm]	30			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			4		
Hopper capacity [5]	[ltr.]	35			35			35			35		
General data		**35/320-35**			**35/320-80**			**35/320-120**			**35/320-200**		
Oil tank capacity	[ltr.]	145			145			145			145		
Installed electrical rating													
> pump [3]	[~kW]	7,5/11/15			7,5/11/15			7,5/11/15			7,5/11/15		
> heating capacity of screw cylinder	[~kW]	4,0	4,3	5,3	4,3	5,3	5,8	5,3	5,8	8,3	5,8	8,3	9,4
> capacity with electr. drive [3]	[kW]	12/15/19	12/15/19	13/16/20	12/15/19	13/16/20	13/17/21	13/16/20	13/17/21	16/19/23	13/17/21	16/19/23	17/20/24
Dry cycles (Euromap 6) [3]	[s-mm]	2,0/1,8/1,5-224			2,0/1,8/1,5-224			2,0/1,8/1,5-224			2,0/1,8/1,5-224		
Net weight (without oil) [6]	[~kg]	2620			2470			2510			2530		
Machine dimensions (l x w x h)	[~m]	3,2x1,2x1,8			3,2x1,2x1,8			3,2x1,2x1,8			3,2x1,2x1,8		
Motor end projection 1 (H) [7]	[mm]												

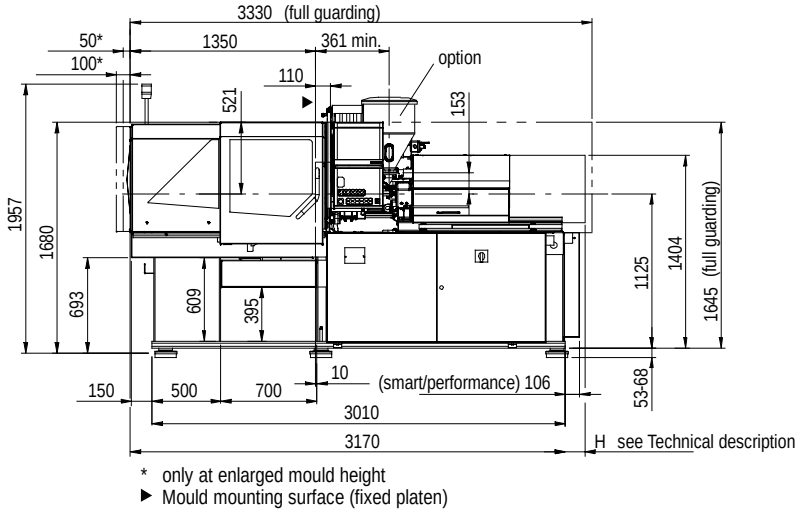
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

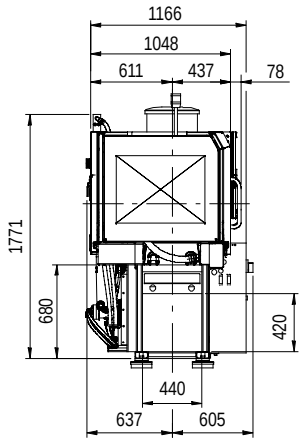
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

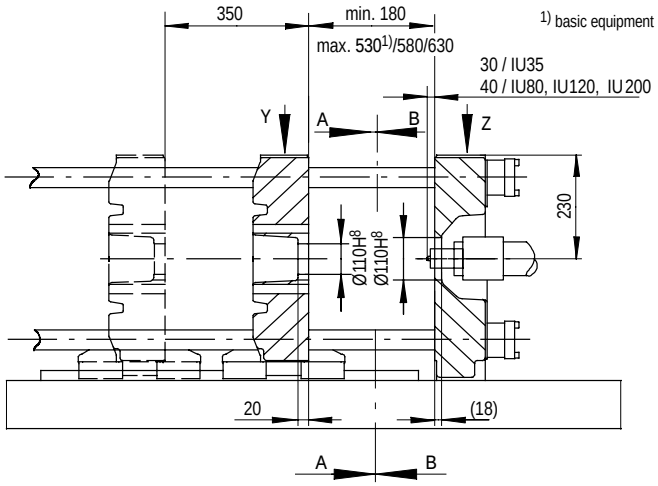
Machine dimensions Systec 35/320



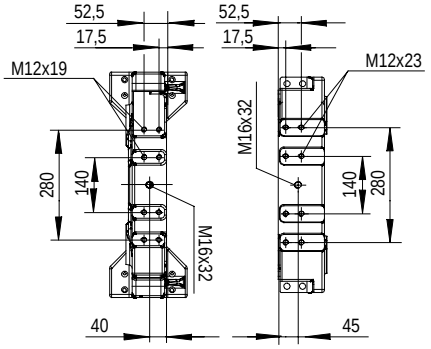
* only at enlarged mould height
▶ Mould mounting surface (fixed platen)



Platen dimensions Systec 35/320

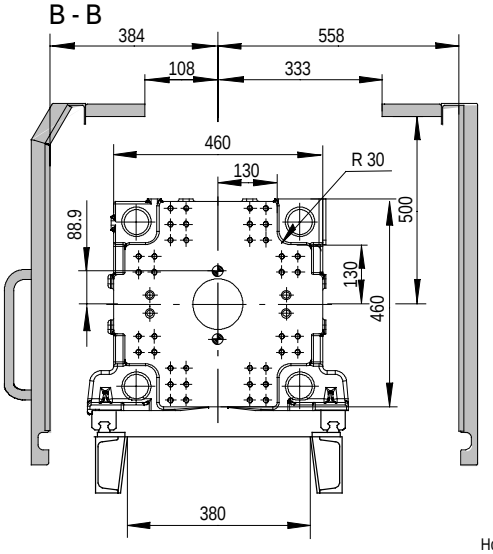


Y, Z Hole pattern for periphery on movable and fixed platen



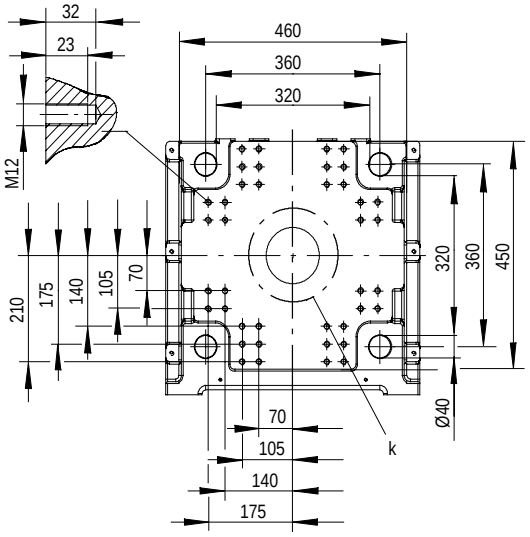
Movable platen

B - B



Fixed platen

A - A



Hole pattern according Euromap

k = minimum permissible mould-Ø 160 mm

Max. permissible mould weight 440 kg,
max. 330 kg of it on the moving platen support bearings

Technical Data Systec 50/370

Sumitomo (SHI) Demag		Systec 50/370			
Model description		50/370-80	50/370-120	50/370-200	50/370-310
International size description		500-80	500-120	500-200	500-310

Clamping unit		50/370				
Clamping force	[kN]	500				
Locking force	[kN]	500				
Max. mould opening stroke	[mm]	400	400	400	400	
Min. mould height	[mm]	(-50)160	(0)210 [1]	(+50)260	(+100)310	
Daylight between platens, max.	[mm]	(-50)560	(0)610 [1]	(+50)660	(+100)710	
Mould platen (h x v)	[mm]	540x530				
Distance between tie bars (h x v)	[mm]	370x370				
Min. permissible mould diameter	[mm]	200				
Ejection stroke	[mm]	125				
Ejection force	[kN]	41				
Retraction force	[kN]	15				

Injection unit		80			120			200			310		
Screw diameter	[mm]	18	22	25	22	25	30	25	30	35	30	35	40
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2868	2061	1596	2591	2006	1393	2800	1995	1466	2755	2024	1550
Cylinder head volume, max.	[cm³]	23	42	54	42	61	88	61	106	144	106	168	220
Max. shot weight (PS)	[g]	20	37	48	37	54	78	54	94	128	94	149	195
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	68/78/136	101/117/203	130/151/262	80/93/161	104/120/208	149/173/300	72/84/145	104/121/209	142/164/285	76/87/152	103/119/206	134/156/269
> with accumulator	[cm³/s]	154	231	299	231	299	431	299	431	587	431	587	767
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	6/6/7	10/10/11	16/17/18	8/9/10	13/16/16	22/26/27	11/15/15	18/25/25	24/34/34	14/20/22	19/27/30	27/40/44
> motor 2 (120 bar) [3]	[g/s]	5/6/6	8/9/10	13/16/16	6/9/9	11/15/15	18/25/25	8/12/13	14/20/22	19/27/30	11/16/18	15/22/24	22/32/35
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	90	110	110	110	125	125	125	150	150	150	175	175
Max. distance of nozzle retraction [4]	[mm]	250			250			250			250		
Max. nozzle dipping depth (SVO)	[mm]	40			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			4		
Hopper capacity [5]	[ltr.]	35			35			35			35		

General data		50/370-80			50/370-120			50/370-200			50/370-310		
Oil tank capacity	[ltr.]	160			160			160			160		
Installed electrical rating													
> pump [3]	[~kW]	11/15/18,5			11/15/18,5			11/15/18,5			11/15/18,5		
> heating capacity of screw cylinder	[~kW]	4,3	5,3	5,8	5,3	5,8	8,3	5,8	8,3	9,4	8,3	9,4	11,1
> capacity with hydraulic drive [3]	[kW]												
> capacity with electr. drive [3]	[kW]	15/19/23	16/20/24	17/21/24	16/20/24	17/21/24	19/23/27	17/21/24	19/23/27	20/24/28	19/23/27	20/24/28	22/26/30
Dry cycles (Euromap 6) [3]	[s-mm]	2,1/1,8/1,4-259			2,1/1,8/1,4-259			2,1/1,8/1,4-259			2,1/1,8/1,4-259		
Net weight (without oil) [6]	[~kg]	3250			3250			3300			3350		
Machine dimensions (l x w x h)	[~m]	3,7x1,4x2,0			3,7x1,4x2,0			3,7x1,4x2,0			3,7x1,4x2,0		
Motor end projection 1 (H) [7]	[mm]												
Motor end projection 2 (H) [7]	[mm]												

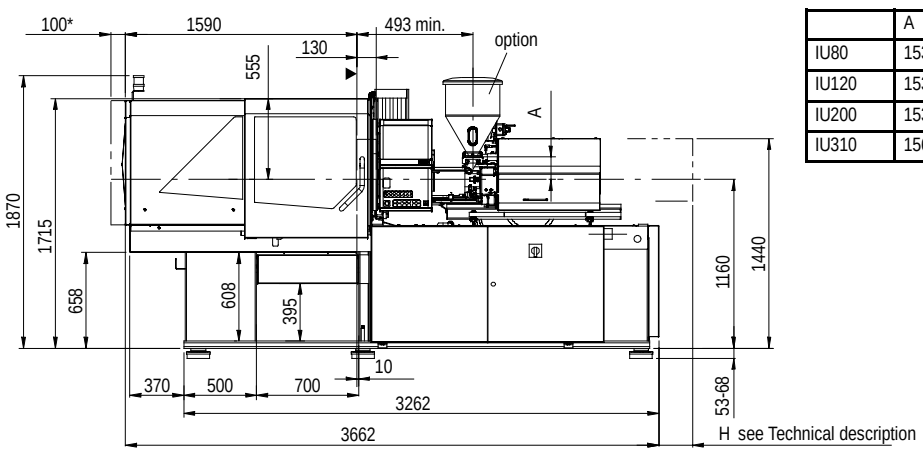
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

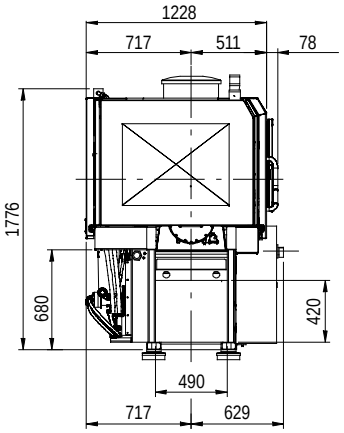
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 50/370



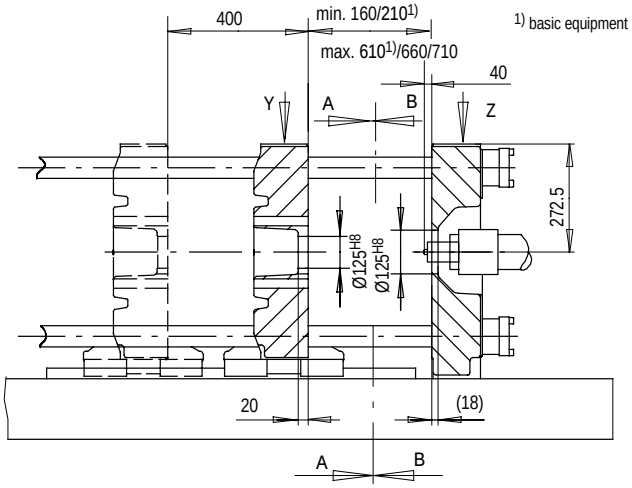
	A
IU80	153
IU120	153
IU200	153
IU310	156

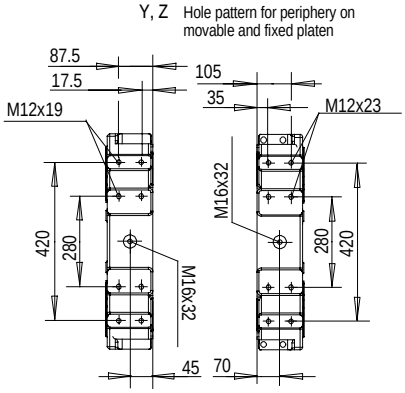


* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

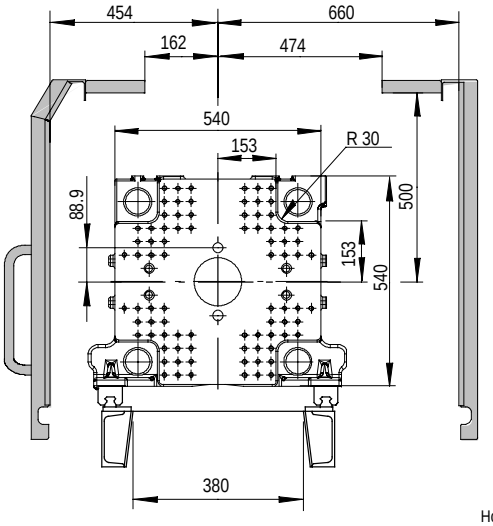
Platen dimensions Systec 50/370





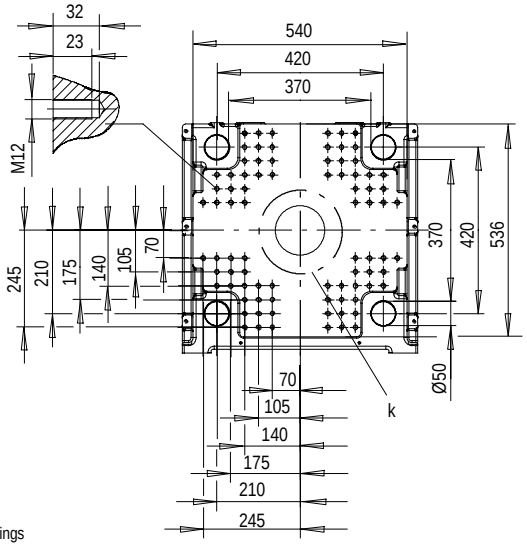
Movable platen

B - B



Fixed platen

A - A



Hole pattern according Euromap

k = minimum permissible mould-Ø 200 mm

Max. permissible mould weight 650 kg,
max. 420 kg of it on the moving platen support bearings

Technical Data Systec 60/420

Sumitomo (SHI) Demag		Systec 60/420			
Model description		60/420-120	60/420-200	60/420-310	60/420-430
International size description		600-120	600-200	600-310	600-430

Clamping unit		60/420				
Clamping force	[kN]	600				
Locking force	[kN]	600				
Max. mould opening stroke	[mm]	450	450	450	450	
Min. mould height	[mm]	(-100)150	(0)250 [1]	(+50)300	(+100)350	
Daylight between platens, max.	[mm]	(-100)150	(0)700 [1]	(+50)750	(+100)800	
Mould platen (h x v)	[mm]	600x600				
Distance between tie bars (h x v)	[mm]	420x420				
Min. permissible mould diameter	[mm]	215				
Ejection stroke	[mm]	150				
Ejection force	[kN]	41				
Retraction force	[kN]	15				

Injection unit		120			200			310			430		
Screw diameter	[mm]	22	25	30	25	30	35	30	35	40	35	40	45
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2591	2006	1393	2800	1995	1466	2755	2024	1550	2644	2025	1600
Cylinder head volume, max.	[cm³]	42	61	88	61	106	144	106	168	220	168	231	293
Max. shot weight (PS)	[g]	37	54	78	54	94	128	94	149	195	149	205	259
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	93/127/174	120/164/226	173/237/324	83/114/158	121/166/227	164/224/309	87/119/163	119/162/223	156/212/291	91/124/170	119/162/223	150/206/282
> with accumulator	[cm³/s]	231	299	431	299	431	587	431	587	767	587	767	969
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	9/10/10	15/16/17	26/27/29	15/15/15	25/25/25	34/34/34	20/22/26	26/30/35	37/41/48	21/24/28	29/33/39	39/44/52
> motor 2 (120 bar) [3]	[g/s]	9/9/9	15/15/15	25/25/25	11/13/15	20/22/22	26/30/35	16/18/21	21/24/28	29/33/39	17/19/22	23/26/31	31/35/42
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	110	125	125	125	150	150	162	175	175	184	184	184
Max. distance of nozzle retraction [4]	[mm]	250			250			250			300		
Max. nozzle dipping depth (SVO)	[mm]	40			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			5		
Hopper capacity [5]	[ltr.]	35			35			35			35		

General data		60/420-120			60/420-200			60/420-310			60/420-430		
Oil tank capacity	[ltr.]	180			180			180			180		
Installed electrical rating													
> pump [3]	[~kW]	15/18,5/22			15/18,5/22			15/18,5/22			15/18,5/22		
> heating capacity of screw cylinder	[~kW]	5,3	5,8	8,3	5,8	8,3	9,4	8,3	9,4	11,1	9,4	11,1	11,3
> capacity with hydraulic drive [3]	[kW]												
> capacity with electr. drive [3]	[kW]	20/24/27	21/24/28	23/27/30	21/24/28	23/27/30	24/28/31	23/27/30	24/28/31	26/30/33	24/28/31	26/30/33	26/30/33
Dry cycles (Euromap 6) [3]	[s-mm]	1,7/1,5/1,3-294			1,7/1,5/1,3-294			1,7/1,5/1,3-294			1,7/1,5/1,3-294		
Net weight (without oil) [6]	[~kg]	3850			3900			4000			4000		
Machine dimensions (l x w x h)	[~m]	4,1x1,4x2,0			4,1x1,4x2,0			4,1x1,4x2,0			4,1x1,4x2,0		
Motor end projection 1 (H) [7]	[mm]												
Motor end projection 2 (H) [7]	[mm]												

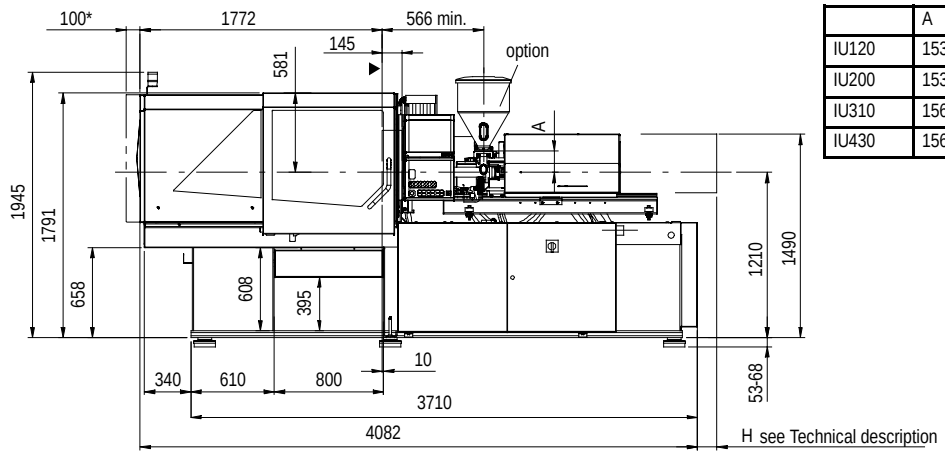
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

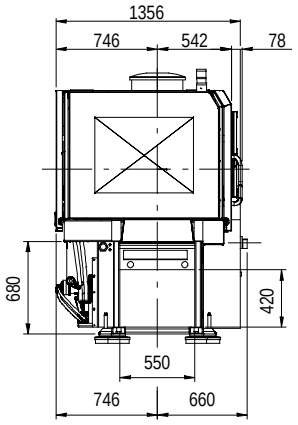
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 60/420



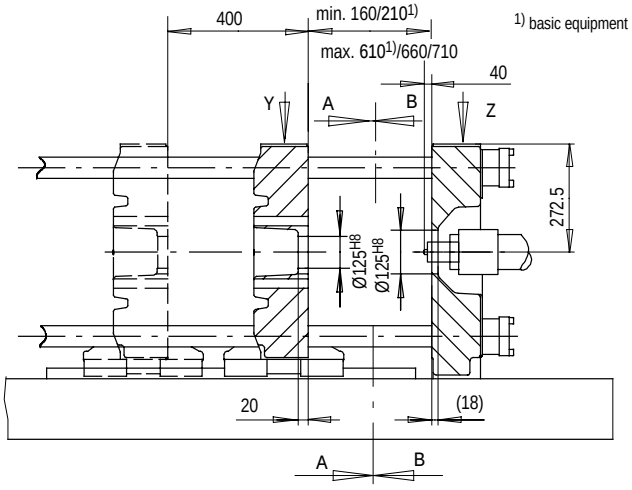
	A
IU120	153
IU200	153
IU310	156
IU430	156

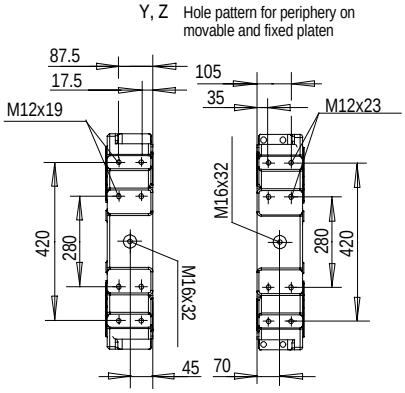


* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

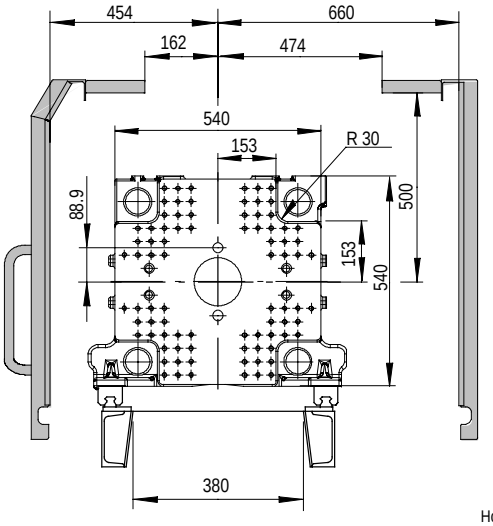
Platen dimensions Systec 60/420





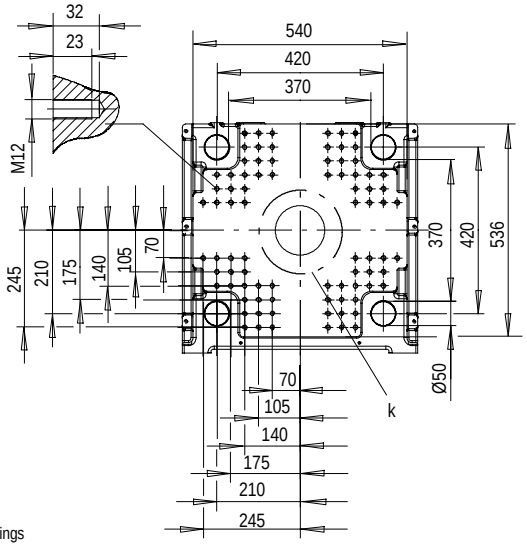
Movable platen

B - B



Fixed platen

A - A



Hole pattern according Euromap

k = minimum permissible mould-Ø 200 mm

Max. permissible mould weight 650 kg,
max. 420 kg of it on the moving platen support bearings

Technical Data Systec 80/420

Sumitomo (SHI) Demag		Systec 80/420			
Model description		80/420-120	80/420-200	80/420-310	80/420-430
International size description		800-120	800-200	800-310	800-430

Clamping unit		80/420				
Clamping force	[kN]	800				
Locking force	[kN]	800				
Max. mould opening stroke	[mm]	450	450	450	450	
Min. mould height	[mm]	(-100)150	(0)250 [1]	(+50)300	(+100)350	
Daylight between platens, max.	[mm]	(-100)600	(0)700 [1]	(+50)750	(+100)800	
Mould platen (h x v)	[mm]	600x600				
Distance between tie bars (h x v)	[mm]	420x420				
Min. permissible mould diameter	[mm]	215				
Ejection stroke	[mm]	150				
Ejection force	[kN]	41				
Retraction force	[kN]	15				

Injection unit		120			200			310			430		
Screw diameter	[mm]	22	25	30	25	30	35	30	35	40	35	40	45
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2591	2006	1393	2800	1995	1466	2755	2024	1550	2644	2025	1600
Cylinder head volume, max.	[cm³]	42	61	88	61	106	144	106	168	220	168	231	293
Max. shot weight (PS)	[g]	37	54	78	54	94	128	94	149	195	149	205	259
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	93/127/174	120/164/226	173/237/324	83/114/158	121/166/227	164/224/309	87/119/163	119/162/223	156/212/291	91/124/170	119/162/223	150/206/282
> with accumulator	[cm³/s]	231	299	431	299	431	587	431	587	767	587	767	969
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	9/10/10	15/16/17	26/27/29	15/15/15	25/25/25	34/34/34	20/22/26	26/30/35	37/41/48	21/24/28	29/33/39	39/44/52
> motor 2 (120 bar) [3]	[g/s]	9/9/9	15/15/15	25/25/25	11/13/15	20/22/22	26/30/35	16/18/21	21/24/28	29/33/39	17/19/22	23/26/31	31/35/42
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	110	125	125	125	150	150	162	175	175	184	184	184
Max. distance of nozzle retraction [4]	[mm]	250			250			250			250		
Max. nozzle dipping depth (SVO)	[mm]	40			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			4		
Hopper capacity [5]	[ltr.]	35			35			35			35		

General data		80/420-120			80/420-200			80/420-310			80/420-430		
Oil tank capacity	[ltr.]	180			180			180			180		
Installed electrical rating													
> pump [3]	[~kW]	15/18,5/22			15/18,5/22			15/18,5/22			15/18,5/22		
> heating capacity of screw cylinder	[~kW]	5,3	5,8	8,3	5,8	8,3	9,4	8,3	9,4	11,1	9,4	11,1	11,3
> capacity with hydraulic drive [3]	[kW]												
> capacity with electr. drive [3]	[kW]	20/24/27	21/24/28	23/27/30	21/24/28	23/27/30	24/28/31	23/27/30	24/28/31	26/30/33	24/28/31	26/30/33	26/30/33
Dry cycles (Euromap 6) [3]	[s-mm]	2,0/1,8/1,3-294			2,0/1,8/1,3-294			2,0/1,8/1,3-294			2,0/1,8/1,3-294		
Net weight (without oil) [6]	[~kg]	3850			3900			4000			4000		
Machine dimensions (l x w x h)	[~m]	4,1x1,4x2,0			4,1x1,4x2,0			4,1x1,4x2,0			4,1x1,4x2,0		
Motor end projection 1 (H) [7]	[mm]												
Motor end projection 2 (H) [7]	[mm]												

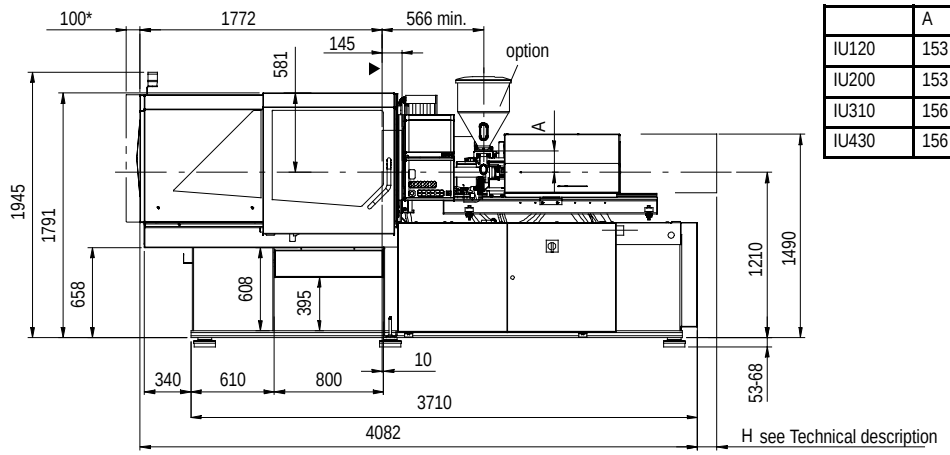
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

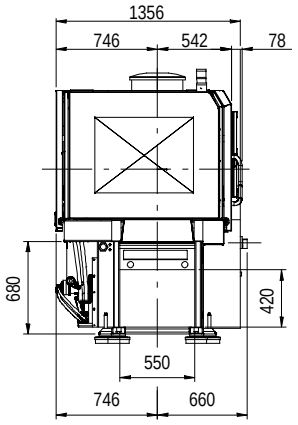
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 80/420



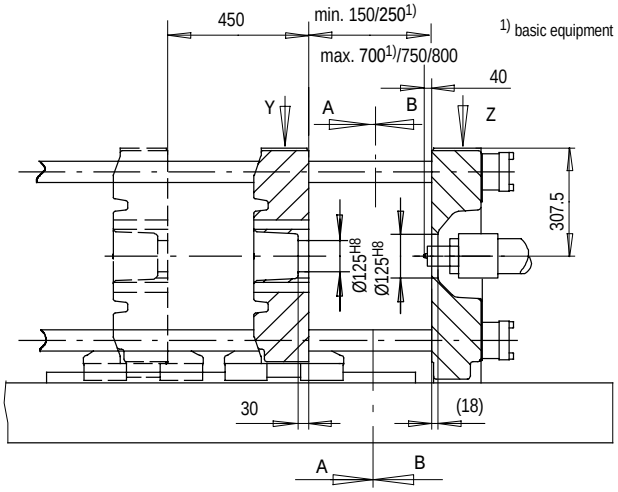
	A
IU120	153
IU200	153
IU310	156
IU430	156



* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

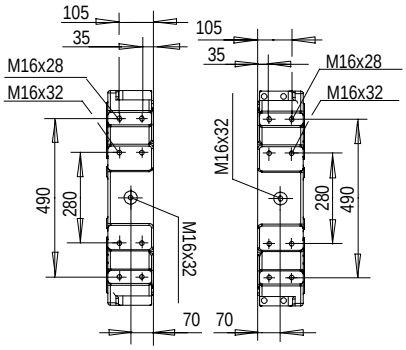
Platen dimensions Systec 80/420



Movable platen

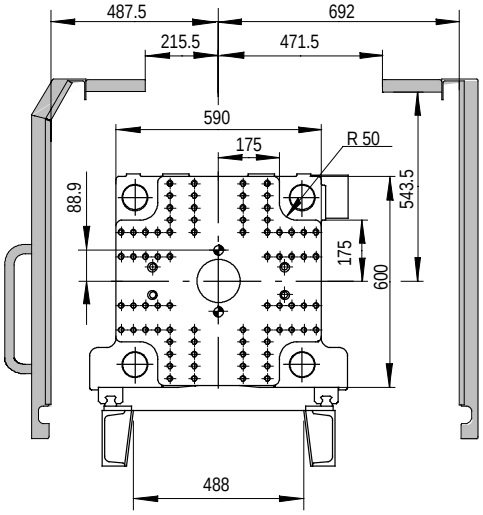
B - B

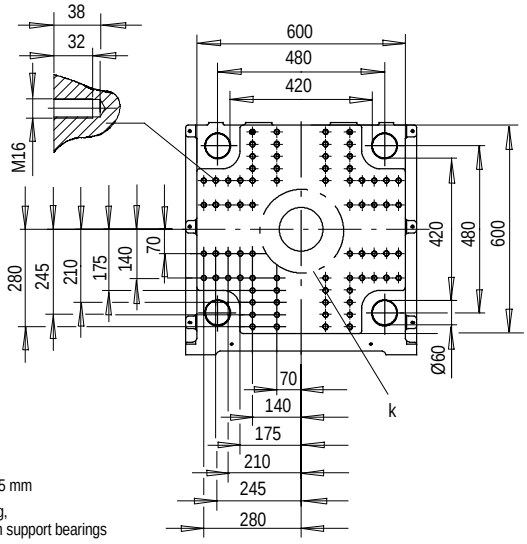
Y, Z Hole pattern for periphery on movable and fixed platen (Euromap 18-E7)



Fixed platen

A - A





Hole pattern according Euromap

k = minimum permissible mould-Ø 215 mm

Max. permissible mould weight 780 kg,
max. 500 kg of it on the moving platen support bearings

Technical Data Systec 100/420

Sumitomo (SHI) Demag		Systec 100/420			
Model description		100/420-200	100/420-310	100/420-430	100/420-600
International size description		1000-200	1000-310	1000-430	1000-600

Clamping unit		100/420				
Clamping force	[kN]	1000				
Locking force	[kN]	1000				
Max. mould opening stroke	[mm]	500	500	500	500	
Min. mould height	[mm]	(-100)150	(0)250 [1]	(+50)300	(+100)350	
Daylight between platens, max.	[mm]	(-100)650	(0)750 [1]	(+50)800	(+100)850	
Mould platen (h x v)	[mm]	600x600				
Distance between tie bars (h x v)	[mm]	420x420				
Min. permissible mould diameter	[mm]	215				
Ejection stroke	[mm]	150				
Ejection force	[kN]	41				
Retraction force	[kN]	15				

Injection unit		200			310			430			600		
Screw diameter	[mm]	25	30	35	30	35	40	35	40	45	40	45	50
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2800	1995	1466	2755	2024	1550	2644	2025	1600	2423	1914	1550
Cylinder head volume, max.	[cm³]	61	106	144	106	168	220	168	231	293	231	322	398
Max. shot weight (PS)	[g]	54	94	128	94	149	195	149	205	259	208	291	359
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	93/127/174	120/164/226	173/237/324	119/151/194	162/206/266	212/269/347	124/158/203	162/206/266	206/260/337	136/172/221	171/218/280	212/269/347
> with accumulator	[cm³/s]	299	431	587	431	587	767	587	767	969	767	969	1197
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	15/15/15	25/25/25	34/34/34	22/26/26	30/35/35	41/48/48	24/28/32	33/39/45	44/52/60	17/21/27	23/29/36	31/40/50
> motor 2 (120 bar) [3]	[g/s]	11/13/15	22/22/22	26/30/35	18/21/24	24/28/32	33/39/45	19/22/25	26/31/35	35/42/47	14/17/23	18/23/31	25/31/43
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	125	150	150	162	175	175	175	184	184	184	203	203
Max. distance of nozzle retraction [4]	[mm]	250			250			300			300		
Max. nozzle dipping depth (SVO)	[mm]	40			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			4		
Hopper capacity [5]	[ltr.]	35			35			35			35		

General data		100/420-200			100/420-310			100/420-430			100/420-600		
Oil tank capacity	[ltr.]	180			180			180			180		
Installed electrical rating													
> pump [3]	[~kW]	18,5/22/30			18,5/22/30			18,5/22/30			18,5/22/30		
> heating capacity of screw cylinder	[~kW]	5,8	8,3	9,4	8,3	9,4	11,1	9,4	11,1	11,3	11,1	11,3	15,7
> capacity with hydraulic drive [3]	[kW]												
> capacity with electr. drive [3]	[kW]	24/28/36	27/30/38	28/31/39	27/30/38	28/31/39	30/33/41	28/31/39	30/33/41	30/33/41	30/33/41	30/33/41	34/38/46
Dry cycles (Euromap 6) [3]	[s-mm]	2,1/1,8/1,3-294			2,1/1,8/1,3-294			2,1/1,8/1,3-294			2,1/1,8/1,3-294		
Net weight (without oil) [6]	[~kg]	4350			4400			4450			4500		
Machine dimensions (l x w x h)	[~m]	4,2x1,4x2,0			4,2x1,4x2,0			4,2x1,4x2,0			4,2x1,4x2,0		
Motor end projection 1 (H) [7]	[mm]												
Motor end projection 2 (H) [7]	[mm]												

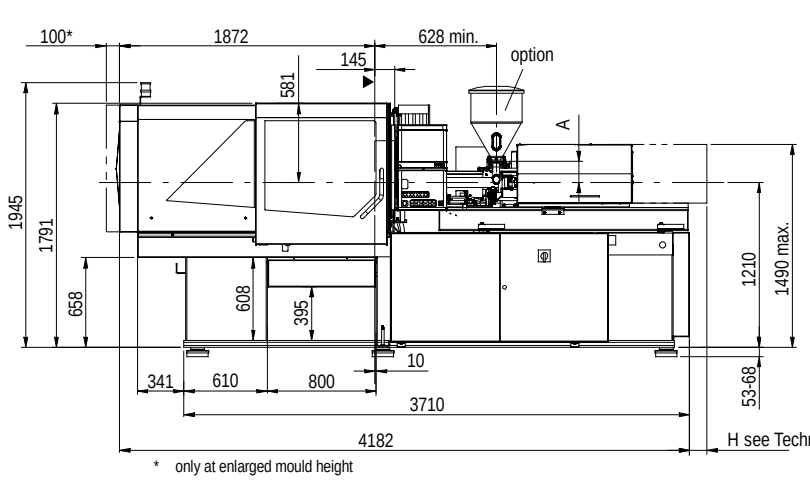
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

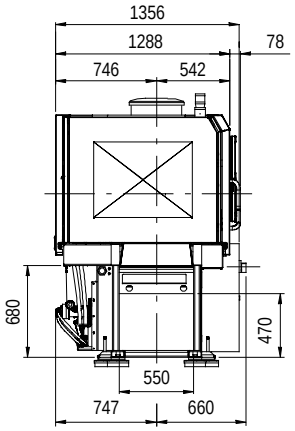
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 100/420



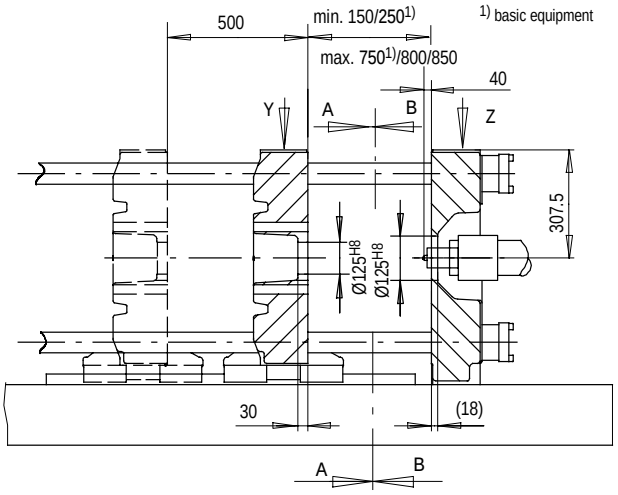
	A
IU200	153
IU310	156
IU430	156
IU600	156



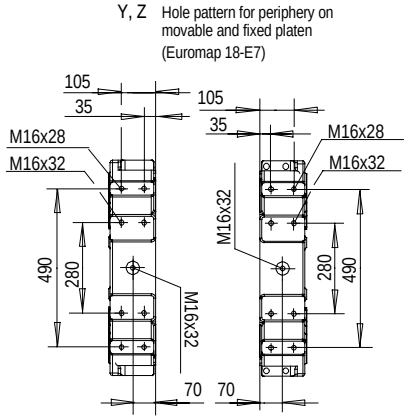
* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

Platen dimensions Systec 100/420

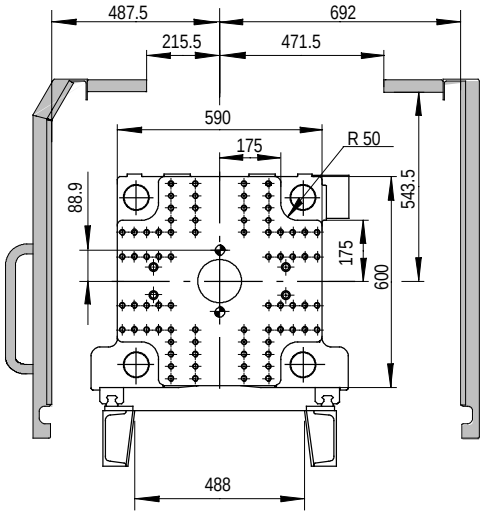


Movable platen

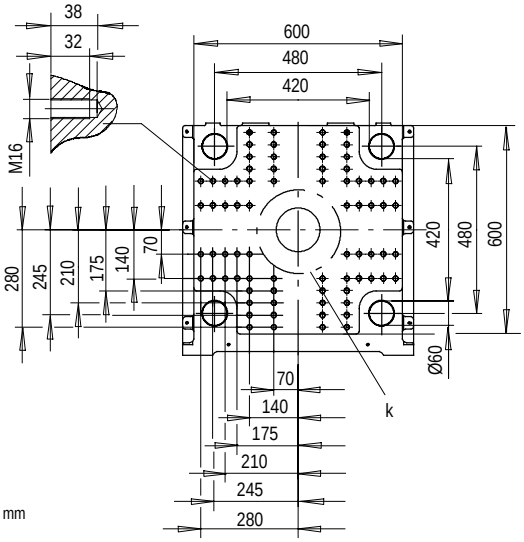


Fixed platen

B - B



A - A



Hole pattern according Euromap

k = minimum permissible mould-Ø 215 mm

Max. permissible mould weight 780 kg,
max. 500 kg of it on the moving platen support bearings

Technical Data Systec 120/470

Sumitomo (SHI) Demag		Systec 120/470			
Model description		120/470-200	120/470-310	120/470-430	120/470-600
International size description		1200-200	1200-310	1200-430	1200-600
Clamping unit		**120/470**			
Clamping force	[kN]	1200			
Locking force	[kN]	1200			
Max. mould opening stroke	[mm]	600	600	600	600
Min. mould height	[mm]	(-100)150	(0)250 [1]	(+50)300	(+100)350
Daylight between platens, max.	[mm]	(-100)750	(0)850 [1]	(+50)900	(+100)950
Mould platen (h x v)	[mm]	670/670			
Distance between tie bars (h x v)	[mm]	470x470			
Min. permissible mould diameter	[mm]	230			
Ejection stroke	[mm]	180			
Ejection force	[kN]	41			
Retraction force	[kN]	15			

Injection unit		**200**			**310**			**430**			**600**		
Screw diameter	[mm]	25	30	35	30	35	40	35	40	45	40	45	50
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2800	1995	1466	2755	2024	1550	2644	2025	1600	2423	1914	1550
Cylinder head volume, max.	[cm³]	61	106	144	106	168	220	168	231	293	231	322	398
Max. shot weight (PS)	[g]	54	94	128	94	149	195	149	205	259	208	291	359
Max. rate of injection [2]													
> without accumulator [3]	[cm³/s]	145/181/218	209/260/314	285/354/427	151/188/227	206/256/309	269/334/403	158/196/237	206/256/309	260/324/391	172/214/258	218/271/327	269/334/403
> with accumulator	[cm³/s]	299	431	587	431	587	767	587	767	969	767	969	1197
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [3]	[g/s]	15/15/15	25/25/25	34/34/34	26/26/26	35/35/35	52/52/52	28/32/32	41/48/48	52/60/60	23/29/29	29/36/36	42/52/52
> motor 2 (120 bar) [3]	[g/s]	13/13/13	22/22/22	30/30/30	20/24/24	28/32/32	41/48/48	22/25/25	33/37/37	42/47/47	18/25/25	23/31/31	33/45/45
> electr. screw drive	[g/s]												
Max. screw stroke	[mm]	125	150	150	162	175	175	184	184	184	200	203	203
Max. distance of nozzle retraction [4]	[mm]	250			250			300			300		
Max. nozzle dipping depth (SVO)	[mm]	40			40			40			40		
Nozzle sealing force	[kN]	60			60			60			60		
Number of heating zones		4			4			4			5		
Hopper capacity [5]	[ltr.]	35			35			35			50		

General data		**120/470-200**			**120/470-310**			**120/470-430**			**120/470-600**		
Oil tank capacity	[ltr.]	220			220			220			220		
Installed electrical rating													
> pump [3]	[~kW]	22/30/30			22/30/30			22/30/30			22/30/30		
> heating capacity of screw cylinder	[~kW]	5,8	8,3	9,4	8,3	9,4	11,1	9,4	11,1	11,3	11,1	11,3	15,7
> capacity with hydraulic drive [3]	[kW]												
> capacity with electr. drive [3]	[kW]	28/35/35	30/38/38	31/39/39	30/38/38	31/39/39	33/41/41	31/39/39	33/41/41	33/41/41	33/41/41	33/41/41	38/46/46
Dry cycles (Euromap 6) [3]	[s-mm]	2,1/1,6/1,5-329			2,1/1,6/1,5-329			2,1/1,6/1,5-329			2,1/1,6/1,5-329		
Net weight (without oil) [6]	[~kg]	5450			5500			5500			5600		
Machine dimensions (l x w x h)	[~m]	4,6x1,5x2,0			4,6x1,5x2,0			4,6x1,5x2,0			4,6x1,5x2,0		
Motor end projection 1 (H) [7]	[mm]												
Motor end projection 2 (H) [7]	[mm]												

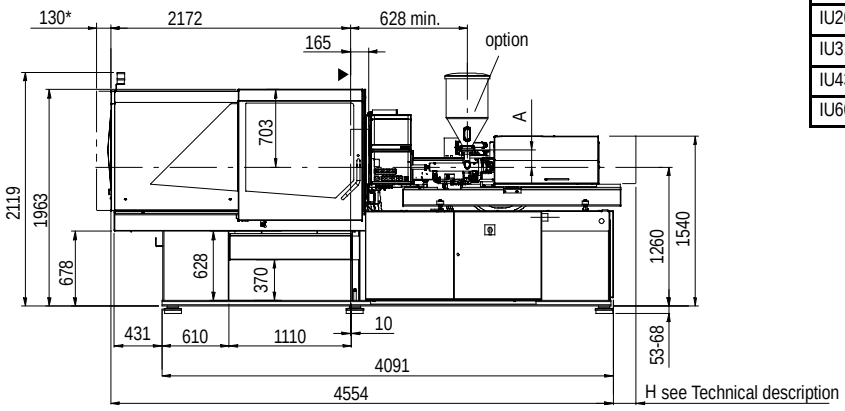
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

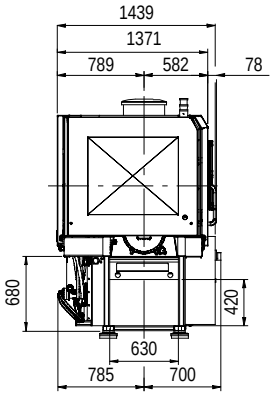
Electrical power supply refers to the standard configuration of the machine

1) basic equipment
2) Rate of injection based on the standard plasticizing unit
3) standard/increased/twin pump
4) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
5) Optional
6) The net weight of the machine may vary depending on equipment
7) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 120/470

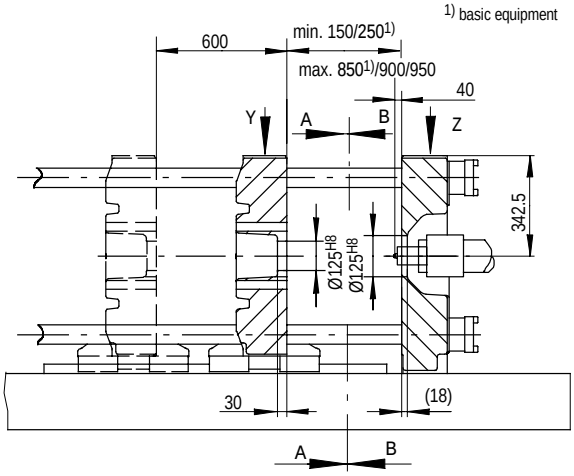


	A
IU200	153
IU310	156
IU430	156
IU600	156

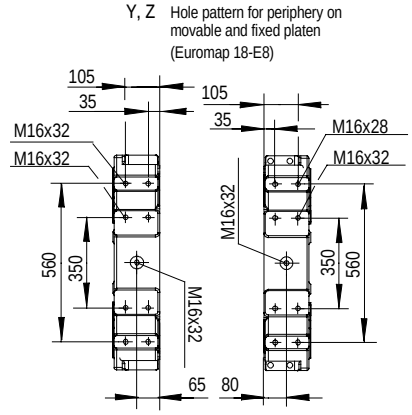


* only at enlarged mould height
▶ Mould mounting surface (fixed platen)

Platen dimensions Systec 120/470

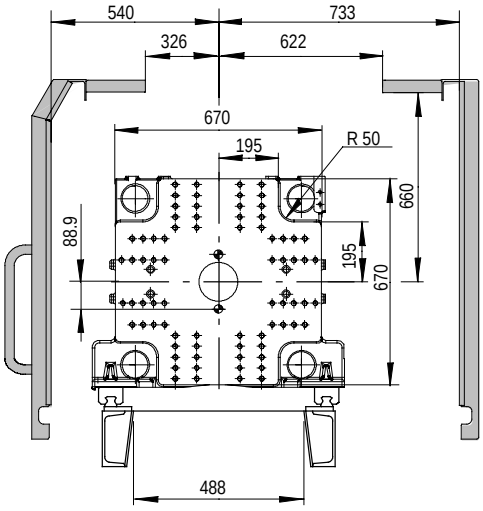


Movable platen

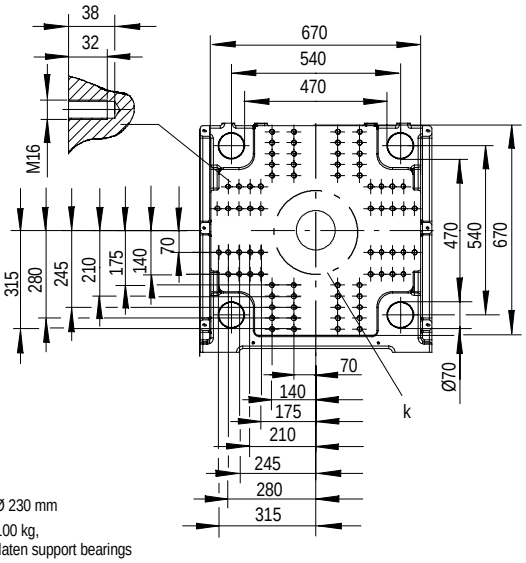


Fixed platen

B - B



A - A



Hole pattern according Euromap
k = minimum permissible mould-Ø 230 mm
Max. permissible mould weight 1100 kg,
max. 750 kg of it on the moving platen support bearings

Technical Data Systec 130/475

Sumitomo (SHI) Demag		Systec 130/475			
Model description		130/475-200	130/475-310	130/475-430	130/475-600
International size description		1300-200	1300-310	1300-430	1300-600
Clamping unit		**130/475**			
Clamping force	[kN]	1300			
Locking force	[kN]	1430			
Max. mould opening stroke	[mm]	450			
Min. mould height	[mm]	250			
Max./enlarged mould height	[mm]	480/580			
Daylight between platens max./enl.	[mm]	930/1030			
Mould platen (h x v)	[mm]	705x700			
Distance between tie bars (h x v)	[mm]	475x475			
Min. permissible mould diameter	[mm]	285			
Max. permissible mould weight	[kg]	1450			
Max. mould weight on mov. platen	[kg]	850			
Max. mould weight on fixed platen	[kg]	1100			
Ejection stroke	[mm]	140			
Ejection force	[kN]	59			
Retraction force	[kN]	29			

Injection unit		**200**			**310**			**430**			**600**		
Screw diameter	[mm]	25	30	35	30	35	40	35	40	45	40	45	50
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2752	1995	1466	2755	2024	1550	2644	2025	1600	2423	1914	1550
Cylinder head volume, max.	[cm³]	61	106	144	115	168	220	168	231	293	231	323	399
Max. shot weight (PS)	[g]	56	96	131	104	153	200	153	210	266	210	294	363
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	112/158/183	161/227/263	219/309/359	117/164/191	159/224/260	208/292/339	122/171/199	159/224/260	201/283/329	133/187/217	168/237/275	207/292/339
> with accumulator	[cm³/s]	299	431	587	431	587	767	587	767	970	767	970	1198
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	15/15/15	25/25/25	34/34/34	25/26/26	35/35/35	51/52/52	28/35/35	41/52/52	51/66/66	25/32/32	32/40/40	45/57/57
> motor 2 (120 bar) [2]	[g/s]	13/13/13	22/22/22	30/30/30	20/26/26	28/35/35	41/52/52	22/28/28	33/42/42	41/53/53	20/25/25	25/32/32	36/46/46
> electr. screw drive	[g/s]				19	26	38	26	38	47	38	47	54
Max. screw stroke	[mm]	125	150	150	162	175	175	175	184	184	184	203	203
Max. distance of nozzle retraction [3]	[mm]		550			300			400			400	
Nozzle stroke in automatic mode [3]	[mm]	308	406	549	323	322	319	322	319	294	319	294	291
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		80			80			80			80	
Number of heating zones		4	4	4	4	4	4	4	4	4	4	4	5
Hopper capacity [4]	[ltr.]		35			35			35			50	

General data		**130/475-200**			**130/475-310**			**130/475-430**			**130/475-600**		
Oil tank capacity	[ltr.]		400			400			400			400	
Installed electrical rating													
> pump [2]	[~kW]		22/30/30			22/30/30			22/30/30			22/30/30	
> electric screw drive	[~kW]		-			22			22			22	
> heating capacity of screw cylinder	[~kW]	5,7	8,3	9,4	8,3	9,4	11,1	9,4	11,1	11,3	11,1	11,3	15,7
> capacity with hydraulic drive [2]	[kW]	28/36/36	30/38/38	31/39/39	30/38/38	31/39/39	33/41/41	31/39/39	33/41/41	33/41/41	33/41/41	33/41/41	38/46/46
> capacity with electr. drive [2]	[kW]	-	-	-	52/60/60	53/61/61	55/63/63	53/61/61	55/63/63	55/63/63	55/63/63	55/63/63	60/68/68
Dry cycles (Euromap 6) [2]	[s-mm]		1,75/1,65/4,65-332			1,75/1,65/4,65-332			1,75/1,65/4,65-332			1,75/1,65/4,65-332	
Net weight (without oil) [5]	[~kg]		5700			5800			5900			6300	
Machine dimensions (l x w x h)	[~m]		5,1x1,6x2,1			5,1x1,6x2,0			5,1x1,6x2,0			5,1x1,6x2,2	
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/4	0/209
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/4	0/209
Electric drive projection (H) [6]	[mm]	-	-	-	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/4	0/209

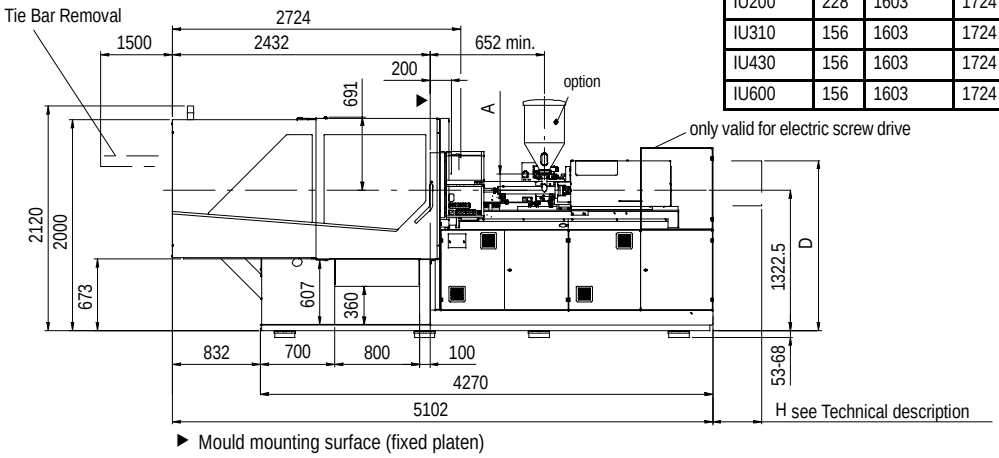
The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

Plasticising rate depends on processing conditions and material employed

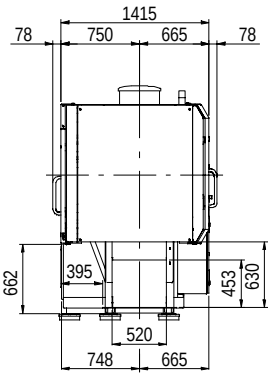
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

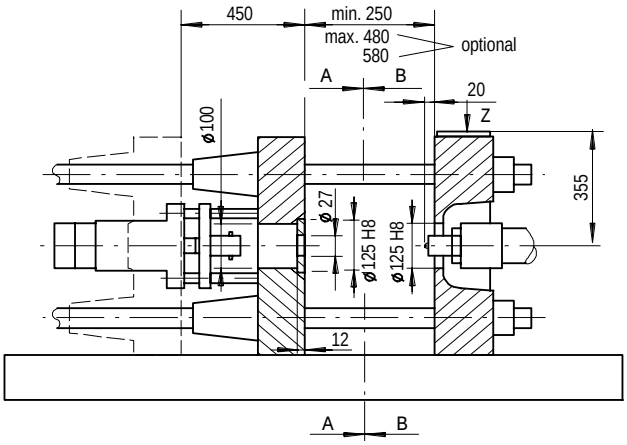
Machine dimensions Systec 130/475



	A	D WA310	D WA313
IU200	228	1603	1724
IU310	156	1603	1724
IU430	156	1603	1724
IU600	156	1603	1724

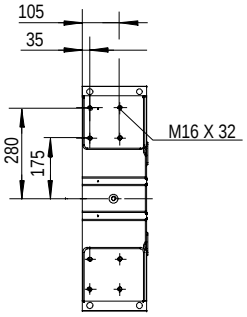


Platen dimensions Systec 130/475



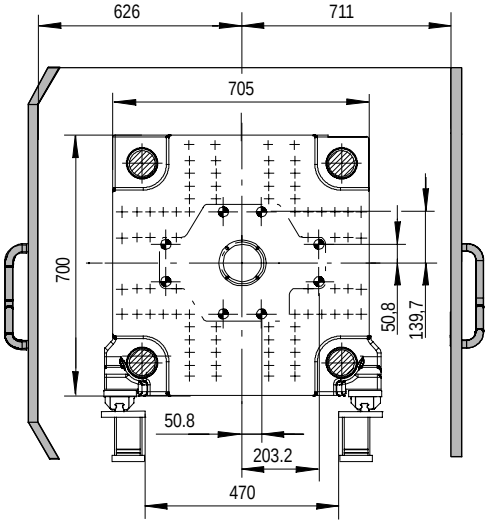
Movable platen

Z Hole pattern for robot/sprue picker on fixed platen (Euromap 18-E8)

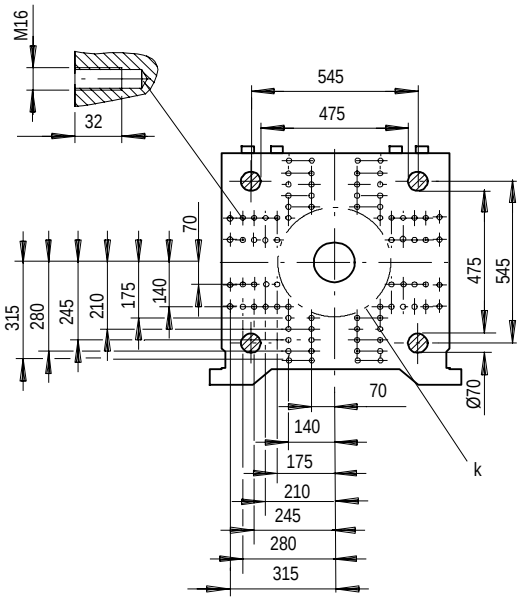


Fixed platen

B - B



A - A



Hole pattern according Euromap

Technical Data Systec 160/520

Sumitomo (SHI) Demag		Systec 160/520			
Model description		160/520-310	160/520-430	160/520-600	160/520-840
International size description		1600-310	1600-430	1600-600	1600-840
Clamping unit		**160/520**			
Clamping force	[kN]	1600			
Locking force	[kN]	1760			
Max. mould opening stroke	[mm]	500			
Min. mould height	[mm]	275			
Max./enlarged mould height	[mm]	585/685			
Daylight between platens max./enl.	[mm]	1085/1185			
Mould platen (h x v)	[mm]	770x770			
Distance between tie bars (h x v)	[mm]	520x520			
Min. permissible mould diameter	[mm]	300			
Max. permissible mould weight	[kg]	2200			
Max. mould weight on mov. platen	[kg]	1300			
Max. mould weight on fixed platen	[kg]	1700			
Ejection stroke	[mm]	160			
Ejection force	[kN]	59			
Retraction force	[kN]	29			

Injection unit		**310**			**430**			**600**			**840**		
Screw diameter	[mm]	30	35	40	35	40	45	40	45	50	45	50	60
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2755	2024	1550	2644	2025	1600	2423	1914	1550	2402	1946	1351
Cylinder head volume, max.	[cm³]	115	168	220	168	231	293	231	323	399	358	442	636
Max. shot weight (PS)	[g]	104	153	200	153	210	266	210	294	363	326	402	579
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	117/164/191	159/224/260	208/292/339	122/171/199	159/224/260	201/283/329	133/187/217	168/237/275	207/292/339	134/189/219	165/233/270	238/335/389
> with accumulator	[cm³/s]	431	587	767	587	767	970	767	970	1198	875	1001	1272
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	25/26/26	35/35/35	51/52/52	28/35/35	41/52/52	51/66/66	25/32/32	32/40/40	45/57/57	21/29/29	30/42/42	46/65/65
> motor 2 (120 bar) [2]	[g/s]	20/26/26	28/35/35	41/52/52	22/28/28	33/42/42	41/53/53	20/25/25	25/32/32	36/46/46	15/21/21	21/29/29	33/46/46
> electr. screw drive	[g/s]	19	26	38	26	38	47	38	47	54	53	60	65
Max. screw stroke	[mm]	162	175	175	175	184	184	184	203	203	225	225	225
Max. distance of nozzle retraction [3]	[mm]	300	300	300	400	400	400	400	400	400	915	762	465
Nozzle stroke in automatic mode [3]	[mm]	323	322	319	322	319	294	319	294	291	420	407	368
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		80			80			80			110	
Number of heating zones		4	4	4	4	4	4	4	4	5	5	5	5
Hopper capacity [4]	[ltr.]		35			35			50			70	

General data		**160/520-310**			**160/520-430**			**160/520-600**			**160/520-840**		
Oil tank capacity	[ltr.]		400			400			400			400	
Installed electrical rating													
> pump [2]	[~kW]		22/30/30			22/30/30			22/30/30			22/30/30	
> electric screw drive	[~kW]		22			22			22			22	
> heating capacity of screw cylinder	[~kW]	8,3	9,4	11,1	9,4	11,1	11,3	11,1	11,3	15,7	13	14,8	23
> capacity with hydraulic drive [2]	[kW]	30/38/38	31/39/39	33/41/41	31/39/39	33/41/41	33/41/41	33/41/41	33/41/41	38/46/46	35/43/43	37/45/45	45/53/53
> capacity with electr. drive [2]	[kW]	52/60/60	53/61/61	55/63/63	53/61/61	55/63/63	55/63/63	55/63/63	55/63/63	60/68/68	67/75/75	69/77/77	77/85/85
Dry cycles (Euromap 6) [2]	[s-mm]		1,95/1,75/1,75-364			1,95/1,75/1,75-364			1,95/1,75/1,75-364			1,95/1,75/1,75-364	
Net weight (without oil) [5]	[~kg]		6800			6800			6900			7300	
Machine dimensions (l x w x h)	[~m]		5,3x1,6x2,1			5,3x1,6x2,1			5,3x1,6x2,1			5,3x1,6x2,1	
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/143	225/1316	378/1316	680/1316
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/4	0/143	225/1316	378/11316	675/1316
Electric drive projection (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/4	0/143	406/1316	559/1316	856/1316

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

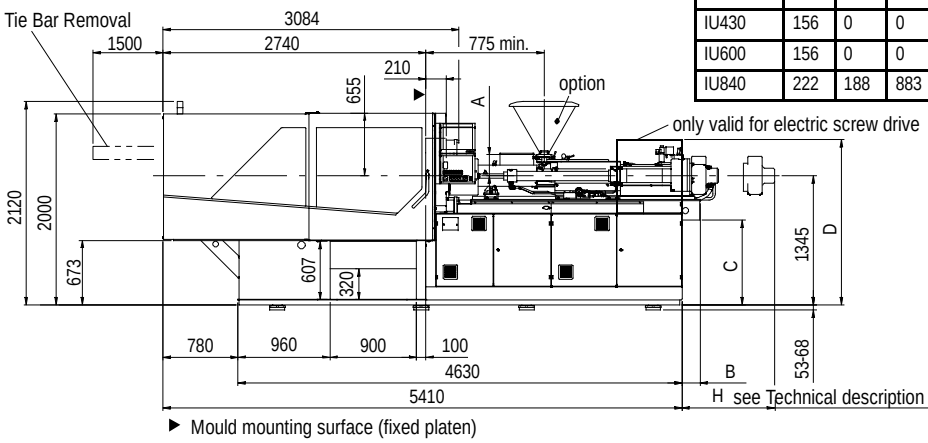
Plasticising rate depends on processing conditions and material employed

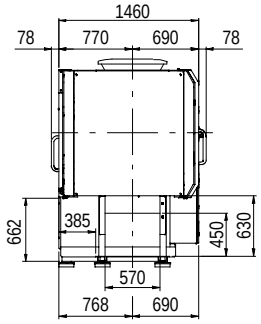
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

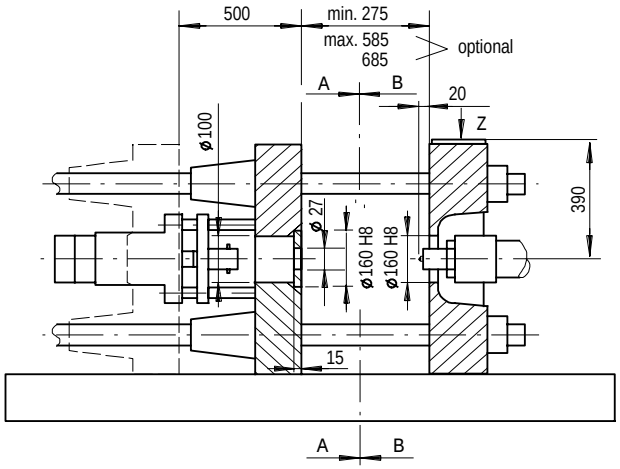
Machine dimensions Systec 160/520

	A	B	C	D WA310	D WA313
IU310	156	0	0	1583	1724
IU430	156	0	0	1625	1724
IU600	156	0	0	1625	1724
IU840	222	188	883	1661	1724

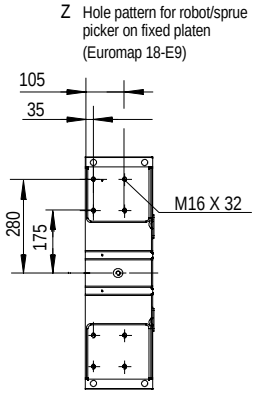




Platen dimensions Systec 160/520

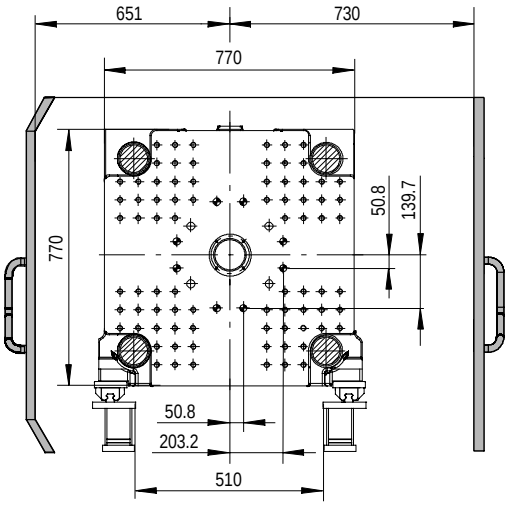


Movable platen

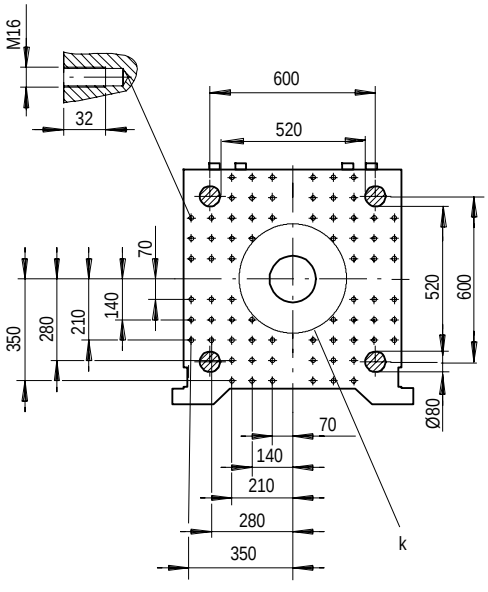


Fixed platen

B - B



A - A



Hole pattern according Euromap
⊕ bore diameter ∅ 27 through holes

Technical Data Systec 210/580

Sumitomo (SHI) Demag		Systec 210/580			
Model description		210/580-430	210/580-600	210/580-840	210/580-1450
International size description		2100-430	2100-580	2100-840	2100-1450
Clamping unit		**210/580**			
Clamping force	[kN]	2100			
Locking force	[kN]	2310			
Max. mould opening stroke	[mm]	575			
Min. mould height	[mm]	340			
Max./enlarged mould height	[mm]	690/790			
Daylight between platens max./enl.	[mm]	1265/1365			
Mould platen (h x v)	[mm]	860x860			
Distance between tie bars (h x v)	[mm]	580x580			
Min. permissible mould diameter	[mm]	350			
Max. permissible mould weight	[kg]	3300			
Max. mould weight on mov. platen	[kg]	2000			
Max. mould weight on fixed platen	[kg]	2500			
Ejection stroke	[mm]	180			
Ejection force	[kN]	73			
Retraction force	[kN]	36			

Injection unit		**430**			**600**			**840**			**1450**		
Screw diameter	[mm]	35	40	45	40	45	50	45	50	60	50	60	70
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2644	2025	1600	2423	1914	1550	2402	1946	1351	2426	1905	1400
Cylinder head volume, max.	[cm³]	168	231	293	231	323	399	358	442	636	530	763	1039
Max. shot weight (PS)	[g]	153	210	266	210	294	363	326	402	579	482	695	946
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	171/206/248	224/269/324	283/340/411	187/224/271	237/284/343	292/351/424	189/226/274	233/279/338	335/402/486	165/198/239	238/285/345	324/388/469
> with accumulator	[cm³/s]	587	767	970	767	970	1198	875	1001	1272	1001	1272	1462
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	35/35/35	52/52/52	66/66/66	32/32/32	40/40/40	57/57/57	29/35/35	42/50/50	65/78/78	29/35/35	46/55/55	65/79/79
> motor 2 (120 bar) [2]	[g/s]	28/28/28	42/42/42	53/53/53	25/25/25	32/32/32	46/46/46	21/25/25	29/35/35	46/55/55	18/22/22	29/35/35	41/49/49
> electr. screw drive	[g/s]	26	38	47	38	47	54	53	60	65	64	76	80
Max. screw stroke	[mm]	175	184	184	184	203	203	225	225	225	270	270	270
Max. distance of nozzle retraction [3]	[mm]	400	400	400	400	400	400	915	762	465	1100	803	499
Nozzle stroke in automatic mode [3]	[mm]	322	319	294	319	294	319	420	407	368	417	378	377
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		80			80			110			110	
Number of heating zones		4	4	4	4	4	5	5	5	5	5	5	5
Hopper capacity [4]	[ltr.]		35			50			70			110	

General data		**210/580-430**			**210/580-600**			**210/580-840**			**210/580-1450**		
Oil tank capacity	[ltr.]		400			400			400			400	
Installed electrical rating													
> pump [2]	[~kW]		30/37/37			30/37/37			30/37/37			30/37/37	
> electric screw drive	[~kW]		22			22			32			38	
> heating capacity of screw cylinder	[~kW]	9,4	11,1	11,3	11,1	11,3	15,7	13	14,8	23	14,8	23	27
> capacity with hydraulic drive [2]	[kW]	39/46/46	41/48/48	41/48/48	41/48/48	41/48/48	46/53/53	43/50/50	45/52/52	53/60/60	45/52/52	53/60/60	57/64/64
> capacity with electr. drive [2]	[kW]	61/68/68	63/70/70	63/70/70	63/70/70	63/70/70	68/75/75	75/82/82	77/84/84	85/92/92	83/90/90	91/98/98	95/102/102
Dry cycles (Euromap 6) [2]	[s-mm]		2,25/2,05/1,95-406			2,25/2,05/1,95-406			2,25/2,05/1,95-406			2,25/2,05/1,95-406	
Net weight (without oil) [5]	[~kg]		9300			9400			9600			10300	
Machine dimensions (l x w x h)	[~m]		6,0x1,7x2,1			6,0x1,7x2,1			6,0x1,7x2,1			6,0x1,7x2,1	
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	25/950	178/950	475/950	323/1462	620/1462	924/1462
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	25/950	178/950	475/950	362/1462	659/1462	963/1462
Electric drive projection (H) [6]	[mm]	0/0	0/0	0/0	0/0	0/0	0/0	206/1131	359/1131	656/1131	554/1654	851/1654	1155/1654

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

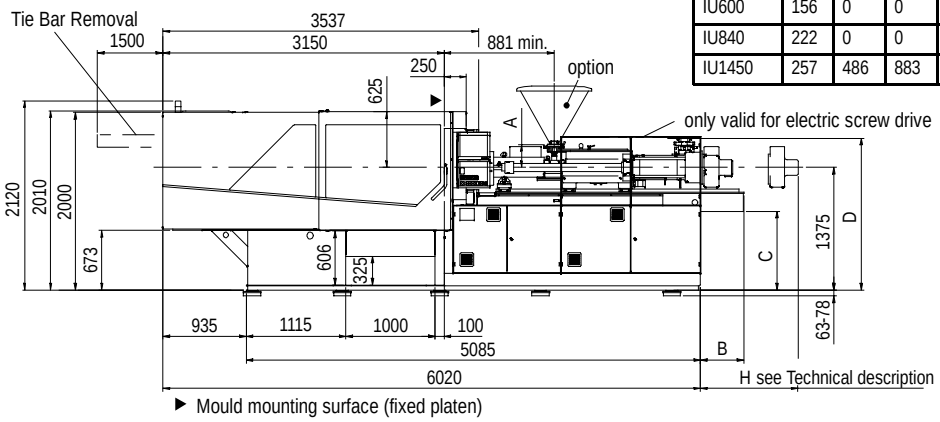
Plasticising rate depends on processing conditions and material employed

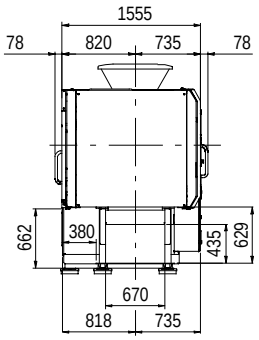
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

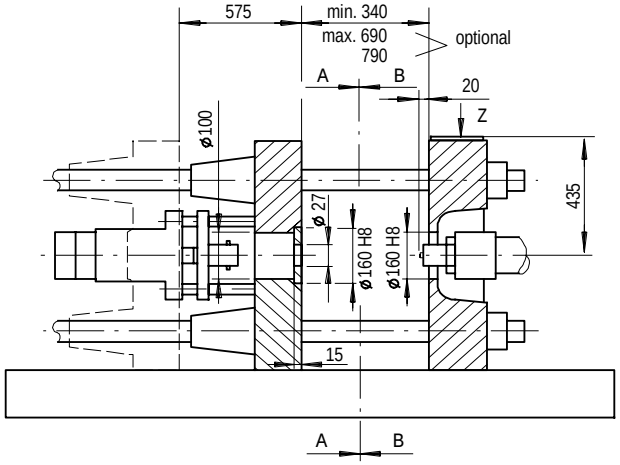
Machine dimensions Systec 210/580

	A	B	C	D WA310	D WA313
IU430	156	0	0	1655	1724
IU600	156	0	0	1655	1724
IU840	222	0	0	1691	1724
IU1450	257	486	883	1702	1724



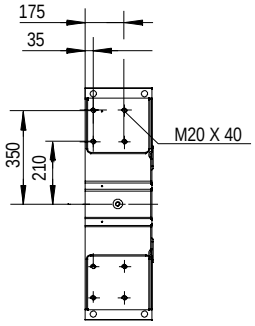


Platen dimensions Systec 210/580



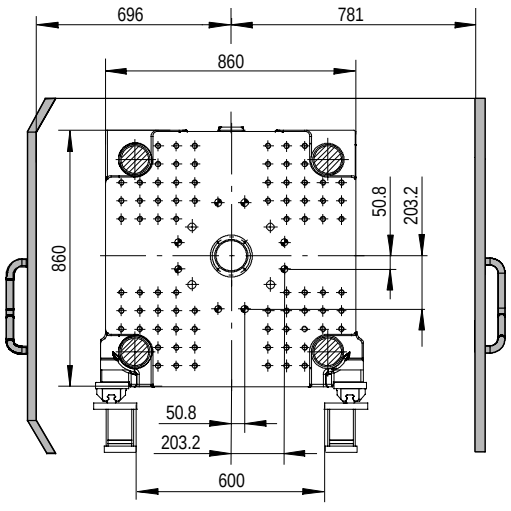
Movable platen

Z Hole pattern for robot/sprue picker on fixed platen (Euromap 18-E10)

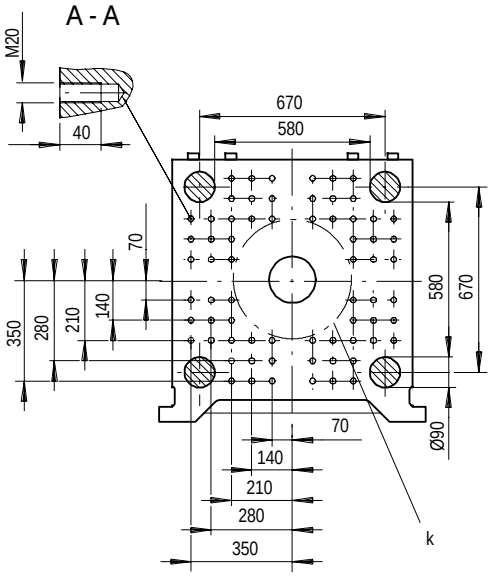


Fixed platen

B - B



A - A



Hole pattern according Euromap
⊕ bore diameter ∅ 27 through holes

Technical Data Systec 280/630

Sumitomo (SHI) Demag		Systec 280/630											
Model description		280/630-600			280/630-840			280/630-1450			280/630-2300		
International size description		2800-600			2800-840			2800-1450			2800-2300		
Clamping unit		**280/630**											
Clamping force	[kN]	2800											
Locking force	[kN]	3080											
Max. mould opening stroke	[mm]	675											
Min. mould height	[mm]	330											
Max./enlarged mould height	[mm]	710/830											
Daylight between platens max./enl.	[mm]	1385/1505											
Mould platen (h x v)	[mm]	930x930											
Distance between tie bars (h x v)	[mm]	630x630											
Min. permissible mould diameter	[mm]	400											
Max. permissible mould weight	[kg]	4300											
Max. mould weight on mov. platen	[kg]	2500											
Max. mould weight on fixed platen	[kg]	3300											
Ejection stroke	[mm]	200											
Ejection force	[kN]	73											
Retraction force	[kN]	36											
Injection unit		**600**			**840**			**1450**			**2300**		
Screw diameter	[mm]	40	45	50	45	50	60	50	60	70	60	70	80
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2423	1914	1550	2402	1946	1351	2426	1905	1400	2420	1877	1437
Cylinder head volume, max.	[cm³]	231	323	399	358	442	636	530	763	1039	891	1212	1583
Max. shot weight (PS)	[g]	210	294	363	326	402	579	482	695	946	810	1103	1441
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	224/262/346	284/331/438	351/409/541	226/264/349	279/326/431	402/469/620	198/231/306	285/333/440	388/453/599	213/248/328	290/338/447	378/441/583
> with accumulator	[cm³/s]	767	970	1198	875	1001	1272	1001	1272	1462	1272	1462	1608
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	32/32/32	40/40/40	57/57/57	35/41/41	50/58/58	78/91/91	35/41/41	55/64/64	79/92/92	35/40/40	49/58/58	69/81/81
> motor 2 (120 bar) [2]	[g/s]	25/25/25	32/32/32	46/46/46	25/29/29	35/41/41	55/64/64	22/26/26	35/40/40	49/58/58	24/28/28	35/41/41	49/57/57
> electr. screw drive	[g/s]	38	47	54	53	60	65	64	76	80	84	87	93
Max. screw stroke	[mm]	184	203	203	225	225	225	270	270	270	315	315	315
Max. distance of nozzle retraction [3]	[mm]	400	400	400	915	762	465	1100	803	499	1155	851	632
Nozzle stroke in automatic mode [3]	[mm]	319	294	319	420	407	368	417	378	377	418	417	420
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		80			110			110			110	
Number of heating zones		4	4	5	5	5	5	5	5	5	5	5	5
Hopper capacity [4]	[ltr.]		50			70			110			110	
General data		**280/630-600**			**280/630-840**			**280/630-1450**			**280/630-2300**		
Oil tank capacity	[ltr.]		549			549			549			549	
Installed electrical rating													
> pump [2]	[~kW]		37/45/45			37/45/45			37/45/45			37/45/45	
> electric screw drive	[~kW]												
> heating capacity of screw cylinder	[~kW]	11,1	11,3	15,7	13	14,8	23	14,8	23	27	23	27	31
> capacity with hydraulic drive [2]	[kW]	48/56/56	48/56/56	53/61/61	50/58/58	52/60/60	60/68/68	52/60/60	60/68/68	64/72/72	60/68/68	64/72/72	68/76/76
> capacity with electr. drive [2]	[kW]	70/78/78	70/78/78	75/83/83	82/90/90	84/92/92	92/100/100	90/98/98	98/106/106	102/110/110	107/115/115	111/119/119	115/123/123
Dry cycles (Euromap 6) [2]	[s-mm]	2,3/2,1/2,05-441			2,3/2,1/2,05-441			2,3/2,1/2,05-441			2,3/2,1/2,05-441		
Net weight (without oil) [5]	[~kg]	11800			12200			12700			13300		
Machine dimensions (l x w x h)	[~m]	6,6x1,9x2,1			6,6x1,9x2,1			6,6x1,9x2,1			6,6x1,9x2,1		
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/580	0/580	105/580	0/1092	250/1092	554/1092	379/1567	683/1567	902/1567
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/580	0/580	105/580	0/1092	289/1092	593/1092	412/1567	716/1567	935/1567
Electric drive projection (H) [6]	[mm]	0/0	0/0	0/0	0/756	0/756	286/756	184/1279	481/1279	785/1279	537/1687	841/1687	1060/1687

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

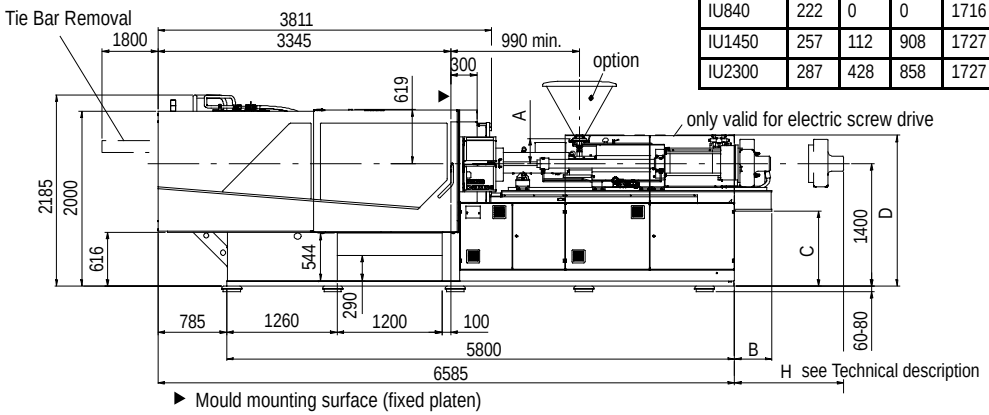
Plasticising rate depends on processing conditions and material employed

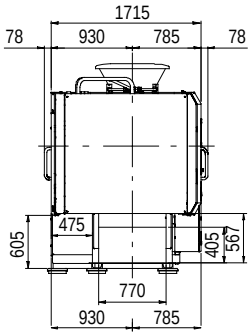
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

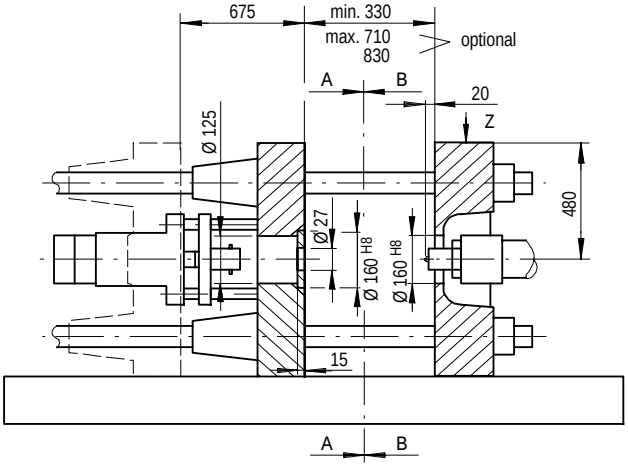
Machine dimensions Systec 280/630

	A	B	C	D WA310	D WA313
IU600	156	0	0	1680	1724
IU840	222	0	0	1716	1727
IU1450	257	112	908	1727	1727
IU2300	287	428	858	1727	1803

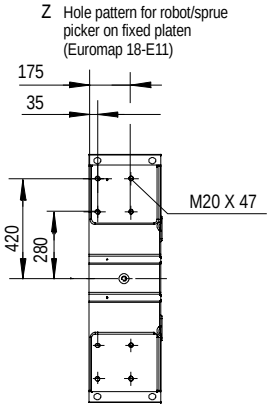




Platen dimensions Systec 280/630

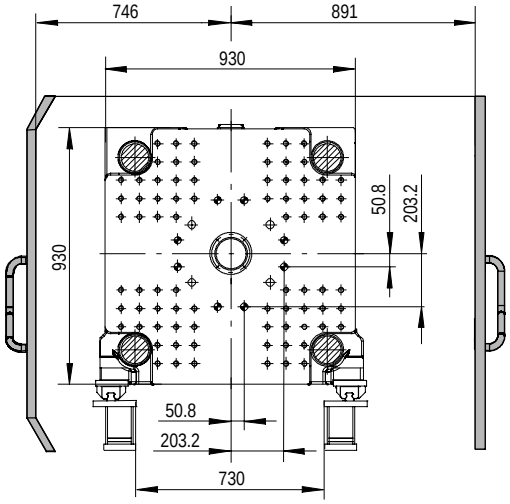


Movable platen

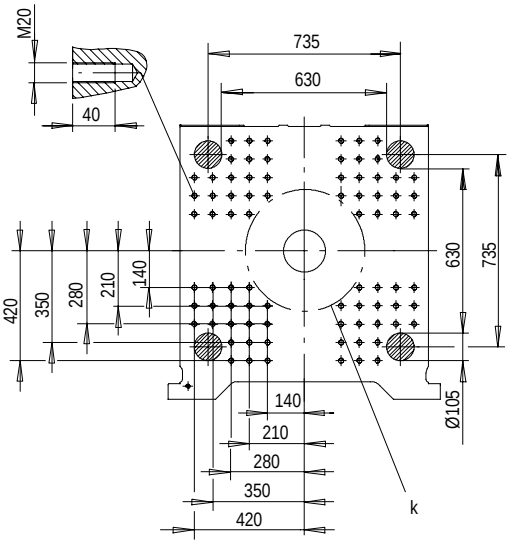


Fixed platen

B - B



A - A



Hole pattern according Euromap
⌖ bore diameter ∅ 27 through holes

Technical Data Systec 350/720

Sumitomo (SHI) Demag		Systec 350/720			
Model description		350/720-600	350/720-840	350/720-1450	350/720-2300
International size description		3500-600	3500-840	3500-1450	3500-2300
Clamping unit		**350/720**			
Clamping force	[kN]	3500			
Locking force	[kN]	3850			
Max. mould opening stroke	[mm]	730			
Min. mould height	[mm]	350			
Max./enlarged mould height	[mm]	745/950			
Daylight between platens max./enl.	[mm]	1475/1680			
Mould platen (h x v)	[mm]	1040/1060			
Distance between tie bars (h x v)	[mm]	720x720			
Min. permissible mould diameter	[mm]	400			
Max. permissible mould weight	[kg]	4700			
Max. mould weight on mov. platen	[kg]	2650			
Max. mould weight on fixed platen	[kg]	3600			
Ejection stroke	[mm]	200			
Ejection force	[kN]	73			
Retraction force	[kN]	36			

Injection unit		**600**			**840**			**1450**			**2300**		
Screw diameter	[mm]	40	45	50	45	50	60	50	60	70	60	70	80
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2423	1914	1550	2402	1946	1351	2426	1905	1400	2420	1877	1437
Cylinder head volume, max.	[cm³]	231	323	399	358	442	636	530	763	1039	891	1212	1583
Max. shot weight (PS)	[g]	210	294	363	326	402	579	482	695	946	810	1103	1441
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	261/320/395	331/405/500	408/500/617	264/323/398	326/398/491	469/573/708	231/282/348	333/407/502	453/553/683	248/303/374	338/413/509	441/539/665
> with accumulator	[cm³/s]	767	970	1198	875	1001	1272	1001	1272	1462	1272	1462	1608
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	32/32/32	40/40/40	57/57/57	41/50/50	58/71/71	91/111/111	41/50/50	64/78/78	92/112/112	40/49/49	58/70/70	81/98/98
> motor 2 (120 bar) [2]	[g/s]	25/25/25	32/32/32	46/46/46	29/35/35	41/50/50	64/78/78	26/32/32	40/49/49	58/70/70	25/35/35	41/50/50	57/69/69
> electr. screw drive	[g/s]	38	47	54	53	60	65	64	76	80	84	87	93
Max. screw stroke	[mm]	184	203	203	225	225	225	270	270	270	315	315	315
Max. distance of nozzle retraction [3]	[mm]	400	400	400	915	762	465	1185	888	584	1155	851	632
Nozzle stroke in automatic mode [3]	[mm]	319	294	319	420	407	368	417	378	377	418	417	420
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		80			110			110			110	
Number of heating zones		4	4	5	5	5	5	5	5	5	5	5	5
Hopper capacity [4]	[ltr.]		50			70			110			110	

General data		**350/720-600**			**350/720-840**			**350/720-1450**			**350/720-2300**		
Oil tank capacity	[ltr.]		549			549			549			549	
Installed electrical rating													
> pump [2]	[~kW]		45/55/55			45/55/55			45/55/55			45/55/55	
> electric screw drive	[~kW]		22			32			38			47	
> heating capacity of screw cylinder	[~kW]	11,1	11,3	15,7	13	14,8	23	14,8	23	27	23	27	31
> capacity with hydraulic drive [2]	[kW]	56/66/66	56/66/66	61/71/71	58/68/68	60/70/70	68/78/78	60/70/70	68/78/78	72/82/82	68/78/78	72/82/82	76/86/86
> capacity with electr. drive [2]	[kW]	78/88/88	78/88/88	83/93/93	90/100/100	92/102/102	100/110/110	98/108/108	106/116/116	110/120/120	115/125/125	119/129/129	123/133/133
Dry cycles (Euromap 6) [2]	[s-mm]		2,6/2,4/2,3-504			2,6/2,4/2,3-504			2,6/2,4/2,3-504			2,6/2,4/2,3-504	
Net weight (without oil) [5]	[~kg]		15700			16100			16600			17300	
Machine dimensions (l x w x h)	[~m]		7,0x2,0x2,3			7,0x2,0x2,2			7,0x2,0x2,4			7,0x2,0x2,4	
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/575	0/575	105/575	0/1087	250/1087	554/1087	379/1562	683/1562	902/1562
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/575	0/575	105/575	0/1087	289/1087	593/1087	412/1562	716/1562	935/1562
Electric drive projection (H) [6]	[mm]	0/0	0/0	0/0	0/756	0/756	286/756	184/1279	481/1279	785/1279	537/1687	841/1687	1060/1687

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

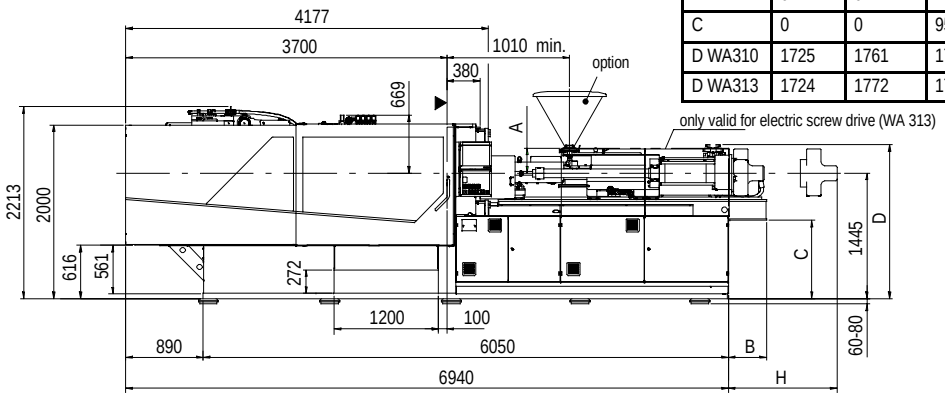
Plasticising rate depends on processing conditions and material employed

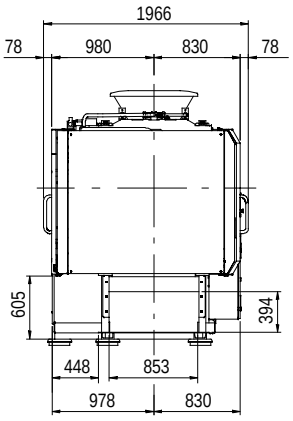
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

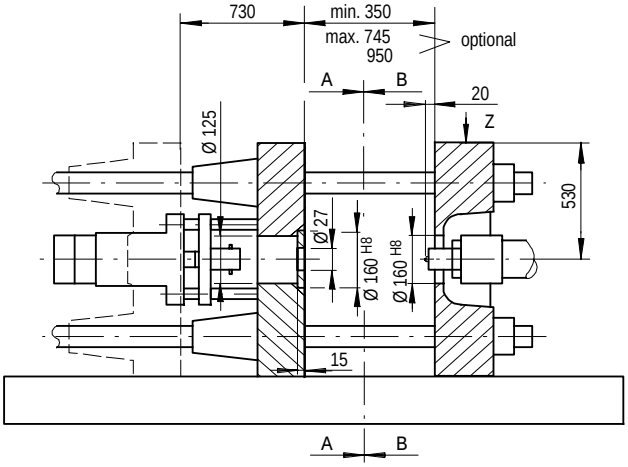
Machine dimensions Systec 350/720

	IU600	IU840	IU1450	IU2300
A	166	222	257	287
B	0	0	124	440
C	0	0	953	903
D WA310	1725	1761	1772	1772
D WA313	1724	1772	1772	1848

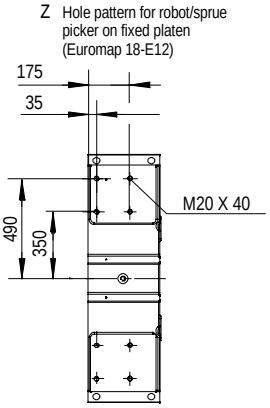




Platen dimensions Systec 350/720

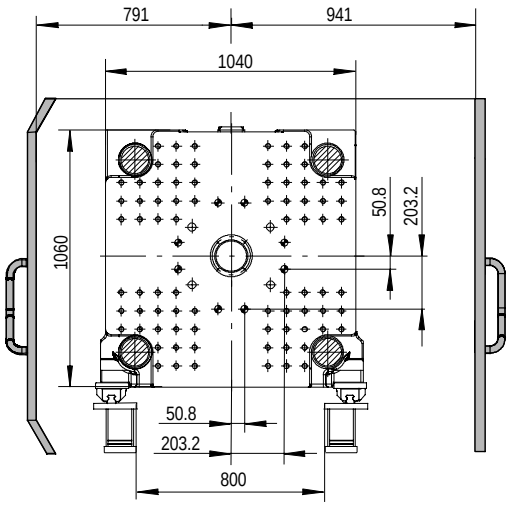


Movable platen

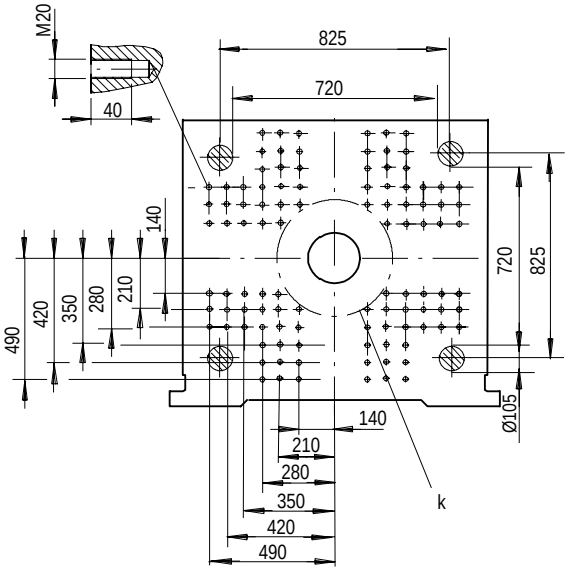


Fixed platen

B - B



A - A



Hole pattern according Euromap
⊕ bore diameter ∅ 27 through holes

Technical Data Systec 420/820

Sumitomo (SHI) Demag		Systec 420/820			
Model description		420/820-840	420/820-1450	420/820-2300	420/820-3300
International size description					
Clamping unit		**420/820**			
Clamping force	[kN]	4200			
Locking force	[kN]	4620			
Max. mould opening stroke	[mm]	770			
Min. mould height	[mm]	380			
Max./enlarged mould height	[mm]	825/1050			
Daylight between platens max./enl.	[mm]	1595/1820			
Mould platen (h x v)	[mm]	1200x1200			
Distance between tie bars (h x v)	[mm]	820x820			
Min. permissible mould diameter	[mm]	420			
Max. permissible mould weight	[kg]	6600			
Max. mould weight on mov. platen	[kg]	3800			
Max. mould weight on fixed platen	[kg]	5100			
Ejection stroke	[mm]	230			
Ejection force	[kN]	96			
Retraction force	[kN]	42			

Injection unit		**840**			**1450**			**2300**			**3300**		
Screw diameter	[mm]	45	50	60	50	60	70	60	70	80	70	80	95
Screw geometry		standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard	standard
L/D ratio		20	20	20	20	20	20	20	20	20	20	20	20
Spec. injection pressure (up to 400°C)	[bar]	2402	1946	1351	2426	1905	1400	2420	1877	1437	2423	1855	1316
Cylinder head volume, max.	[cm³]	358	442	636	530	763	1039	891	1212	1583	1362	1779	2509
Max. shot weight (PS)	[g]	326	402	579	482	695	946	810	1103	1441	1240	1619	2283
Max. rate of injection [1]													
> without accumulator [2]	[cm³/s]	264/323/398	326/398/491	469/573/708	231/282/348	333/407/502	453/553/683	248/303/374	338/413/509	441/539/665	320/449/527	418/586/688	589/826/970
> with accumulator	[cm³/s]	875	1001	1272	1001	1272	1462	1272	1462	1608	1462	1608	1980
Plasticising rate (PS)	[g/s]												
> motor 1 (120 bar) [2]	[g/s]	41/50/50	58/71/71	91/111/111	41/50/50	64/78/78	92/112/112	40/49/49	58/70/70	81/98/98	50/69/69	69/97/97	111/156/156
> motor 2 (120 bar) [2]	[g/s]	29/35/35	41/50/50	64/78/78	26/32/32	40/49/49	58/70/70	28/35/35	41/50/50	57/69/69	33/46/46	46/65/65	74/104/104
> electr. screw drive	[g/s]	53	60	65	64	76	80	84	87	93	105	129	155
Max. screw stroke	[mm]	225	225	225	270	270	270	315	315	315	354	354	354
Max. distance of nozzle retraction [3]	[mm]	930	777	480	1205	908	604	1155	851	632	980	980	613
Nozzle stroke in automatic mode [3]	[mm]	420	407	368	417	378	377	418	417	420	728	728	708
Max. nozzle dipping depth (SVO)	[mm]		20			20			20			20	
Nozzle sealing force	[kN]		110			110			110			110	
Number of heating zones			5			5			5			5	
Hopper capacity [4]	[ltr.]		70			110			110			110	

General data		**420/820-840**			**420/820-1450**			**420/820-2300**			**420/820-3300**		
Oil tank capacity	[ltr.]		670			670			670			670	
Installed electrical rating													
> pump [2]	[~kW]		45/55/55			45/55/55			45/55/55			55/75/75	
> electric screw drive	[~kW]		32			38			47			76	
> heating capacity of screw cylinder	[~kW]	13	14,8	23	14,8	23	27	23	27	31	30,6	30,6	42,6
> capacity with hydraulic drive [2]	[kW]	58/68/68	60/70/70	68/78/78	60/70/70	68/78/78	72/82/82	68/78/78	72/82/82	76/86/86	86/106/106	86/106/106	98/118/118
> capacity with electr. drive [2]	[kW]	90/100/100	92/102/102	100/110/110	98/108/108	106/116/116	110/120/120	115/125/125	119/129/129	123/133/133	162/182/182	162/182/182	174/194/194
Dry cycles (Euromap 6) [2]	[s-mm]		3,1/2,9/2,8-574			3,1/2,9/2,8-574			3,1/2,9/2,8-574			3,1/2,9/2,55-574	
Net weight (without oil) [5]	[~kg]		21500			22000			23000			23700	
Machine dimensions (l x w x h)	[~m]		8,0x2,2x2,3			8,0x2,2x2,5			8,0x2,2x2,5			8,0x2,2x2,5	
Motor end projection 1 (H) [6]	[mm]	0/0	0/0	0/0	0/342	0/342	0/342	0/817	0/817	167/817	690/1763	690/1763	1057/1763
Motor end projection 2 (H) [6]	[mm]	0/0	0/0	0/0	0/342	0/342	0/342	0/817	0/817	190/817	783/1763	783/1763	1150/1763
Electric drive projection (H) [6]	[mm]	0/11	0/11	0/11	0/534	0/534	40/534	0/942	96/942	315/942	965/1945	965/1945	1332/1945

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

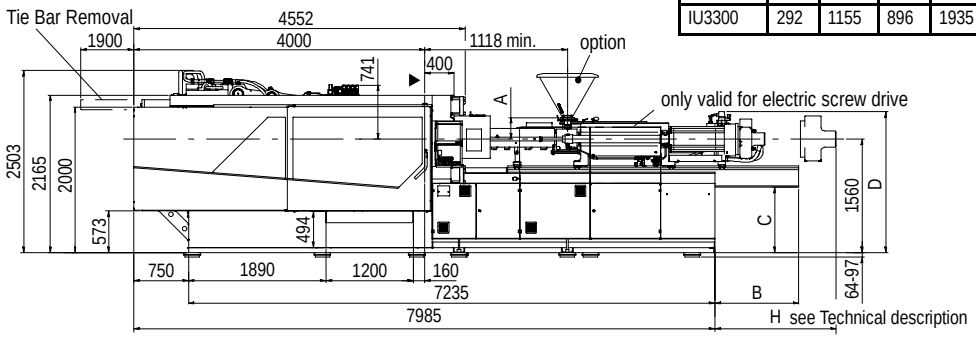
Plasticising rate depends on processing conditions and material employed

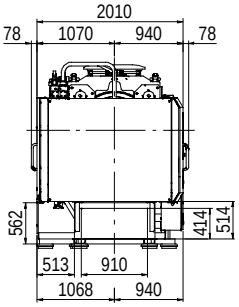
Electrical power supply refers to the standard configuration of the machine

1) Rate of injection based on the standard plasticizing unit
2) standard/increased/twin pump
3) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
4) Optional
5) The net weight of the machine may vary depending on equipment
6) At nozzle contact / at max. distance of nozzle retraction

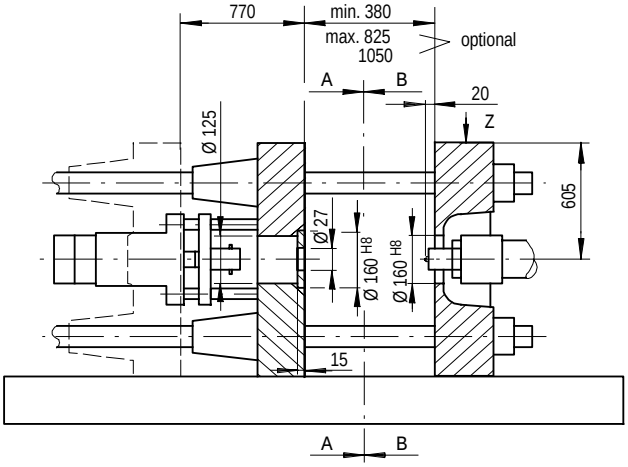
Machine dimensions Systec 420/820

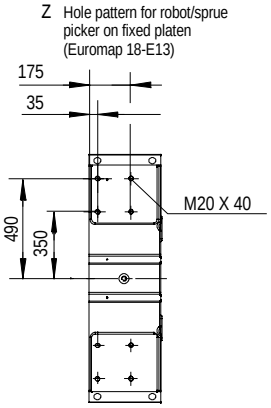
	A	B	C	D WA310	D WA313
IU840	222	0	0	1876	1887
IU1450	257	0	0	1887	1887
IU2300	287	0	0	1887	1963
IU3300	292	1155	896	1935	1963



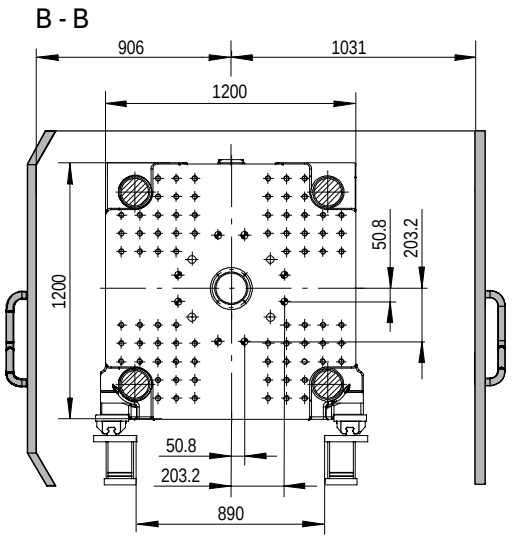


Platen dimensions Systec 420/820

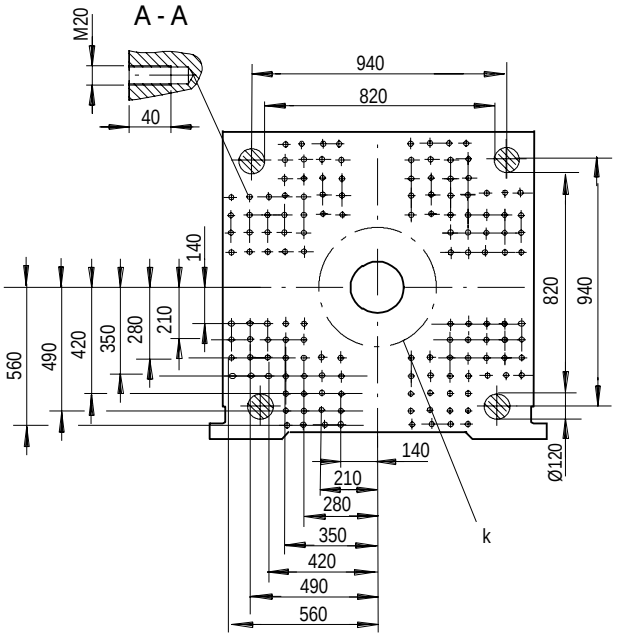




Movable platen



Fixed platen



Hole pattern according Euromap
⊕ bore diameter ∅ 27 through holes

Technical Data Systec 500/920

Sumitomo (SHI) Demag		Systec 500/920		
Model description		500/920-2300	500/920-3300	500/920-6400
International size description		5000-2300	5000-3300	5000-6400
Clamping unit		**500/920**		
Clamping force	[kN]	5000		
Locking force	[kN]	5500		
Max. mould opening stroke	[mm]	850		
Min. mould height	[mm]	400		
Max./enlarged mould height	[mm]	920/1150		
Daylight between platens max./enl.	[mm]	1770/2000		
Mould platen (h x v)	[mm]	1300x1300		
Distance between tie bars (h x v)	[mm]	920x920		
Min. permissible mould diameter	[mm]	420		
Max. permissible mould weight	[kg]	8700 [1]		
Max. mould weight on mov. platen	[kg]	5200		
Max. mould weight on fixed platen	[kg]	6700		
Ejection stroke	[mm]	260		
Ejection force	[kN]	96		
Retraction force	[kN]	42		

Injection unit		2300				3300				6400			
Screw diameter	[mm]	60	70	80	70	70	80	95	80	80	95	110	95
Screw geometry		standard	standard	standard	special[2]	standard	standard	standard	special[2]	standard	standard	standard	special[2]
L/D ratio		20	20	20	25	23	20	20	24	24	20	20	23
Spec. injection pressure (up to 400°C)	[bar]	2420	1877	1437	1877	2423	1855	1316	1855	2391	1895	1413	1895
Cylinder head volume, max.	[cm³]	891	1212	1583	1212	1362	1779	2509	1779	2388	3367	4514	3367
Max. shot weight (PS, PE*)	[g]	810	1103	1441	885*	1240	1619	2283	1299*	2173	3064	4108	2460*
Max. rate of injection [3]													
> without accumulator [4]	[cm³/s]	248/303/374	338/413/509	441/539/665	338/413/509	320/449/527	418/586/688	589/826/970	418/586/688	407/475/561	574/670/791	769/898/1060	574/670/791
> with accumulator	[cm³/s]	1272	1462	1608	1462	1462	1608	1985	1608	1608	1985	2281	1985
Plasticising rate (PS, PE*)	**[g/s]**												
> motor 1 (120 bar) [4]	[g/s]	40/49/49	58/70/70	81/98/98	52/63/63	50/69/69	69/97/97	111/156/156	62/87/87	65/76/76	104/122/122	151/176/176	93/108/108
> motor 2 (120 bar) [4]	[g/s]	28/35/35	41/50/50	57/69/69	36/45/45*	33/46/46	46/65/65	74/104/104	41/58/58*	43/50/50	69/80/80	99/116/116	61/71/71*
> electr. screw drive	[g/s]	84	87	93	79	105	129	155	115	132	176	187	157
Max. screw stroke	[mm]	315				354				475			
Max. distance of nozzle retraction [5]	[mm]	1240	936	717	589	1070	1070	703	703	1100	1100	657	657
Nozzle stroke in automatic mode [5]	[mm]	766	765	717	589	728	728	703	703	708	708	657	657
Max. nozzle dipping depth (SVO)	[mm]	40				40				40			
Nozzle sealing force	[kN]	110				110				110			
Number of heating zones		5				6				6			
Hopper capacity [6]	[ltr.]	110				110				110			

General data		500/920-2300				500/920-3300				500/920-6400			
Oil tank capacity	[ltr.]	760				760				760/1000			
Installed electrical rating													
> pump [4]	[~kW]	45/55/55				55/75/75				75/90/90			
> electric screw drive	[~kW]	47				76				90			
> heating capacity of screw cylinder	[~kW]	23	27	31	32	31	31	43	43	43	43	59	59
> capacity with hydraulic drive [4]	[kW]	68/78/78	72/82/82	76/86/86	77/87/87	86/106/106	86/106/106	98/118/118	98/118/118	118/133/133	118/133/133	134/149/149	134/149/149
> capacity with electr. drive [4]	[kW]	115/125/125	119/129/129	123/133/133	124/134/134	162/182/182	162/182/182	174/194/194	-/-/-	208/223/223	208/223/223	224/239/239	224/239/239
Dry cycles (Euromap 6) [4]	[s-mm]	3,6/3,1/2,4-644				3,1/2,5/2,3-644				2,5/2,3/2,1-644			
Net weight (without oil) [7] [8]	[~kg]	18000/6800/24800				18000/7600/25600				18000/7800/25800			
Machine dimensions (l x w x h)	[~m]	8,4x2,3x2,5				9,2x2,3x2,5				9,2x2,3x2,5			
Motor end projection 1 (H) [9]	[mm]	0/612	0/612	0/612	0/612	0/775	0/775	0/775	0/775	16/1189	16/1189	459/1189	459/1189
Motor end projection 2 (H) [9]	[mm]	0/612	0/612	0/612	0/612	0/775	0/775	0/775	0/775	89/1189	89/1189	532/1189	532/1189
Electric drive projection (H) [9]	[mm]	0/612	0/612	0/612	26/612	0/775	0/775	72/775	72/775	0/1060	0/1060	403/1060	403/1060

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

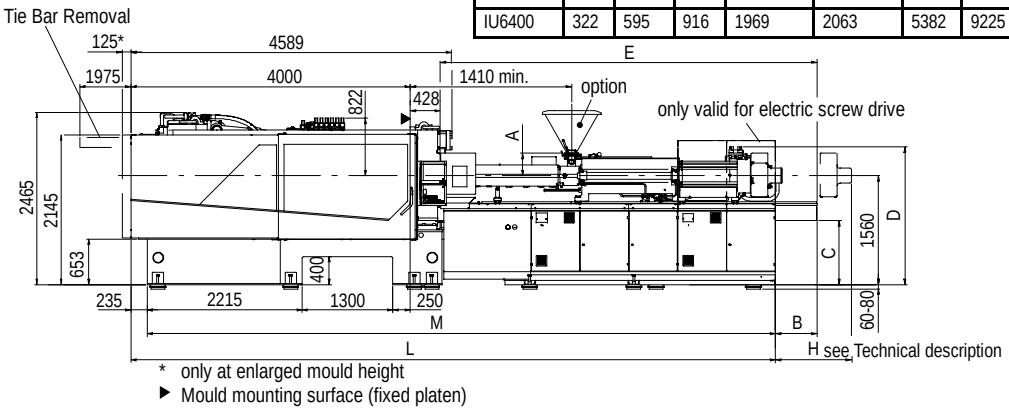
Plasticising rate depends on processing conditions and material employed

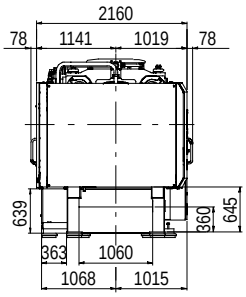
Electrical power supply refers to the standard configuration of the machine

1) Increased mould weights for stack moulds on demand
2) Shear and mixing unit
3) Rate of injection based on the standard plasticizing unit
4) standard/increased/twin pump
5) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
6) Optional
7) Clamping unit/Injection unit/Overall
8) The weight of the machine may vary depending on equpment
9) At nozzle contact / at max. distance of nozzle retraction

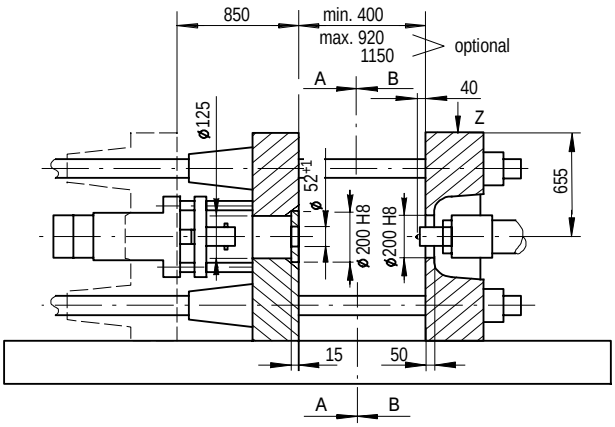
Machine dimensions Systec 500/920

	A	B	C	D WA310	D WA313	E	L	M
IU2300	287	0	0	1887	2063	3947	8385	8150
IU3300	292	0	0	1935	2063	4787	9225	8990
IU6400	322	595	916	1969	2063	5382	9225	8990

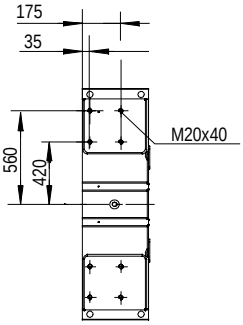




Platen dimensions Systec 500/920

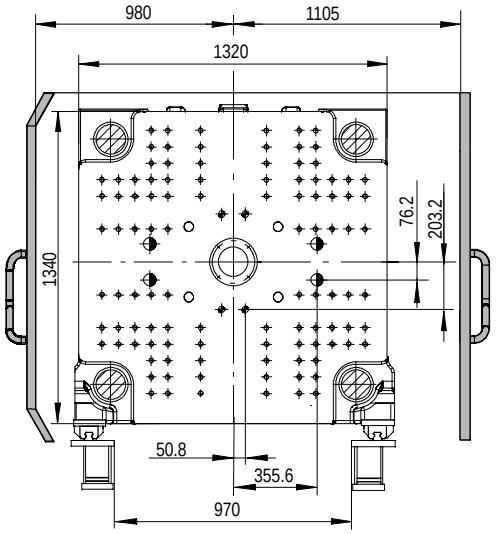


Z Hole pattern for robot/sprue picker on fixed platen



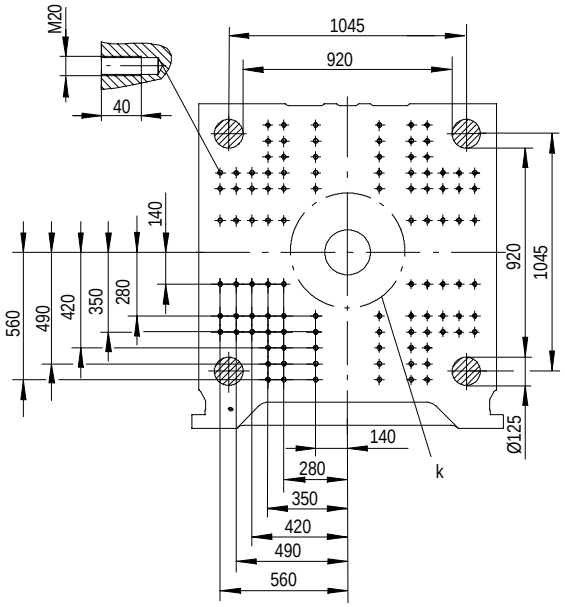
Movable platen

B - B



Fixed platen

A - A



Hole pattern according Euromap
- bore diameter ∅ 52+1 through holes
- bore diameter ∅ 27 through holes

Technical Data Systec 650/1020

Sumitomo (SHI) Demag		Systec 650/1020		
Model description		650/1020-3300	650/1020-6400	650/1020-9500
International size description		6500-3300	6500-6400	6500-9500
Clamping unit		**650/1020**		
Clamping force	[kN]	6500		
Locking force	[kN]	7150		
Max. mould opening stroke	[mm]	930		
Min. mould height	[mm]	450		
Max./enlarged mould height	[mm]	1020/1250		
Daylight between platens max./enl.	[mm]	1950/2180		
Mould platen (h x v)	[mm]	1450x1470		
Distance between tie bars (h x v)	[mm]	1020x1020		
Min. permissible mould diameter	[mm]	500		
Max. permissible mould weight	[kg]	11200 [1]		
Max. mould weight on mov. platen	[kg]	6700		
Max. mould weight on fixed platen	[kg]	8600		
Ejection stroke	[mm]	300		
Ejection force	[kN]	149		
Retraction force	[kN]	76		

Injection unit		3300				6400				9500			
Screw diameter	[mm]	70	80	95	80	80	95	110	95	95	110	130	110
Screw geometry		standard	standard	standard	special[2]	standard	standard	standard	special[2]	standard	standard	standard	special[2]
L/D ratio		23	20	20	24	24	20	20	23	23	20	20	24
Spec. injection pressure (up to 400°C)	[bar]	2423	1855	1316	1855	2391	1895	1413	1895	2434	1815	1300	1815
Cylinder head volume, max.	[cm³]	1362	1779	2509	1779	2388	3367	4514	3367	3899	5227	7300	5227
Max. shot weight (PS, PE*)	[g]	1240	1619	2283	1299*	2173	3064	4108	2460*	3548	4756	6643	3816*
Max. rate of injection [3]													
> without accumulator [4]	[cm³/s]	449/523/618	586/684/808	826/964/1139	586/684/808	407/475/561	574/670/791	769/898/1060	574/670/791	521/637/744	699/854/998	976/1192/1394	699/854/998
> with accumulator	[cm³/s]	1462	1608	1985	1608	1608	1985	2281	1985	1985	2281	2787	2281
Plasticising rate (PS, PE*)	**[g/s]**												
> motor 1 (120 bar) [4]	[g/s]	69/81/81	97/113/113	156/182/182	87/101/101*	65/76/76	104/122/122	151/176/176	93/108/108*	80/98/98	116/141/141	164/200/200	94/115/115*
> motor 2 (120 bar) [4]	[g/s]	46/54/54	65/76/76	104/122/122	58/68/68*	43/50/50	69/80/80	99/116/116	61/71/71*	54/66/66	78/95/95	110/135/135	64/78/78*
> electr. screw drive	[g/s]	105	129	155	115*	132	176	187	157*	182	223	212	122*
Max. screw stroke	[mm]	354				475				550			
Max. distance of nozzle retraction [5]	[mm]	1155	1155	788	788	1100	1100	657	657	1340	1340	753	753
Nozzle stroke in automatic mode [5]	[mm]	820	820	788	788	715	715	657	657	800	800	753	753
Max. nozzle dipping depth (SVO)	[mm]	40				40				40			
Nozzle sealing force	[kN]	110				110				110			
Number of heating zones		6	6	6	6	6	6	6	6	6	6	7	7
Hopper capacity [6]	[ltr.]	110				110				110			

General data		650/1020-3300				650/1020-6400				650/1020-9500			
Oil tank capacity	[ltr.]	760/1000				760/1000				1300			
Installed electrical rating													
> pump [4]	[~kW]	75/90/90				75/90/90				90/110/110			
> electric screw drive	[~kW]	76				90				115			
> heating capacity of screw cylinder	[~kW]	31	31	43	43	43	43	59	59	59	59	79	79
> capacity with hydraulic drive [4]	[kW]	106/121/121	106/121/121	118/133/133	118/133/133	118/133/133	118/133/133	134/149/149	134/149/149	149/169/169	149/169/169	169/189/189	169/189/189
> capacity with electr. drive [4]	[kW]	182/197/197	182/197/197	194/209/209	-/-/-	208/223/223	208/223/223	224/239/239	224/239/239	264/284/284	264/284/284	284/304/304	284/304/304
Dry cycles (Euromap 6) [4]	[s-mm]	3,3/2,9/2,9-714				3,3/2,9/2,7-714				2,9/2,4/2,3-714			
Net weight (without oil) [7] [8]	[~kg]	27500/7600/35100				27500/7800/35300				27500/10900/38400			
Machine dimensions (l x w x h)	[~m]	9,6x2,5x2,6				9,6x2,5x2,6				11,0x2,5x2,6			
Motor end projection 1 (H) [9]	[mm]	0/495	0/495	0/495	0/495	97/1197	97/1197	540/1197	540/1197	0/647	0/647	0/647	0/647
Motor end projection 2 (H) [9]	[mm]	0/588	0/588	0/588	0/588	170/1270	170/1270	613/1270	613/1270	0/647	0/647	0/647	0/647
Electric drive projection (H) [9]	[mm]	0/770	0/770	0/770	0/770	0/1060	0/1060	403/1060	403/1060	0/594	0/594	0/594	0/594

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

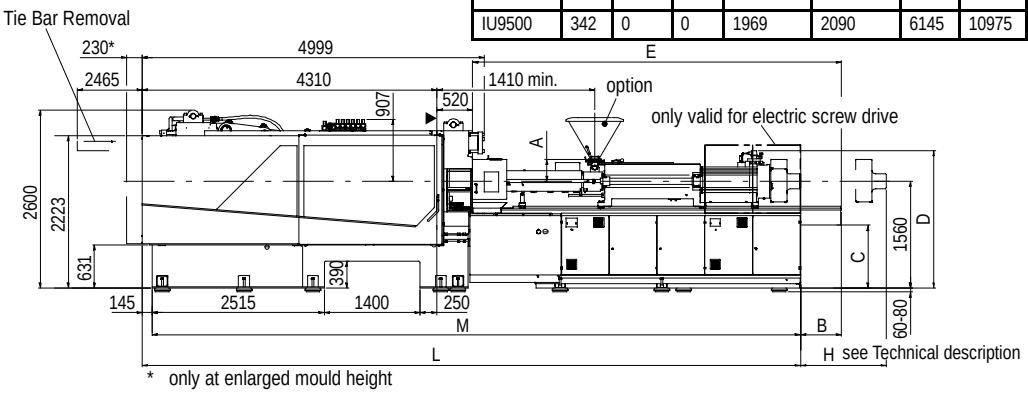
Plasticising rate depends on processing conditions and material employed

Electrical power supply refers to the standard configuration of the machine

1) Increased mould weights for stack moulds on demand
2) Shear and mixing unit
3) Rate of injection based on the standard plasticizing unit
4) standard/increased/twin pump
5) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
6) Optional
7) Clamping unit/Injection unit/Overall
8) The weight of the machine may vary depending on equpment
9) At nozzle contact / at max. distance of nozzle retraction

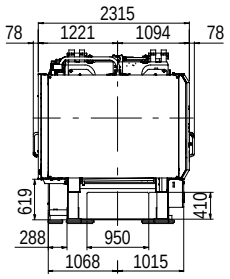
Machine dimensions Systec 650/1020

	A	B	C	D WA310	D WA313	E	L	M
IU3300	292	0	0	1935	2090	4795	9625	9480
IU6400	322	595	916	2011	2090	5390	9625	9480
IU9500	342	0	0	1969	2090	6145	10975	10830

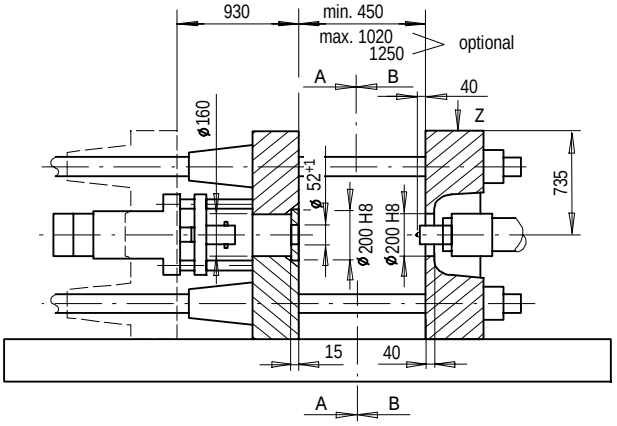


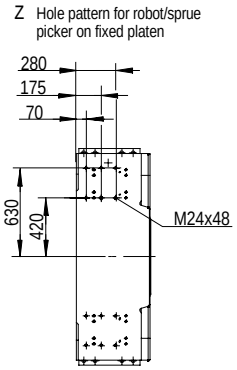
* only at enlarged mould height

▶ Mould mounting surface (fixed platen)



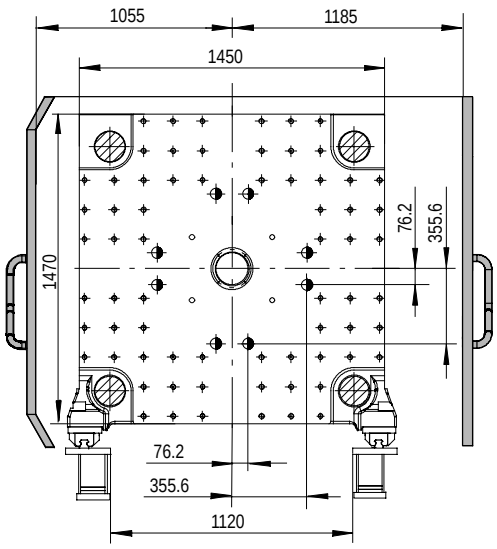
Platen dimensions Systec 650/1020





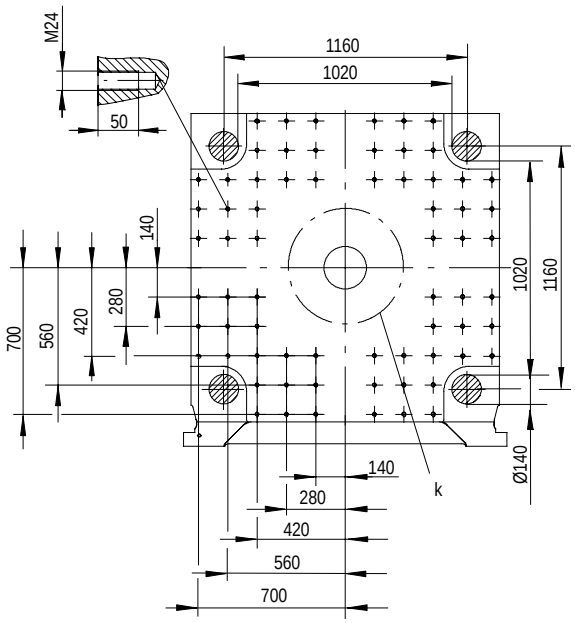
Movable platen

B - B



Fixed platen

A - A



Hole pattern according Euromap

bore diameter ∅ 52^{+1} through holes

Technical Data Systec 800/1120

Sumitomo (SHI) Demag		Sytec 800/1120	
Model description		800/1120-6400	800/1120-9500
International size description		8000-6400	8000-9500

Clamping unit		800/1120
Clamping force	[kN]	8000
Locking force	[kN]	8800
Max. mould opening stroke	[mm]	1030
Min. mould height	[mm]	700
Max./enlarged mould height	[mm]	1120/1350
Daylight between platens max./enl.	[mm]	2150/2380
Mould platen (h x v)	[mm]	1620x1620
Distance between tie bars (h x v)	[mm]	1120x1120
Min. permissible mould diameter	[mm]	500
Max. permissible mould weight	[kg]	14000 [1]
Max. mould weight on mov. platen	[kg]	8400
Max. mould weight on fixed platen	[kg]	10800
Ejection stroke	[mm]	350
Ejection force	[kN]	197
Retraction force	[kN]	102

Injection unit		6400				9500			
Screw diameter	[mm]	80	95	110	95	95	110	130	110
Screw geometry		standard	standard	standard	special[2]	standard	standard	standard	special[2]
L/D ratio		24	20	20	23	23	20	20	24
Spec. injection pressure (up to 400°C)	[bar]	2391	1895	1413	1895	2434	1815	1300	1815
Cylinder head volume, max.	[cm³]	2388	3367	4514	3367	3899	5227	7300	5227
Max. shot weight (PS, PE*)	[g]	2173	3064	4108	2460*	3548	4756	6643	3816*
Max. rate of injection [3]									
> without accumulator [4]	[cm³/s]	407/475/561	574/670/791	769/898/1060	574/670/791	521/637/744	699/854/998	976/1192/1394	699/854/998
> with accumulator	[cm³/s]	1608	1985	2281	1985	1985	2281	2787	2281
Plasticising rate (PS, PE*)	**[g/s]**								
> motor 1 (120 bar) [4]	[g/s]	65/7676	104/122/122	151/176/176	93/108/108*	80/98/98	116/141/141	164/200/200	94/115/115*
> motor 2 (120 bar) [4]	[g/s]	43/50/50	69/80/80	99/116/116	61/71/71*	54/66/66	78/95/95	110/135/135	64/78/78*
> electr. screw drive	[g/s]	132	176	187	157*	182	223	212	182*
Max. screw stroke	[mm]	475				550			
Max. distance of nozzle retraction [5]	[mm]	1246	1246	803	803	1400	1400	813	813
Nozzle stroke in automatic mode [5]	[mm]	860	860	803	803	860	860	813	813
Max. nozzle dipping depth (SVO)	[mm]	40				40			
Nozzle sealing force	[kN]	110				110			
Number of heating zones		6	6	6	6	6	6	7	7
Hopper capacity [6]	[ltr.]	110				110			

General data		800/1120-6400				800/1120-9500			
Oil tank capacity	[ltr.]	760/1000				1300			
Installed electrical rating									
> pump [4]	[~kW]	75/90/90				90/110/110			
> electric screw drive	[~kW]	90				115			
> heating capacity of screw cylinder	[~kW]	43	43	59	59	59	59	79	79
> capacity with hydraulic drive [4]	[kW]	118/133/133	118/133/133	134/149/149	134/149/149	149/169/169	149/169/169	169/189/189	169/189/189
> capacity with electr. drive [4]	[kW]	208/223/223	208/223/223	224/239/239	224/239/239	264/284/284	264/284/284	284/304/304	284/304/304
Dry cycles (Euromap 6) [4]	[s-mm]	4,1/3,3/3-714				3,3/3,1/2,8-714			
Net weight (without oil) [7] [8]	[~kg]	35000/7800/42800				35000/10900/45900			
Machine dimensions (l x w x h)	[~m]	10,1x2,7x2,7				11,5x2,7x2,7			
Motor end projection 1 (H) [9]	[mm]	0/1183	0/1183	388/1183	388/1183	0/645	0/645	0/645	0/645
Motor end projection 2 (H) [9]	[mm]	0/1183	0/1183	0/1183	0/1183	0/645	0/645	0/645	0/645
Electric drive projection (H) [9]	[mm]	0/1054	0/1054	251/1054	251/1054	0/592	0/592	0/592	0/592

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

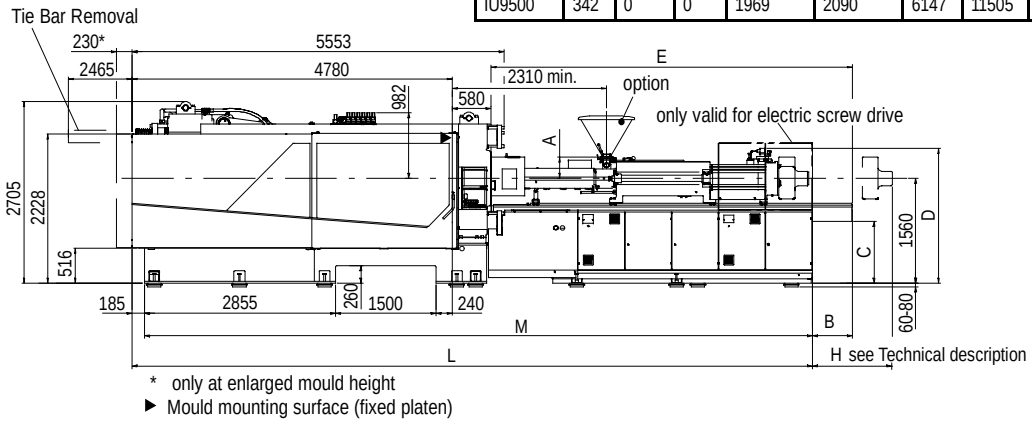
Plasticising rate depends on processing conditions and material employed

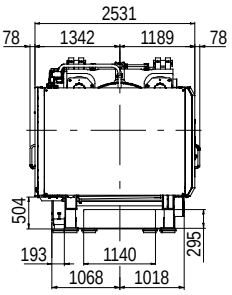
Electrical power supply refers to the standard configuration of the machine

1) Increased mould weights for stack moulds on demand
2) Shear and mixing unit
3) Rate of injection based on the standard plasticizing unit
4) standard/increased/twin pump
5) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
6) Optional
7) Clamping unit/Injection unit/Overall
8) The weight of the machine may vary depending on equpment
9) At nozzle contact / at max. distance of nozzle retraction

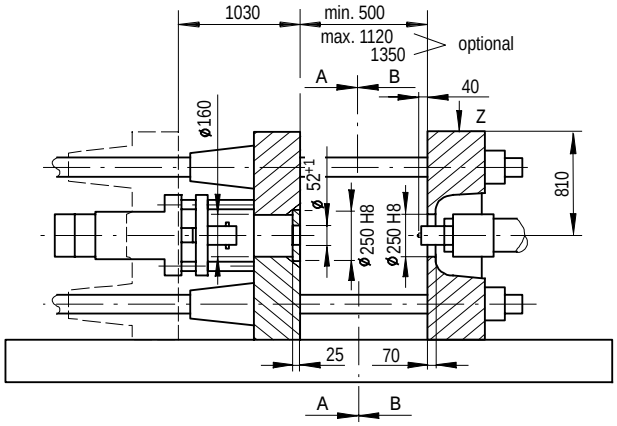
Machine dimensions Systec 800/1120

	A	B	C	D WA310	D WA313	E	L	M
IU6400	322	595	916	2011	2090	5392	10155	9970
IU9500	342	0	0	1969	2090	6147	11505	11320



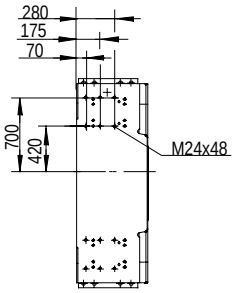


Platen dimensions Systec 800/1120



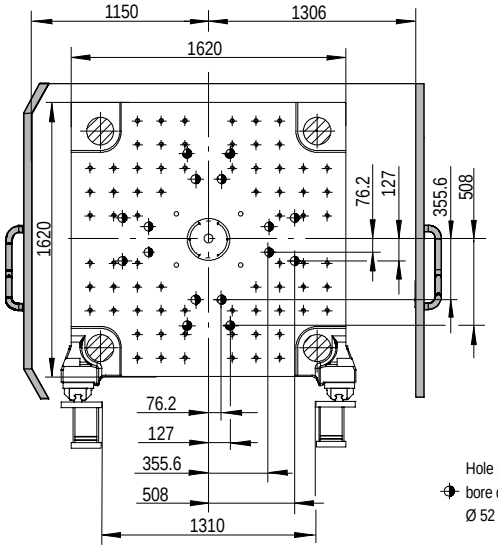
Movable platen

Z Hole pattern for robot/sprue picker on fixed platen (Euromap 18-E16)

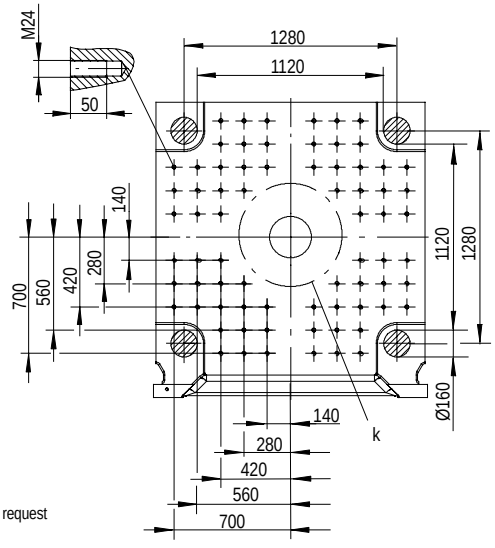


Fixed platen

B - B



A - A



Hole pattern according Euromap
bore diameter ∅ 52^{+1} through holes
Ø 52 Boring through platen with vertical offset of 508 on request

Technical Data Systec 1000/1400-6400...1000/1400-9500

Sumitomo (SHI) Demag		Systec 1000/1400	
Model description		1000/1400-6400	1000/1400-9500
International size description		1000-6400	1000-9500
Clamping unit		**1000/1400**	
Clamping force	[kN]	10000	
Locking force	[kN]	11000	
Max. mould opening stroke	[mm]	1250	
Min. mould height	[mm]	500/600 [1]	
Max./enlarged mould height	[mm]	1200/1500	
Daylight between platens max./enl.	[mm]	2450/2750	
Mould platen (h x v)	[mm]	1950x1670	
Distance between tie bars (h x v)	[mm]	1400x1120	
Min. permissible mould diameter	[mm]	950x750	
Max. permissible mould weight	[kg]	16000 [2]	
Max. mould weight on mov. platen	[kg]	10700	
Max. mould weight on fixed platen	[kg]	10800	
Ejection stroke	[mm]	350	
Ejection force	[kN]	233	
Retraction force	[kN]	121	

Injection unit		**6400**				**9500**			
Screw diameter	[mm]	80	95	110	95	95	110	130	110
Screw geometry		standard	standard	standard	special[3]	standard	standard	standard	special[3]
L/D ratio		24	20	20	23	23	20	20	24
Spec. injection pressure (up to 400°C)	[bar]	2391	1895	1413	1895	2434	1815	1300	1815
Cylinder head volume, max.	[cm³]	2388	3367	4514	3367	3899	5227	7300	5227
Max. shot weight (PS, PE*)	[g]	2173	3064	4108	2460*	3548	4756	6643	3816*
Max. rate of injection [4]									
> without accumulator [5]	[cm³/s]	407/475/561	574/670/791	769/898/1060	574/670/791	521/637/744	699/854/998	976/1192/1394	699/854/998
> with accumulator	[cm³/s]	1608	1985	2281	1985	1985	2281	2787	2281
Plasticising rate (PS, PE*)	**[g/s]**								
> motor 1 (120 bar) [5]	[g/s]	65/76/76	104/122/122	151/176/176	93/108/108*	80/98/98	116/141/141	164/200/200	94/115/115*
> motor 2 (120 bar) [5]	[g/s]	43/50/50	69/80/80	99/116/116	61/71/71*	54/66/66	78/95/95	110/135/135	64/78/78*
> electr. screw drive	[g/s]	132	176	187	157*	182	223	212	182*
Max. screw stroke	[mm]	475				550			
Max. distance of nozzle retraction [6]	[mm]	1221	1221	778	778	1455	1455	868	868
Nozzle stroke in automatic mode [6]	[mm]	905	905	778	778	905	868	868	-
Max. nozzle dipping depth (SVO)	[mm]	40				40			
Nozzle sealing force	[kN]	110				110			
Number of heating zones		6	6	6	6	6	6	7	7
Hopper capacity [7]	[ltr.]	110				110			

General data		**1000/1400-6400**				**1000/1400-9500**			
Oil tank capacity	[ltr.]	760/1000				1300			
Installed electrical rating									
> pump [5]	[~kW]	75/90/90				90/110/110			
> electric screw drive	[~kW]	90				115			
> heating capacity of screw cylinder	[~kW]	43	43	59	59	59	59	79	79
> capacity with hydraulic drive [5]	[kW]	118/133/133	118/133/133	134/149/149	134/149/149	149/169/169	149/169/169	169/189/189	169/189/189
> capacity with electr. drive [5]	[kW]	208/223/223	208/223/223	224/239/239	224/239/239	264/284/284	264/284/284	284/304/304	284/304/304
Net weight (without oil) [8] [9]	[~kg]	52500/7800/61500				52500/10900/63400			
Machine dimensions (l x w x h)	[~m]	12,0x3,2x2,9				12,8x3,2x2,9			
Motor end projection 1 (H) [10]	[mm]	0/1131	0/1131	353/1131	353/1131	0/665	0/665	0/665	0/665
Motor end projection 2 (H) [10]	[mm]	0/1204	0/1204	426/1204	426/1204	0/665	0/665	0/665	0/665
Electric drive projection (H) [10]	[mm]	0/994	0/994	216/994	216/994	0/612	0/612	0/612	0/612

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

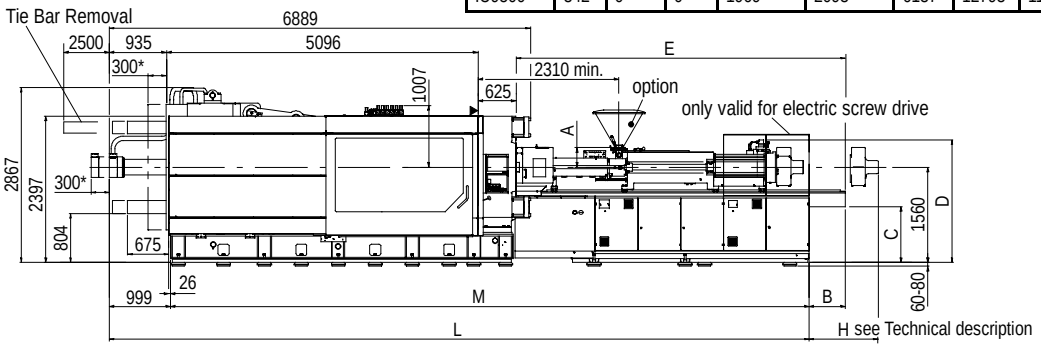
Plasticising rate depends on processing conditions and material employed

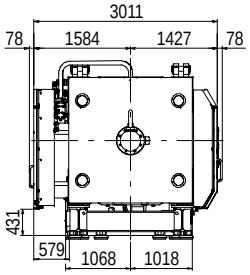
Electrical power supply refers to the standard configuration of the machine

1) only valid for enlarged max. mould height
2) Increased mould weights for stack moulds on demand
3) Shear and mixing unit
4) Rate of injection based on the standard plasticizing unit
5) standard/increased/twin pump
6) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
7) Optional
8) Clamping unit/Injection unit/Overall
9) The weight of the machine may vary depending on equpment
10) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 1000/1400-6400...1000/1400-9500

	A	B	C	D WA310	D WA313	E	L	M
IU6400	322	595	916	2011	2093	5385	11443	10447
IU9500	342	0	0	1969	2093	6137	12793	11797

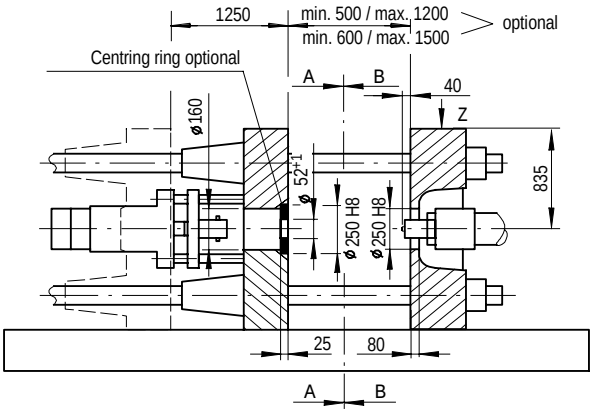




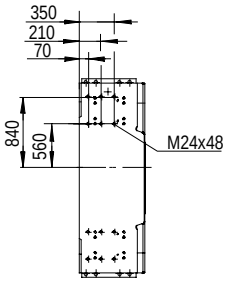
* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

Platen dimensions Systec 1000/1400-6400...1000/1400-9500

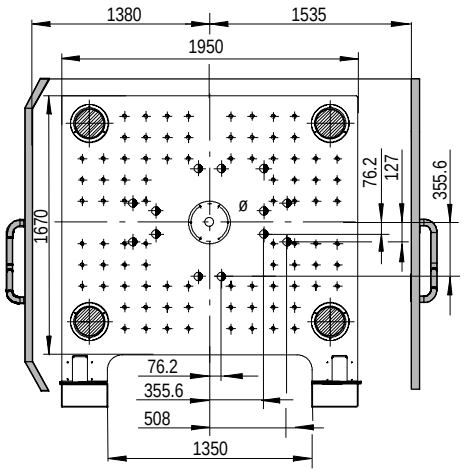


Z Hole pattern for robot/sprue picker on fixed platen (Euromap 18-E17)



Movable platen

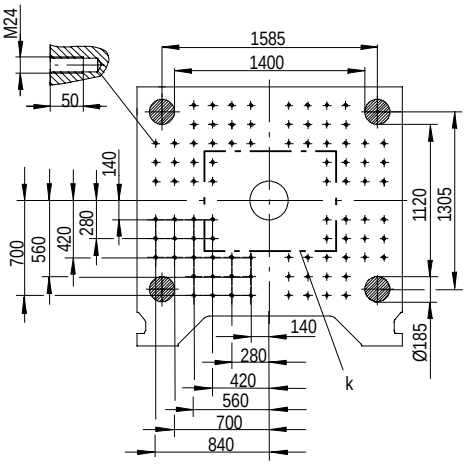
B - B



Hole pattern according Euromap
bore diameter ∅ 52+1 through holes

Fixed platen

A - A



Technical Data Systec 1000/1400-11500...1000/1400-16000

Sumitomo (SHI) Demag		Systec 1000/1400	
Model description		1000/1400-11500	1000/1400-16000
International size description		1000-11500	1000-16000
Clamping unit		**1000/1400**	
Clamping force	[kN]	10000	
Locking force	[kN]	11000	
Max. mould opening stroke	[mm]	1250	
Min. mould height	[mm]	500/600 [1]	
Max./enlarged mould height	[mm]	1200/1500	
Daylight between platens max./enl.	[mm]	2450/2750	
Mould platen (h x v)	[mm]	1950x1670	
Distance between tie bars (h x v)	[mm]	1400x1120	
Min. permissible mould diameter	[mm]	950x750	
Max. permissible mould weight	[kg]	16000 [2]	
Max. mould weight on mov. platen	[kg]	10700	
Max. mould weight on fixed platen	[kg]	10800	
Ejection stroke	[mm]	350	
Ejection force	[kN]	233	
Retraction force	[kN]	121	

Injection unit		11500			16000			
Screw diameter	[mm]	110	130	130	130	130	145	145
Screw geometry		standard	standard	special[3]	standard	special[3]	standard	special[3]
L/D ratio		24	20	25	20	25	20	23
Spec. injection pressure (up to 400°C)	[bar]	1971	1412	1412	1809	1809	1454	1454
Cylinder head volume, max.	[cm³]	5797	8097	8097	8827	8827	10981	10981
Max. shot weight (PS, PE*)	[g]	5220	7290	5750*	7940	6270*	9880	7800*
Max. rate of injection [4]								
> without accumulator [5]	[cm³/s]	786/1179/1301	1098/1647/1818	1096/1647/1818	856/1284/1418	856/1284/1418	1065/1598/1764	1065/1598/1764
> with accumulator	[cm³/s]	2281	2721	2721	2721	2721	2642	2642
Plasticising rate (PS, PE*)	**[g/s]**							
> motor 1 (120 bar) [5]	[g/s]	114/170/170	162/241/241	-/-/-	135/201/201	145/218/218	167/249/249	167/251/251*
> motor 2 (120 bar) [5]	[g/s]	95/142/142	135/201/201	145/218/218	104/155/155	112/168/168	129/192/192	129/194/194*
> electr. screw drive	[g/s]	128	181	197	181	197*	224	226
Max. screw stroke	[mm]	610			665			
Max. distance of nozzle retraction [6]	[mm]	860			860			
Nozzle stroke in automatic mode [6]	[mm]	-			-			
Max. nozzle dipping depth (SVO)	[mm]	40			40			
Nozzle sealing force	[kN]	110			110			
Number of heating zones		7			7			
Hopper capacity [7]	[ltr.]	110			110			

General data		1000/1400-11500			1000/1400-16000			
Oil tank capacity	[ltr.]	2000			2000			
Installed electrical rating								
> pump [5]	[~kW]	110/165/165			110/165/165			
> electric screw drive	[~kW]	115			147			
> heating capacity of screw cylinder	[~kW]	79	79	107	79	107	97	107
> capacity with hydraulic drive [5]	[kW]	189/244/244	189/244/244	217/272/189	189/244/244	217/272/272	207/262/262	217/272/272
> capacity with electr. drive [5]	[kW]	304/359/359	304/359/359	232/287/287	336/391/391	364/419/419	354/409/409	364/419/419
Net weight (without oil) [8] [9]	[~kg]	52500/20000/72500			52500/21000/73500			
Machine dimensions (l x w x h)	[~m]	13,2x3,2x3			13,2x3,2x3			
Motor end projection 1 (H) [10]	[mm]	0/0	0/0	0/191	0/0	0/308	0/0	0/408
Motor end projection 2 (H) [10]	[mm]	0/0	0/0	0/191	0/0	0/406	0/70	0/506
Electric drive projection (H) [10]	[mm]	0/0	0/0	0/257	0/0	0/374	0/38	0/474

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

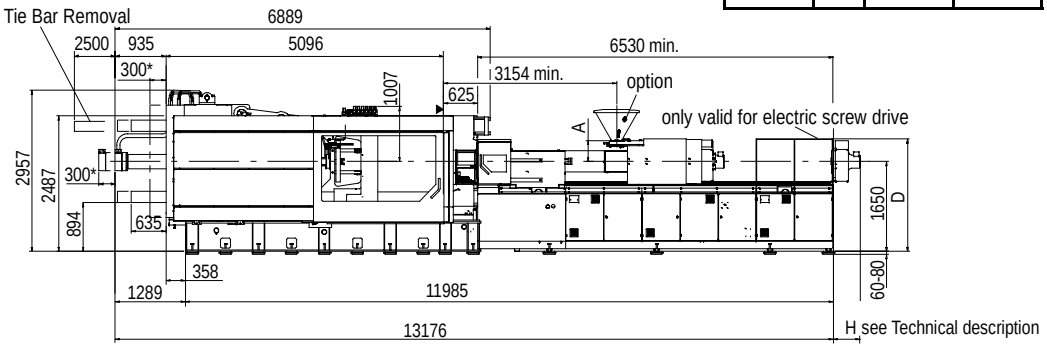
Plasticising rate depends on processing conditions and material employed

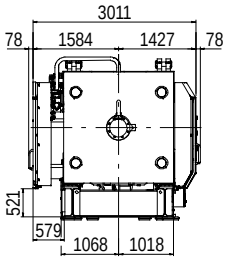
Electrical power supply refers to the standard configuration of the machine

1) only valid for enlarged max. mould height
2) Increased mould weights for stack moulds on demand
3) Shear and mixing unit
4) Rate of injection based on the standard plasticizing unit
5) standard/increased/twin pump
6) Only valid for open nozzles (SVO). Carriage travel is shortened with shut-off or extended nozzles
7) Optional
8) Clamping unit/Injection unit/Overall
9) The weight of the machine may vary depending on equpment
10) At nozzle contact / at max. distance of nozzle retraction

Machine dimensions Systec 1000/1400-11500...1000/1400-16000

	A	D WA310	D WA313
IU11500	373	2068	2093
IU16000	383	2068	2093

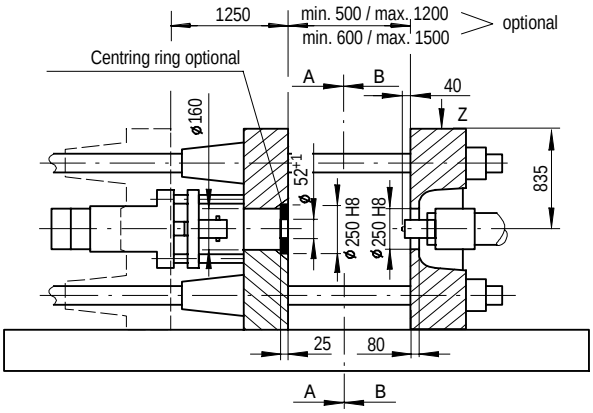




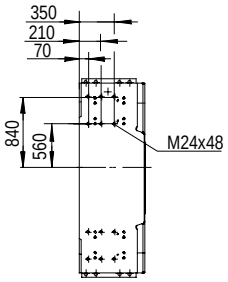
* only at enlarged mould height

▶ Mould mounting surface (fixed platen)

Platen dimensions Systec 1000/1400-11500...1000/1400-16000

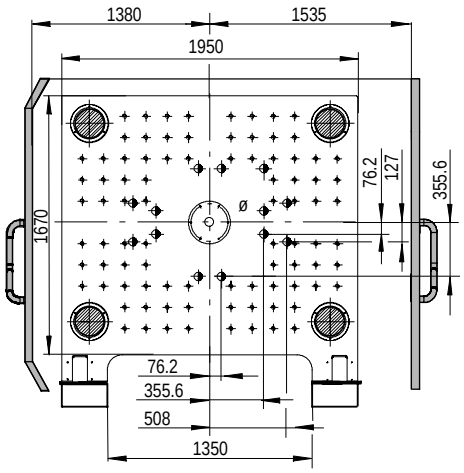


Z Hole pattern for robot/sprue picker on fixed platen (Euromap 18-E17)



Movable platen

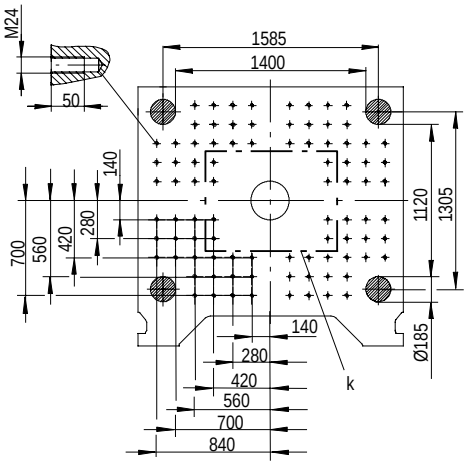
B - B



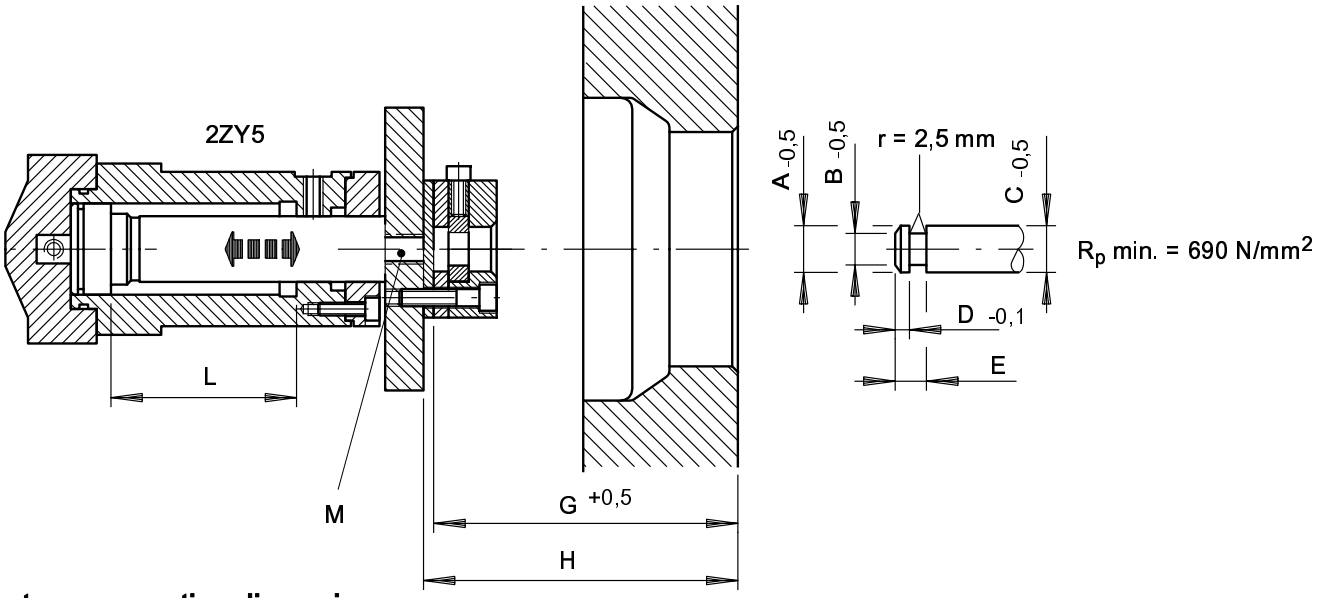
Hole pattern according Euromap
bore diameter ∅ 52+1 through holes

Fixed platen

A - A



Ejector - dimensioned diagram Systec

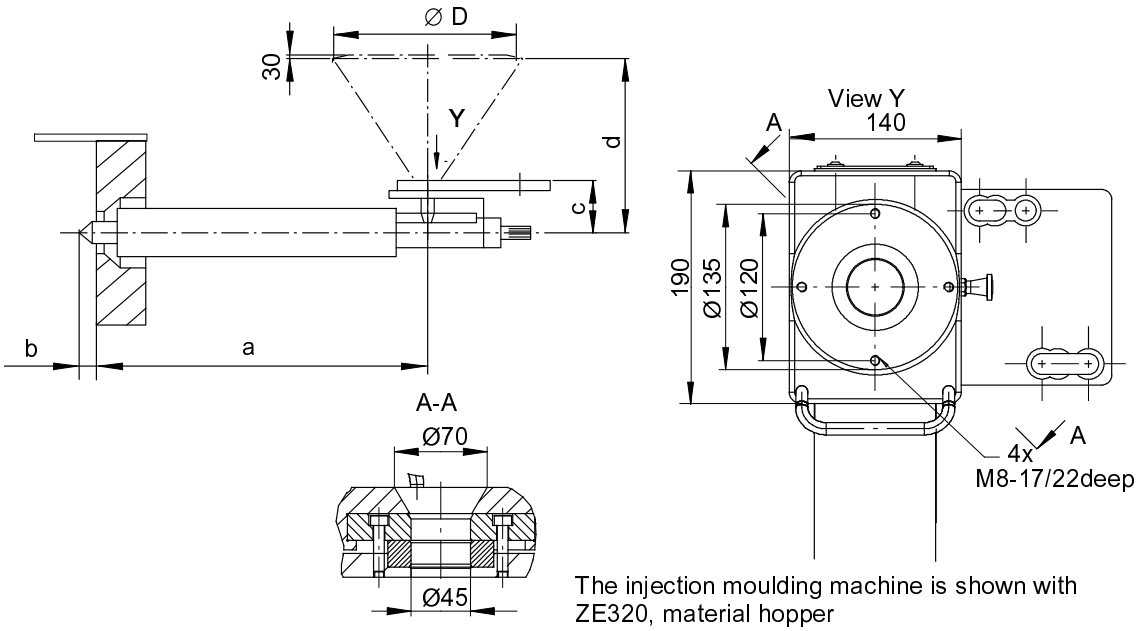


Ejector - connecting dimensions

Maschinentype	Dimensions (mm)								
	A	B	C	D	E	G	H	L	M
Systec $25/_{320}$	24.5	14	24.5	7.8	20	162	194	100	-
Systec $35/_{320}$	24.5	14	24.5	7.8	20	162	194	100	-
Systec $50/_{370}$	24.5	14	24.5	7.8	20	229	250	125	-
Systec $60/_{420}$	24.5	14	24.5	7.8	20	289	310	150	-
Systec $80/_{420}$	24.5	14	24.5	7.8	20	289	310	150	-
Systec $100/_{420}$	24.5	14	24.5	7.8	20	289	310	150	-
Systec $120/_{470}$	24.5	14	24.5	7.8	20	327	348	180	-
Systec $130/_{475}$	24.5	14	24.5	7.8	20	274	282	140	M16 - 30
Systec $160/_{520}$	24.5	14	24.5	7.8	20	302	310	160	M16 - 30
Systec $210/_{580}$	44.5	26	44.5	9.5	26	360	370	180	M20 - 35
Systec $280/_{630}$	44.5	26	44.5	9.5	26	435	445	200	M20 - 35
Systec $350/_{720}$	44.5	26	44.5	9.5	26	485	495	200	M20 - 35
Systec $420/_{820}$	44.5	26	44.5	9.0	26	542	552	230	M24 - 50
Systec $500/_{920}$	44.5	26	44.5	9.0	26	560.5	570.5	260	M24 - 50
Systec $650/_{1020}$	44.5	26	44.5	9.0	26	575.5	585.5	300	M24 - 50
Systec $800/_{1120}$	44.5	26	44.5	9.0	26	655.5	665.5	350	M24 - 50
Systec $1000/_{1400}$	44.5	26	44.5	9.0	26	680	690	350	M24 - 50
Systec $1300/_{1500}$	44.5	26	44.5	9.0	26	725	735	350	M24 - 50
Systec $1500/_{1500}$	44.5	26	44.5	9.0	26	725	735	350	M24 - 50
Systec $2000/_{1800}$	44.5	26	44.5	9.0	26	990	1000	450	M24 - 50

Coupling zone of ejector rods not hardened

Connection dimensions for material conveyor Systec IU 35...600



The injection moulding machine is shown with ZE320, material hopper

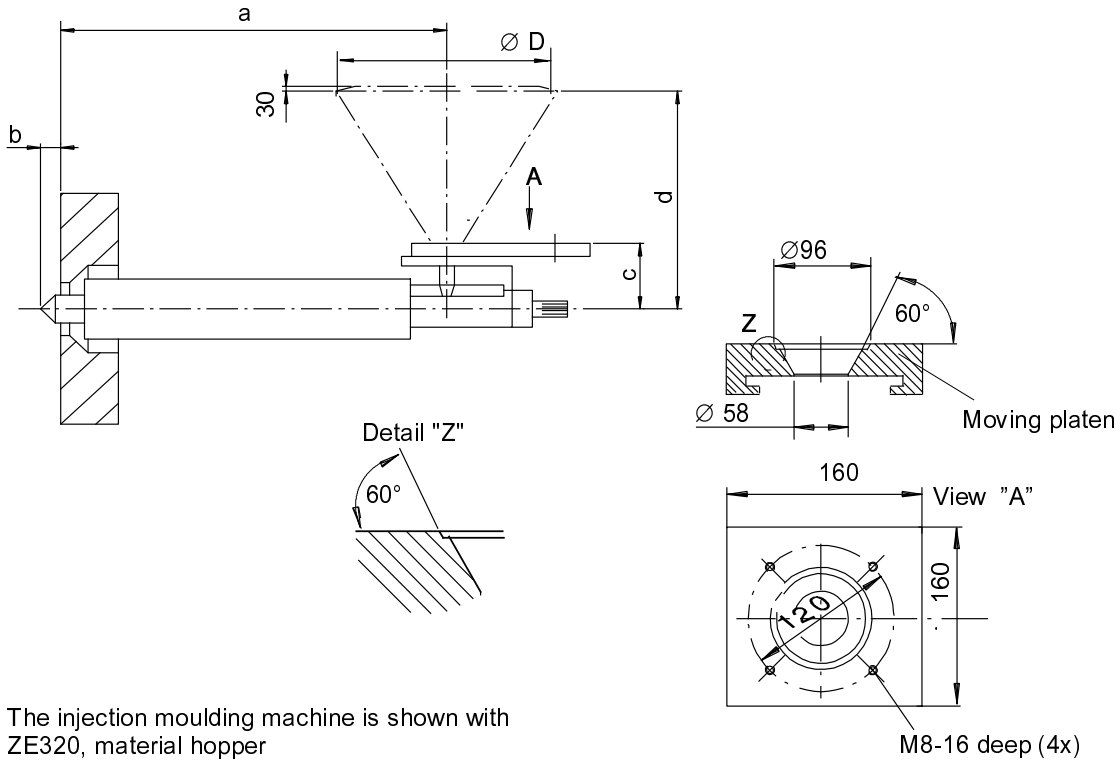
Systec 35 - 120

Injection unit	Screw diameter-[mm]	Dimension a [mm] with SVO		Dimension [mm]		
		a	b	c	d	D
IU 35	14/18/22	361	33	153	671	405
IU 80	18/22/25	493	43	153	671	405
IU 120	22/25/35	566	43	153	671	405
IU 200	25/30/35	628	43	153	671	405
IU 310	30/35/40	752	43	156	674	405
IU 430	35/40/45	858	43	156	674	405
IU 600	40/45/50	962	43	156	794	405

Systec 130 - 350

Injection unit	Screw diameter-[mm]	Dimension a [mm] with SVO		Dimension [mm]		
		a	b	c	d	D
IU 200	25	652	20	228	746	405
	30	775	20			
	35	881	20			
IU 310	30	775	20	156	677	392
	35	881	20			
	40	990	20			
IU 430	35	881	20	156	677	392
	40	990	20			
	45	1118	20			
IU 600	40	990	20	156	827	395
	45	1118	20			
	50	1224	20			

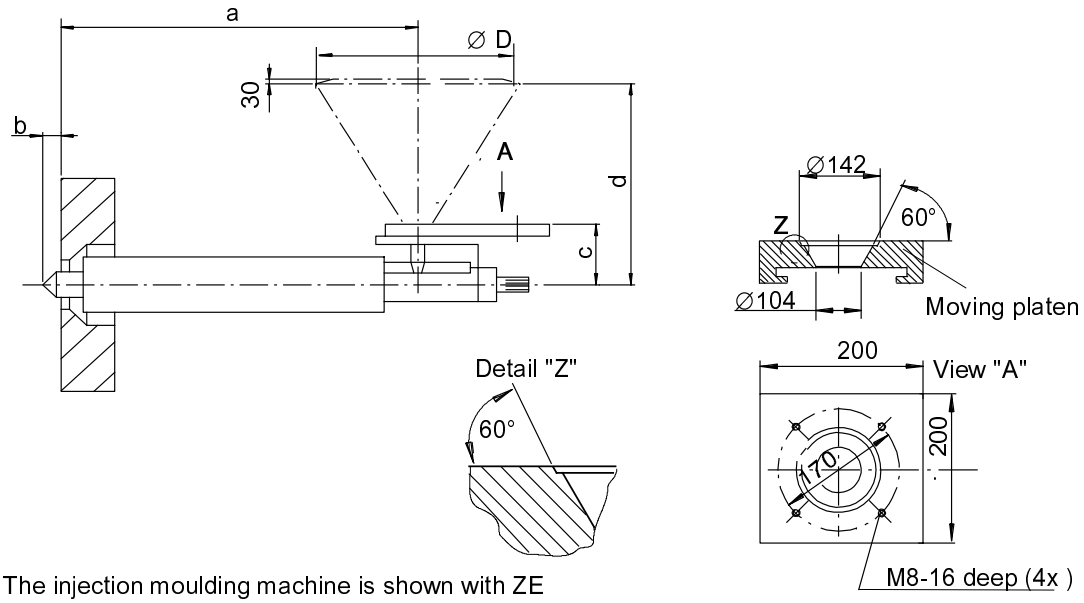
Connection dimensions for material conveyor Systec IU 80...3300



The injection moulding machine is shown with ZE320, material hopper

Injection unit	Screw diameter-[mm]	Dimension a [mm] with SVO			Dimension [mm]		
		Standard barrel	Special barrel				
		a	a	b	c	d	D
IU 840	45	1118	-	20	222	742	723
	50	1244	1489	20			
	60	1475	-	20			
IU 1450	50	1244	-	20	257	877	825
	60	1475	1770	20			
	70	1719	-	20			
IU 2300	60	1475	-	20	287	907	825
	70	1719	2064	20			
	80	1965	-	20			
IU 3300	70	1975	-	45	292	872	825
	80	1975	2307	45			
	95	2307	-	45			

Connection dimensions for material conveyor Systec IU 3300...16000



The injection moulding machine is shown with ZE 320, material hopper

Injection unit	Screw diameter-[mm]	Dimension a [mm] with SVO			Dimension [mm]		
		Standard barrel	Special barrel				
		a	a	b	c	d	D
IU 3300	70	1950	-	45	292	872	825
	80	1950	2307	45			
	95	2307	-	45			
IU 6400	80	2307	-	45	322	902	825
	95	2307	2670	45			
	110	2670	-	45			
IU 9500	95	2670	-	45	342	922	825
	110	2670	3154	45			
	130	3154	-	45			
IU 11500	110	3154	-	45	383	923	825
	130	3154	-	45			
	130	-	3853	45	396	936	
IU 16000	130	3154	-	45	383	923	825
	130	-	3853	45	396	936	
	145	3517	-	45			
	145			45			

Equipment Systec 350...4.200 kN

Clamping unit	35...120	130...210	280...420
Compact units with fully hydraulic clamping system with two clamp cylinders and a volume multipler for fast machine cycles and low energy consumption	●	-	-
Short-lenght, 5-point double toggle	-	●	●
Moving platen supported by linear guides on machine base	●	●	●
Clamp force adjustable at NC5 control, including indication of actual valve	●	●	●
Clamp force control with indication	●	●	●
Mould mounting dimensions in accordance to Euromap, without side ejector plate	●	●	●
Mould mounting dimensions in accordance to Euromap, with side ejector plate	-	○	○
Mould mounting dimensions similar to SPI	○	○	○
Automatic central oil lubrication for toggle	-	●	●
Upper tiebar on operator side retractable	●	●	●
Upper tiebar on non-operator side retractable	●	●	●
Manual clamping mechanism for tiebar retraction	○	○	○
Automatic tiebar retraction, upper tiebar on non-operator side	-	○	○
Two-stage adjustable clamp force	●	-	-
Extended mould height	○	○	○
Reduced mould height (from 500 kN)	○	-	-
Automatic mould height adjustment	-	○	○
Hydraulic central ejector with multi-stroke and mechanical quick coupling	●	●	●
Short/long stroke ejector	●	●	●
Programmable ejector stroke, power and speed	●	●	●
Ejector pressure and speed programmable for serial operation with mould movement	●	●	●
Ejector pressure and speed programmable for simultaneous operation with mould movement[1)]	○	○	○
Ejector power and speed programmable for simultaneous operation with mould movement, including positioning control[1)]	○	○	○
Mould and ejector movements only when safety gate closed	●	●	●
Ejector forward when mould open	●	●	●
Position-stabilising non-return valve combination for ejector for spring-loaded tools (not possible for ejector with closed loop position control)	○	○	○
Digital and wearfree stroke measuring system ultrasonic, respectively high-resolution rotary sensors for injection and injection unit movement, clamp and ejector movement	●	●	●
ActiveQ: Active mould safety via sensor with mould movement[1)]	○	○	○
Core puller with 1, 2 or 4 circuits and sequence matrix for independent (serial operation) programming of speed control	○	○	○
Core puller with 1, 2 or 4 circuits (from 500 kN)and sequence matrix for independent (parallel operation) programming of speed control	○	○	○
Additional connections for two core-pullers on fixed platen (from 500 kN)	○	○	○
Manual pressure relief for 1, 2 or 4 core pullers	●	●	●
Sequence matrix for free programming of ejectors and core pullers	●	●	●
Sequence matrix for free programming of ejectors and core pullers, simultaneous to mould movement (only with option core puller)	○	○	○
Flexible sequence of the clamp unit with or without multiple movement of the ejector and core pullers[1)]	○	○	○

Clamping unit	35...120	130...210	280...420
1 or 2 pneumatik 5/2 directional valves, mounted to moving platen and freely programmable	○	○	○
1 or 2 pneumatik 5/2 directional valves, mounted to fixed platen and freely programmable	○	○	○
Cooling water controller 4 circuits with temperature gauge	●	●	●
4 addiditional cooling water volume controllers	○	○	○
Time-programmable switch-off mould cooling	●	●	●
Blow-through for mould cooling lines	○	○	○
Automatic safety gate on operator side	○	○	○

Injection unit	35...120	130...210	280...420
Flexible movement of the injection unit[2)]	○	○	○
Barrel adaptable for 3 injection units	●	●	●
Cylinder for PVC rigid with 20:1 L/D ratio with ventilator (optional)	○	○	○
Screw and cylinder for thermoset application	○	○	○
Wear and corrosion resistant universal thermoplastic screw, nitrided barrel	○	○	○
Special screws for processing various materials, with screws and non-return valves in wear and corrision resistant or heavy duty design (powder material)	○	○	○
Barrel with bi-metal lining	○	○	○
Open nozzle with M24x1,5 connection thread, from 18 mm screw diameter onwards incl. adapter	○	○	○
Extended open nozzle	○	○	○
Pneumatic shut off nozzle incl. control (up to IU 600)	○	○	○
Hydraulic shut off nozzle incl. control (from IU 840)	-	○	○
Needle shut off nozzle	○	○	○
Melt temperature measuring (only for open nozzles)	○	○	○
Controlled barrel heating zones (ceramic heaters), number dependent on injection unit, and one controlled nozzle heating zone	●	●	●
Each temperature control circuit with setpoint deviation control and thermocouple break protection; barrel operating temperatures up to 450°C, with pressure limitation above 400°C (with bi-metal lining barrel)	●	●	●
Hot runner control (number of zones depending on machine size)	○	○	○
Hydraulic control for hot runner nozzles	○	○	○
Pneumatic hot runner shut off control	○	○	○
Hydraulic screw motor for high screw speeds (rpm)	●	●	●
Hydraulic screw motor for high torque	○	○	○
Frequency controlled electric screw drive with AC servo motor (from UI 310 and CU 130)	○	○	○
Stainless steel feed hopper for automatic filling	○	○	○
Hopper shutoff with emptying capability (with drill pattern for material conveyor)	●	●	●
Closed-loop control for throat temperature (max. temperature 90°C with 3°C tolerance)	●	●	●
Barrel quick change with central plugs for heaters and thermocouple, and automatic barrel recognition	●	●	●
Programmable profiles for closed-loop control of injection speed, holding pressure, back pressure and screw speed parameters	●	●	●
Injection with DFE pump and closed-loop control of preassures and speed	●	●	●
Injection, holding pressure and back-pressure regulated by servovalve; regulated screw speed	○	○	○
Switch-over to follow-up pressure by hydraulic pressure, with acquisition of maximum value and pressure recording	○	○	○

● Basic equipment

○ Additional price

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

1) Component of Smart and Performance build level
2) Component of Performance build level

Injection unit	35...120	130...210	280...420
Switch-over to holding pressure by cavity pressure, with pressure recording for 1 or 2 pressure transducers	○	○	○
Programmable nozzle contact pressure	●	●	●
Residual nozzle sealing force programmable	○	○	○
Nozzle movement at same time as closing via prop. valve[1)]	○	○	○
Two-stage injection unit movement	●	●	●
WC5 - DPG World Connect; Remote maintenance and control of the machine	●	●	●
Energy-saving thermal insulation of the plasticizing	○	○	○

Electronics	35...120	130...210	280...420
Operator-friendly NC5 microprocessor-based operating touch screen panel with large LCD colour monitor, alphanumerical keyboard, and 2 USB data links	●	●	●
Setpoint entry switch-over to physical values (bar, cm³, mm/s)	●	●	●
Fault log with trouble shooting hints	●	●	●
Quality control with reject parts recognition	●	●	●
Universal printer port	●	●	●
Printer program for external printer for automatic printout of error log, alarms, messages and changes	○	○	○
Integrated printer including driver software	○	○	○
USB-Stick for controlled access	●	●	●
Second operating language for NC5-Control	●	●	●

Hydraulics	35...120	130...210	280...420
Pump unit with increased drive capacity[3)]	○	○	○
Twin pump for parallel movements on clamp side[2)]	○	○	○
Oil cooling unit with increased cooling capacity	○	○	○
Closed-loop control of oil temperature depending on temperature reading	●	●	●
Separate circuits for oil and mould cooling	●	●	●
Pre-heating circuit for hydraulic oil	●	●	●
Automatic two stage control and display of oil filter contamination	●	●	●
Ports for external oil cleaning during production (bypass filtration)	●	●	●
Integrated oil cleaning unit for microfibre bypass filtration	●	●	●

Functions	35...120	130...210	280...420
Process data acquisition with 100 % monitoring and statistics with graphics for of process parameters	●	●	●
Integrated Statistical Process Control (SPC) with display of process control charts	○	○	○
Memo program for external saving of statistics	●	●	●
Change log	●	●	●
Opperator support by integrated help function	●	●	●
Additional operating language	○	○	○
Three-stage start-up program	○	○	○
On/off programme with one purging cycle	○	○	○
3 or 6 freely programmable inputs/outputs (Terminal point outside control cabinet)	○	○	○
Dry cycle without heat via program switch	●	●	●
Report of actions	○	○	○
Maintenance indication	●	●	●

Functions	35...120	130...210	280...420
Cycle time analysis	○	○	○
Low temperature activated manually via program switch with timer	●	●	●
Counter for start-up scrap (after every interruption of the automatic cycle)	●	●	●

Automation	35...120	130...210	280...420
Quality reject feature in part removal with Small part separation unit, control for 2 directions	○	○	○
Connection of the mould cooling up to the clamping plates	○	○	○
Interface and control for gas injection process, 1 to 4 circuits integrated	○	○	○

Interfaces	35...120	130...210	280...420
Display colored, as well as interface for external monitor and keyboard	○	○	○
Interface for mould protection (ejector plate safety)	●	●	●
Interfaces for ejector limit switch in mould, side action with LS and product detection	○	○	○
Mould temperature display with monitoring for 2 circuits	○	○	○
Contact for colour-dosing unit with socket	○	○	○
CAN-Bus interface for temperature controllers (4 circuits), signal specified according Demag	○	○	○
20 mA interface (TT-V24) for up to 6 units integrated temperature controllers	○	○	○
Additional 2 point temperature control for nozzle, 1 circuit	○	○	○
Socket for second nozzle heater band	○	○	○
Drilles for handling device to VDMA 24466	●	●	●
50-pin handling device interface conf. to Euromap 67 (VDMA)	○	○	○
Data interface for three signals: drycycling, automatic, and semi-automatic operation	○	○	○
Data interface for main computer systems to Euromap 63 and SPI AN-142	○	○	○

General	35...120	130...210	280...420
Joint power supply for drive and heating	●	●	●
Separate power supply for both drive and heating	○	○	○
Single-phase 230 V/50 Hz/ 10 A socket in specific national version	●	●	●
Set of sockets in separate cabinet on non-operator side, with lockout through mains switch and switch-off matrix, 2x 16A three-phase IECEE and 2x 10A AC shockproof plugs in specific national versions	○	○	○
Supply voltage 400 V+-10 %/ 50 Hz; 3 Ph + N + PE	○	○	○
Specific national supply voltage	○	○	○
Full guarding on injection unit operator side	○	-	-
Basic equipment to European safety standard (EN 201)	●	●	●
Basic equipment in compliance with national safety standards	○	○	○
Fault indication by flashing lamp	●	●	●
Fault indication by acoustic alarm	○	○	○
Freely assignable output for fault indication	●	●	●
Anti-vibration mounts	●	●	●
Two-colour paint trim: machine dark grey RAL 7016; cladding alternative light blue 571C MD or light grey RAL 7035 or reseda green RAL 6011	○	○	○

● Basic equipment

○ Additional price

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

1) Component of Smart and Performance build level
2) Component of Performance build level
3) Component of Smart build level

Equipment Systec 5.000...8.000 kN

General	
Compact units with fully hydraulic clamping system with two clamp cylinders and a volume multipler for fast machine cycles and low energy consumption	-
Short-lenght, 5-point double toggle	●
Moving platen supported by linear guides on machine base	●
Clamp force adjustable at NC5 control, including indication of actual valve	●
Clamp force control with indication	●
Mould mounting dimensions in accordance to Euromap, without side ejector plate	●
Mould mounting dimensions in accordance to Euromap, with side ejector plate	○
Mould mounting dimensions similar to SPI	○
Automatic central oil lubrication for toggle	●
Upper tiebar on operator side retractable	●
Upper tiebar on non-operator side retractable	●
Manual clamping mechanism for tiebar retraction	○
Automatic tiebar retraction, upper tiebar on non-operator side	○
Two-stage adjustable clamp force	-
Extended mould height	○
Reduced mould height (from 500 kN)	-
Automatic mould height adjustment	○
Hydraulic central ejector with multi-stroke and mechanical quick coupling	●
Short/long stroke ejector	●
Programmable ejector stroke, power and speed	●
Ejector pressure and speed programmable for serial operation with mould movement	●
Ejector power and speed programmable for simultaneous operation with mould movement, including positioning control	●
Mould and ejector movements only when safety gate closed	●
Ejector forward when mould open	●
Position-stabilising non-return valve combination for ejector for spring-loaded tools (not possible for ejector with closed loop position control)	-
Digital and wearfree stroke measuring system ultrasonic, respectively high-resolution rotary sensors for injection and injection unit movement, clamp and ejector movement	●
ActiveQ: Active mould safety via sensor with mould movement[1)]	○
Core puller with 1, 2, 4 or 6 circuits and sequence matrix for independent (serial operation) programming of speed control	○
Core puller with 1, 2, 4 or 6 circuits and sequence matrix for independent (parallel operation) programming of speed control	○
Additional connections for two core-pullers on fixed platen (from 500 kN)	○
Manual pressure relief for 1, 2, 4 or 6 core pullers	●
Sequence matrix for free programming of ejectors and core pullers, simultaneous to mould movement (only with option core puller)	●
Flexible sequence of the clamp unit with or without multiple movement of the ejector and core pullers[1)]	●
1 or 2 pneumatik 5/2 directional valves, mounted to moving platen and freely programmable	○
1 or 2 pneumatik 5/2 directional valves, mounted to fixed platen and freely programmable	○
Cooling water controller 4 circuits with temperature gauge	●
4 addiditional cooling water volume controllers	○
Time-programmable switch-off mould cooling	●
Blow-through for mould cooling lines	○
Automatic safety gate on operator side	○

Injection unit	500...8.000
Flexible movement of the injection unit[2)]	○

Injection unit	500...8.000
Barrel adaptable for 3 injection units	●
Cylinder for PVC rigid with 20:1 L/D ratio with ventilator (optional)	○
Screw and cylinder for thermoset application (up to IU 2300)	○
Special screws for processing various materials, with screws and non-return valves in wear and corrision resistant or heavy duty design (powder material)	○
Barrel with bi-metal lining (option up to IU 2300)	●
Open nozzle with M60x3 connection thread for screws from 30 mm	●
Extended open nozzle	○
Pneumatic shut off nozzle incl. control (up to IU 600)	-
Hydraulic shut off nozzle incl. control (from IU 840)	○
Needle shut off nozzle (up to IU 2300)	○
Melt temperature measuring (only for open nozzles)	○
Controlled barrel heating zones (ceramic heaters), number dependent on injection unit, and one controlled nozzle heating zone	●
Each temperature control circuit with setpoint deviation control and thermocouple break protection; barrel operating temperatures up to 450°C, with pressure limitation above 400°C (with bi-metal lining barrel)	●
Hydraulic control for hot runner nozzles	○
Pneumatic hot runner shut off control	○
Hydraulic screw motor for high screw speeds (rpm)	●
Hydraulic screw motor for high torque	○
Frequency controlled electric screw drive with AC servo motor (from UI 310 and CU 130)	○
Stainless steel feed hopper for automatic filling	○
Hopper shutoff with emptying capability (with drill pattern for material conveyor)	●
Closed-loop control for throat temperature (max. temperature 90°C with 3°C tolerance)	●
Barrel quick change with central plugs for heaters and thermocouple, and automatic barrel recognition	●
Programmable profiles for closed-loop control of injection speed, holding pressure, back pressure and screw speed parameters	●
Injection with DFE pump and closed-loop control of preassures and speed	●
Injection, holding pressure and back-pressure regulated by servovalve; regulated screw speed	○
Switch-over to follow-up pressure by hydraulic pressure, with acquisition of maximum value and pressure recording	○
Switch-over to holding pressure by cavity pressure, with pressure recording for 1, 2 or 4 pressure transducers (from 1.300 kN)	○
Programmable nozzle contact pressure	●
Residual nozzle sealing force programmable	○
Nozzle movement at same time as closing via prop. valve[1)]	○
Two-stage injection unit movement	●

Hydraulics	500...8.000
Pump unit with increased drive capacity[3)]	○
Twin pump for parallel movements on clamp side[2)]	○
Oil cooling unit with increased cooling capacity	○
Closed-loop control of oil temperature depending on temperature reading	●
Separate circuits for oil and mould cooling	●
Pre-heating circuit for hydraulic oil	●
Automatic two stage control and display of oil filter contamination	●
Ports for external oil cleaning during production (bypass filtration)	●
Integrated oil cleaning unit for microfibre bypass filtration	●

Electronics	500...8.000
Operator-friendly NC5 microprocessor-based operating touch screen panel with large LCD colour monitor, alphanumerical keyboard, and 2 USB data links	●

● Basic equipment

○ Additional price

The shown specifications reflect the state at the time of printing. We reserve the right to modifiy specifications.

1) Component of Smart and Performance build level
2) Component of Performance build level
3) Component of Smart build level

Electronics	500...8.000
Setpoint entry switch-over to physical values (bar, cm³, mm/s)	●
Fault log with trouble shooting hints	●
Quality control with reject parts recognition	●
Universal printer port	●
Printer program for external printer for automatic printout of error log, alarms, messages and changes	○
Integrated printer including driver software	○
USB-Stick for controlled access	●
Second operating language for NC5-Control	●

Functions	500...8.000
Process data acquisition with 100 % monitoring and statistics with graphics for of process parameters	●
Integrated Statistical Process Control (SPC) with display of process control charts	○
Memo program for external saving of statistics	●
Change log	●
Opperator support by integrated help function	●
Additional operating language	○
Three-stage start-up program	○
On/off programme with one purging cycle	○
3 or 6 freely programmable inputs/outputs (Terminal point outside control cabinet)	○
Low temperature activated manually via program switch with timer	●
Dry cycle without heat via program switch	●
Counter for start-up scrap (after every interruption of the automatic cycle)	●
Report of actions	●
Maintenance indication	●

Automation	500...8.000
Interface and control for gas injection process, 1 to 4 circuits integrated	○

Interfaces	500...8.000
Display colored, as well as interface for external monitor and keyboard	●
Interface for mould protection (ejector plate safety)	●
Interfaces for ejector limit switch in mould, side action with LS and product detection	○
Mould temperature display with monitoring for 2 circuits	○
Contact for colour-dosing unit with socket	○
CAN-Bus interface for temperature controllers (4 circuits), signal specified according Demag	○
20 mA interface (TT-V24) for up to 6 units integrated temperature controllers	○
Additional 2 point temperature control for nozzle, 1 circuit	○
Socket for second nozzle heater band	○
Drilles for handling device to VDMA 24466	●
50-pin handling device interface conf. to Euromap 67 (VDMA)	○
Data interface for three signals: drycycling, automatic, and semi-automatic operation	○
Data interface for main computer systems to Euromap 63 and SPI AN-142	○

General	500...8.000
Joint power supply for drive and heating	●
Separate power supply for both drive and heating (from 90 kW)	●
Single-phase 230 V/50 Hz/ 10 A socket in specific national version	●
Set of sockets in separate cabinet on non-operator side, with lockout through mains switch and switch-off matrix, 2x 16A three-phase IECEE and 2x 10A AC shockproof plugs in specific national versions	○

General	500...8.000
Supply voltage 400 V+-10 %/ 50 Hz; 3 Ph + N + PE	○
Specific national supply voltage	○
Basic equipment to European safety standard (EN 201)	●
Basic equipment in compliance with national safety standards	○
Fault indication by flashing lamp	●
Fault indication by acoustic alarm	○
Freely assignable output for fault indication	●
Anti-vibration mounts	●
Two-colour paint trim: machine dark grey RAL 7016; cladding alternative light blue 571C MD or light grey RAL 7035 or reseda green RAL 6011	●

Publication date: 10/2010

Practical values of melt correction factor for use in calculation of shot weight for some common plastics	
Material	Melt correction factor
HD-PE	0,75
LD-PE	0,73
PP	0,73
PS	0,91
SB	0.91
ABS	0.91
SAN	0.91
PA	0,93
PA 6 +30 %	GF 1,14
PC	0,97
PC/ABS	0,94
PMMA	0,97
POM	1,15
PET	1,08
PBT	1,08
CA	1,03
CAB	0,98
PVC-w	1,05
PVC-h	1,15
shot weight = melt correction factor x swept volume	
The melt correction factor takes into account the change in volume at process temperature and also includes a factor for the flow characteristics of the shut off device on the end of the screw	

Certified according to VDA 6.4

18311328 gb fd

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