

Matchplate Machine Type	MATCH 20/24	MATCH 24/28	MATCH 28/32	MATCH 32/32
Mould dimensions				
Length (mm)	610	711	813	813
Width (mm)	508	610	711	813
Height, min.-max of drag (mm)	150-200	180-255	225-300	225-300
Height, min.-max of cope (mm)	150-200	180-255	225-350	225-350
Mismatch, max.	0.20	0.20	0.25	0.25
Length (inches)	24	28	32	32
Width (inches)	20	24	28	32
Height, min.-max of drag (inches)	5.9-7.9	7-10	8.9-11.8	8.9-11.8
Height, min.-max of cope (inches)	5.9-7.9	7-10	8.9-13.8	8.9-13.8
Mismatch, max.	0.01	0.01	0.01	0.01
Machine dimensions				
Length (mm)	3843	4620	5560	5560
Width (mm)	2522	2180	2450	2450
Height, top of sand inlet (mm)	3311	4290	4730	4780
Height, manual core setting (mm)	790	925	925	925
Length (inches)	151	182	219	219
Width (inches)	99	86	96	96
Height, top of sand inlet (inches)	130	169	186	188
Height, manual core setting (inches)	31	36	36	36
Machine capacity				
Uncored (moulds/hr)	180	120	100	100
Automatically cored (moulds/hr)	145	100	75	75
Squeeze pressure (kp/cm²)	1.2-10	3-10	3-10	3-10
Squeeze pressure (psi)	17 - 142	42.6 - 142	42.6 - 142	42.6 - 142
Shot pressure (kp/cm²)	0 - 4.5	0 - 4.5	0 - 4.5	0 - 4.5
Shot pressure (psi)	0 - 64	0 - 64	0 - 64	0 - 64
Electrical requirements				
Average power consumption (kW)	21	42	60	60
Connected load (KVA)	32	80	100	100
Mould sand requirements				
Sand consumption max (metric tonnes/hr)	26	40	58	67
Sand consumption max (US tons/hr)	35	44	62	72
Pneumatic requirements				
Air pressure min (bar)	5	5	5	5
Air pressure min (psi)	71	71	71	71
Hydraulic fluid (litres)	250	800	400	400
Hydraulic fluid (US gallons)	66	212	106	106

On DISA, DISA Industries A/S holds patents and patents pending.

Sand Mixers	SAM-3	SAM-6	SAM-10			SAM-16	
Type	40	70	85	100	120	160	180S
Mixing throughput max*							
Excl. SMC/incl. SMC (metric tonnes/h)	36/30	63/53	77/64	90/75	108/90	144/120	180/150
Excl. SMC/incl. SMC (US tons/h)	40/33	69/58	85/71	99/83	119/99	159/132	198/165
Charge (kg)	1000	1750	2125	2500	3000	4000	5000
Charge (lbs)	2205	3858	4685	5512	6614	8818	11023
Motor performance (kW)							
Turbine	55	110	110	132	160	200	250
Gear Bridge	30	55	55	75	90	132	200
Dimensions							
Mixer height without hopper (mm)	1650	1850	2225	2225	2225	2475	2580
Sand weight hopper height (mm)	1900	2125	2320	2320	2320	2515	2620
Mixer length incl. discharge door (mm)	2300	2850	3400	3400	3400	3850	3850
Mixer diameter (mm)	1600	2000	2400	2400	2400	2700	2700
Mixer height without hopper (inches)	65.0	72.8	87.6	87.6	87.6	97.4	101.6
Sand weight hopper height (inches)	74.8	83.7	91.3	91.3	91.3	99.0	103.1
Mixer length incl. discharge door (inches)	90.6	112.2	133.9	133.9	133.9	151.6	151.6
Mixer diameter (inches)	63.0	78.7	94.5	94.5	94.5	106.3	106.3
Weight (kg)	5000	8000	11000	11000	11000	18000	18000
Weight (lbs)	11023	17637	24251	24251	24251	39683	39683
* Depending on the water content and sand properties.							

Sand Mixers	TM-160	TM-190	TM-240		TM-285	
Type	45	75	90	110	160	200
Nominal capacity						
At 100/120 sec cyclus (metric tonnes/hr)*	18/15	36/30	50/42	66/55	90/75	115/96
At 100/120 sec cyclus (US tons/hr)*	20/17	40/33	55/46	73/61	100/83	127/106
Charge (kg)	500	1000	1400	1850	2500	3200
Charge (lbs)	1102	2205	3086	4079	5512	7055
Motor performance (kW)						
Agitator	45	75	90	110	160	200
Turbines (number/drive power)	1/22.5	1/37	1/45	2/45	2/45	2/55
Dimensions						
Mixer height without hopper (mm)	1990	2080	2405	2405	2480	2480
Sand weight hopper height (mm)	1400	1750	1600	1900	1950	2250
Mixer diameter (mm)	1650	1950	2460	2460	2900	2900
Mixer height without hopper (inches)	78.3	81.9	94.7	94.7	97.6	97.6
Sand weight hopper height (inches)	55.1	68.9	63.0	74.8	76.8	88.6
Mixer diameter (inches)	65.0	76.8	96.9	96.9	114.2	114.2
Weight (kg)	4400	6700	12400	13200	16900	17000
Weight (lbs)	9700	14771	27337	29101	37258	37478

* Depending on the water content and sand properties.

DISA Flask machines	DISA FLEX			
Type	70	70HS	80	90
Flask size				
Height of cope/drag flask, min-max (mm)	200-325	200-325	250-350	300-400
Width min-max. (mm)	700	700	800	900
Length min-max. (mm)	800-1000	800-1000	900-1050	1200-1250
Height of cope/drag flask, min-max (inches)	7.9-11.8	7.9-11.8	9.8-13.8	11.8-15.7
Width min-max. (inches)	27.6	27.6	31.5	35.4
Length min-max. (inches)	31.5-39.4	31.5-39.4	35.4-41.3	47.2-49.2
Machine output in complete moulds	50-90	60-120	60-120	40-100
Squeeze pressure (max.kgf/cm²)	10	10	10	10
Sand consumption (metric tonnes/hr)	20-76	25-102	40-132	48-168
Sand consumption (US tons/hr)	22-84	28-112	44-145	53-189
Power consumption of the FLEX machine (kW)	40	75	75	85
Air consumption (m³/hr) at 5 bar	300-540	360-720	360-720	240-600
Air consumption (cu ft/hr) at 5 bar	10594-19069	12713-25427	12713-25427	8475-21188
Water consumption				
At 32 °C inlet temperature (litres/min)	70-90	140	140	180
At 32 °C inlet temperature (US gallons/min)	18.5-24	37	37	47.5

DISACOOL	2400	2900	3200	3400	3800	4300
Sand/metal capacity max.						
Metric tonnes/hr	25	50	60	90	140	200
US tons/hr	27.6	55.1	66.1	99.2	154.3	220.5
Dimensions						
Diameter (mm)	2400	2900	3200	3400	3800	4300
Length (mm)	9400	12500	12500	15250	19180	22400
Distance centreline-floor (mm)	1660	2280	2425	2560	3120	3375
Diameter (inches)	94.5	114.2	126.0	133.9	149.6	169.3
Length (inches)	370.1	492.1	492.1	600.4	755.1	881.9
Distance-floor (inches)	65.4	89.8	95.5	100.8	122.8	132.9
Weight – empty (metric tonnes)	11	23	26	45	57	70
Weight – empty (US tons)	12.1	25.4	28.7	49.6	62.8	78
Ventilation requirements (m³/min)	250	383	500	750	1167	15833
Ventilation requirements (cu ft/min)	8829	13537	17657	26486	41200	55915
Rated speed (rpm)	3.8	3.0	2.7	2.5	2.5	2.2
Installed power (kW)	22	44	60	88	160	250

Maximum recommended inlet temperatures for ferrous castings is usually 700 °C
Casting discharge temperatures are typically 70-90 °C
Sand discharge temperatures are 45-55 °C with moisture contents of about 1.5% (max.. 1.8%)
With a SCR system the final sand temperature will be less than 45 °C
Noise levels are less than 85 dB(A)

Simplified Product Names

To make it easier to identify our products we have simplified our product range names.

Below you can see the new machine names and a list of the different names it has been called since its invention.

New Names	DISAMATIC D1	DISAMATIC D3-A	DISAMATIC D3-B
Old Names	2110 Mk4	DISA 231-A	DISA 231-B
	2110 Mk3	DISA 230-A	DISA 131-B
	2110 Mk2	DISA 131-A	DISA 130-B
	2110 Mk1	DISA 130-A	DISA 230-B
	2011	2013 Mk5-A	2013 Mk5-B
	2110 Size	2013 Mk4-A	2013 Mk4-B
		2013 Mk3	2013 Size B
		2013 Mk2	
		2013 Mk1	
		2013 Size A	

Old Names	DISAMATIC D3-X	DISA 240-B	DISA 250-C
	DISA 231-X	DISAMATIC 2130-B	DISAMATIC 2120-C
	DISA 230-X	DISAMATIC 2120-B	DISAMATIC 2130-C
	2013 Mk5-X	DISAMATIC 2032	2130 Size C
	2013 Size X	2032 size	

Old Names	DISA 270-A	DISA 270-B	MATCH 20/24
	2070 Mk2-A	2070 Mk2-B	MATCH 130
	2070 Mk1-A	2070 Mk1-B	MATCH
	2070 Size A	2070 Size B	

General Specifications

DISA Vertical
DISA Matchplate
DISA Flasklines
DISA Core
DISA Sand Mixers
DISA Cooling Drums

DISAMATIC D1					DISAMATIC D3												DISA 240								DISA 250				DISA 270								DISA 280									
Measurement:	Metric	US	Metric	US	Measurement:	Metric	US	Metric	US	Metric	US	Metric	US	Metric	US	Measurement:	Metric	US	Metric	US	Metric	US	Metric	US	Measurement:	Metric	US	Metric	US	Metric	US	Measurement:	Metric	US	Metric	US	Metric	US	Metric	US	Metric	US				
Mould Dimensions:					Mould Dimensions:											Mould Dimensions:									Mould Dimensions:							Mould Dimensions:														
Height	mm	inches	400	15.7	Height	mm	inches	480	18.9	535	21.1	550	21.7	535	21.1	550	21.7	Height	mm	inches	600	23.6	600	23.6	600	23.6	mm	inches	650	23.6	Height	mm	inches	700	27.6	800	31.5	800	23.6	mm	inches	850	33.5	44.5		
Width	mm	inches	500	19.7	Width	mm	inches	600	23.6	650	25.6	675	26.6	750	29.5	750	29.5	Width	mm	inches	750	29.5	775	30.5	850	33.5	mm	inches	850	33.5	Width	mm	inches	950	37.4	950	37.4	1000	39.4	mm	inches	1200	47.2	1200	47.2	
Thickness	mm	inches	100-315	3.9-12.4	Thickness	mm	inches	150-395	5.9-15.6	150-395	5.9-15.6	150-405	5.9-15.9	150-405	5.9-15.9	150-405	5.9-15.9	Thickness	mm	inches	150-500	5.9-19.7	150-500	5.9-19.7	150-500	5.9-19.7	mm	inches	150-500	5.9-19.7	Thickness	mm	inches	200-650	7.9-25.6	200-650	7.9-25.6	200-650	7.9-25.6	mm	inches	250-675	9.8-26.6	250-675	9.8-26.6	
Mismatch:	mm	inches	0.2	0.008	Mismatch:	mm	inches	0.1	0.004	0.1	0.004	0.1	0.004	0.1	0.004	0.1	0.004	Mismatch:	mm	inches	0.15	0.006	0.15	0.006	0.15	0.006	mm	inches	0.15	0.006	Mismatch:	mm	inches	0.2	0.008	0.2	0.008	0.2	0.008	Mismatch:	mm	inches	0.4	0.016	0.4	0.016
D1 - 205:					D3 - 365:											DISA 240/250 - 335:															DISA 270 - 280:															
Uncored	mould/hr*	mold/hr*	205	-	Uncored	mould/hr*	mold/hr*	365	-	365	-	365	-	365	-	365	-	Uncored	mould/hr*	mold/hr*	335	-	335	-	335	-	mould/hr*	mold/hr*	335	-	Uncored	mould/hr*	mold/hr*	280	-	280	-	280	-	Uncored	mould/hr*	mold/hr*	210	-	210	-
Cored	mould/hr*	mold/hr*	185	-	Cored	mould/hr*	mold/hr*	333	-	333	-	333	-	333	-	333	-	Cored	mould/hr*	mold/hr*	305	-	305	-	305	-	mould/hr*	mold/hr*	305	-	Cored	mould/hr*	mold/hr*	250	-	250	-	250	-	Cored	mould/hr*	mold/hr*	195	-	195	-
Cooling time max.	min*	min*	70	70	Cooling time max.	min*	min*	77	-	77	-	77	-	77	-	77	-	Cooling time max.	min*	min*	90	-	90	-	90	-	min*	min*	90	-	Cooling time max.	min*	min*	128	-	128	-	128	-	Cooling time max.	min*	min*	137	-	137	-
Sand consumption max.	tonnes/hr**	tons/hr**	20	22	Sand consumption max.	tonnes/hr**	tons/hr**	62	68	75	83	82	90	89	98	91	101	Sand consumption max.	tonnes/hr**	tons/hr**	93	102	96	105	115	tonnes/hr**	tons/hr**	114	125	Sand consumption max.	tonnes/hr**	tons/hr**	182	200	207	227	218	240	Sand consumption max.	tonnes/hr**	tons/hr**	217	238	268	295	
Power consumption	kW	kW	67	16	Power consumption	kW	kW	55	-	55	-	55	-	55	-	55	-	Power consumption	kW	kW	105	-	105	-	105	-	kW	kW	105	-	Power consumption	kW	kW	110	-	110	-	110	-	Power consumption	kW	kW	125	-	125	-
Connected load	KVA	KVA	55	-	Connected load	KVA	KVA	69	-	69	-	69	-	69	-	69	-	Connected load	KVA	KVA	123	-	123	-	123	-	KVA	KVA	123	-	Connected load	KVA	KVA	129	-	129	-	129	-	Connected load	KVA	KVA	138	-	138	-
Air consumption	Nm3/min	cu ft/min	3.2	113	Air consumption	Nm3/min	Ncu ft/min	11	389	11	389	11	389	11	389	11	389	Air consumption	Nm3/min	Ncu ft/min	18	636	18	636	18	636	Nm3/min	Ncu ft/min	18	636	Air consumption	Nm3/min	Ncu ft/min	23	812	25	883	26	918	Air consumption	Nm3/min	Ncu ft/min	28	989	30	1059
D1 - 315:					D3 - 425:											DISA 240/250 - 450:															DISA 270 - 400/390:															
Uncored	mould/hr*	mold/hr*	315	-	Uncored	mould/hr*	mold/hr*	425	-	425	-	425	-	425	-	425	-	Uncored	mould/hr*	mold/hr*	450	-	450	-	450	-	mould/hr*	mold/hr*	450	-	Uncored	mould/hr*	mold/hr*	400	-	390	-	390	-	Uncored	mould/hr*	mold/hr*	300	-	300	-
Cored	mould/hr*	mold/hr*	285	-	Cored	mould/hr*	mold/hr*	380	-	380	-	380	-	380	-	380	-	Cored	mould/hr*	mold/hr*	400	-	400	-	400	-	mould/hr*	mold/hr*	400	-	Cored	mould/hr*	mold/hr*	375	-	365	-	365	-	Cored	mould/hr*	mold/hr*	280	-	280	-
Cooling time max.	min*	min*	47	47	Cooling time max.	min*	min*	66	-	66	-	66	-	66	-	66	-	Cooling time max.	min*	min*	65	-	65	-	65	-	min*	min*	65	-	Cooling time max.	min*	min*	90	-	92	-	92	-	Cooling time max.	min*	min*	96	-	96	-
Sand consumption max.	tonnes/hr**	tons/hr**	29	32	Sand consumption max.	tonnes/hr**	tons/hr**	73	80	88	96	96	105	104	114	107	117	Sand consumption max.	tonnes/hr**	tons/hr**	122	134	125	137	138	152	tonnes/hr**	tons/hr**	150	165	Sand consumption max.	tonnes/hr**	tons/hr**	188	207	215	236	226	248	Sand consumption max.	tonnes/hr**	tons/hr**	255	280	309	340
Power consumption	kW	kW	67	-	Power consumption	kW	kW	55	-	55	-	55	-	55	-	55	-	Power consumption	kW	kW	105	-	105	-	105	-	kW	kW	105	-	Power consumption	kW	kW	110	-	110	-	110	-	Power consumption	kW	kW	125	-	125	-
Connected load	KVA	KVA	55	-	Connected load	KVA	KVA	69	-	69	-	69	-	69	-	69	-	Connected load	KVA	KVA	123	-	123	-	123	-	KVA	KVA	123	-	Connected load	KVA	KVA	129	-	129	-	129	-	Connected load	KVA	KVA	138	-	138	-
Air consumption	Nm3/min	cu ft/min	4.3	152	Air consumption	Nm3/min	Ncu ft/min	13	459	13	459	13	459	13	459	13	459	Air consumption	Nm3/min	Ncu ft/min	18	636	18	636	18	636	Nm3/min	Ncu ft/min	18	636	Air consumption	Nm3/min	Ncu ft/min	23	812	25	883	26	918	Air consumption	Nm3/min	Ncu ft/min	28	989	30	1059
Conveyor length max:	m	ft	50	164.1	D3 - 555 :											Conveyor length max:	m	ft	100	328	100	328	100	328	m	ft	100	328	Conveyor length max:	m	ft	120	394	120	394	120	394	Conveyor length max:	m	ft	120	394	120	394		
Water consumption (DMS):					Uncored	mould/hr*	mold/hr*	555	-	555	-	555	-	555	-	555	-	Water consumption (DMS):													Water consumption (DMS):															
at 15 °C inlet temp.	litres/min	gallons/min	8	2.1	Cored	mould/hr*	mold/hr*	485	-	485	-	485	-	465	-	465	-	at 15 °C inlet temp.	litres/min	gallons/min	40	10.6	40	10.6	40	10.6	litres/min	gallons/min	40	10.6	at 15 °C inlet temp.	litres/min	gallons/min	43	11.4	43	11.4	43	11.4	at 15 °C inlet temp.	litres/min	gallons/min	50	13.3	56	14.8
Pressure:					Cooling time max.	min*	min*	48	-	48	-	48	-	48	-	48	-	Pressure:													Pressure:															
Squeeze pressure	kp/cm2	psi	12.5	184.9	Sand consumption max.	tonnes/hr**	tons/hr**	77	85	93	102	99	109	107	118	110	121	Squeeze pressure	kp/cm2	psi	3-16	42-227	3-16	42-227	3-16	42-227	kp/cm2	psi	3-16	42-227	Squeeze pressure	kp/cm2	psi	3-16	42-227	3-16	42-227	3-16	42-227	Pressure:	kp/cm2	psi	3-12	42-168	3-12	42-168
Shot pressure	kp/cm2	psi	5.5	80	Power consumption	kW	kW	60	60	60	60	60	60	60	60	60	60	Shot pressure	kp/cm2	psi	0-5	0-71	0-5	0-71	0-5	0-71	kp/cm2	psi	0-5	0-71	Shot pressure	kp/cm2	psi	0-5	0-71	0-5	0-71	Shot pressure	kp/cm2	psi	0-5	0-71	0-5	0-71		
Pneumatic requirements:					Connected load	KVA	KVA	75	-	75	-	75	-	75	-	75	-	Pneumatic requirements:													Pneumatic requirements:															
Air pressure min.	bar	psi	5.5	81.3	Air consumption	Nm3/min	Ncu ft/min	16	565	16	565	16	565	16	565	16	565	Air pressure min.	bar	psi	5.5	80	5.5	80	5.5	80	bar	psi	5.5	80	Air pressure min.	bar	psi	5.5	80	5.5	80	5.5	80	Air pressure min.	bar	psi	5.5	80	5.5	80
Hydraulic fluid (DMS):			</																																											