

Digital Engineering (DE)

Country	Machine	Grades	Installation	actuator type	No. of actuators	Machine / Headbox type	QCS	CD improvement
Norway	PM	grease proof	March-91	Caliper actuators	24	Devron Induction	Accuray	85 %
Sweden	PM	fine paper	June-91	BW Slice lip	20	Escher Wyss	Accuray	78 %
Sweden	PM2	fine paper	August-91	BW Slice lip	17	Escher Wyss	Measurex	56 %
Norway	PM	grease proof	March-93	BW Slice lip	24	Valmet	ABB	54 %
UK	PM2	printing	April-94	BW Slice lip	22	Alstrom	Lippke / LSC	52 %
Taiwan	PM19	board	April-94	BW Slice lip	33	Bruderhaus	Impact	54 %
Belgium	PM3	release paper	August-95	BW Slice lip	30	Voith Escher Wyss	ABB	~60 %
Belgium	PM4	release paper	August-95	BW Slice lip	20	Alstrom	Lippke	64 %
Norway	PM1	bible paper	November-95	BW Slice lip	41	Valmet	Lippke / LSC	45 %
Norway	PM4	fine paper	November-95	BW Slice lip	24	Valmet	ABB	55 %
India	PM1	fine paper	April-96	BW Slice lip	33	Voith Escher Wyss	Yokogawa	50 %
Taiwan	OMC2	fine paper	June-96	CW actuators	2 * 106			?
Sweden	PM2	fine paper	August-97	BW Slice lip	17	KMV (Valmet)	ABB	57 %
Sweden	PM2	fine paper	January-99	Caliper actuators	25		Accuray	75 %
Sweden	PM1	fine paper	November-99	Caliper actuators	46		Accuray	85 %
Germany		paper / board	February-01	BW Slice lip	39	Bellmer	ABB	60 %
Germany		paper / board	February-01	BW Slice lip	39	Bellmer	ABB	
Germany	PMx	pilot machine	April-01	BW Dilution	4	dilution control		
Sweden	PM2	fine paper	April-01	BW Slice lip upgrade	17	Escher Wyss	Measurex	55+20
Sweden	PM14	waste board	September-01	Caliper sensor	1		Accuray	N/A
Taiwan	PM1,2	fine paper	October-01	BW Slice lip	87	no control		
Sweden	PM15	board	March-02	BW Slice lip	24	Escher Wyss	Impact	65 %
Italy	PM	fine paper	September-02	BW Slice lip	30	Comer	Lippke / LSC	55 %
Turkey	PM	fine paper	October-02	BW Dilution box	30	Dgi/Circular distrib.	Format	64 %
Sweden	PM 14	Board	April-03	QCS upgrade		Accu Ray 1180		N/A
Sweden	line2	nonwoven	June-03	Profilecontrol	32	Reisenhauser	Scienta	50 %
Egypt	PM2,3,4	fine paper	July-03	BW Slice lip	33	Escher Wyss	ABB	N/A
Spain	PM 1	Spec. Paper	August-03	Bw Slice lip control	22	Valmet	LSC	55 %
Korea	PM53	Special Paper	November-04	Bw profile Control	20	Local mfg.	Abb	55 %
England	PM 2	Special Paper	January-05	BW profile upgrade	22	Alstrom	LSC	65 %
Mexico	PM n	board	January-05	Dilution Control	38	Dgi/Circular distrib.	Fomat	65 %
Belgium	PM 6	Board	May-05	BW upgrade	35	Voith	LSC	N/A
India	PM1	fine paper	June-05	Review/upgrade	33	Voith Escher Wyss	Yokogawa	N/A
Korea	PM 51	Special Paper	July-05	BW slice	17	Local/mfg.	ABB	55 %
Norway	PM 1	Board	August-05	BW Dilution	36	Dgi/Cir. distrib.	LSC	80 %
Poland	PM 1	Fine Paper	August-05	BW Slice	28	Oriental	LSC	60 %
Poland	PM 2	Fine paper	October-05	BW slice	28	Oriental	LSC	60 %
Sweden	PM2	fine paper	October-05	Upgrade Bw slice	17	Voith Escher V	Mx	70 %
Germany	PM 2	board	April-06	Dilution Control	75	PM Poland	Metso	> 60 %
Phillipines	PM1	Fine paper	June-06	Dilution Control	53	Voiht	Honeywell	> 70 %
Phillipines	PM1	fine paper	November-06	Caliper control	32		Jasch	65 %
Sweden	PM1	fine paper	November-06	Upgr.Bw, Caliper	45	KMV (Valmet)	Abb	67 %
Sweden	PM 2		July-07	Caliper control	33	Hunt Mos so cal	Mx	75 %
China	PM z	Filter paper	December-07	Dilution Control	20	Hogenkamp	SSS	60 %
Czech		fine paper	July-08	Slicecontrol	24	Papcel	Abb	54 %
Poland	Pm2	finepaper	July-08	Slicecontrol	24	Papcel	abb	>50 %
China		Board	August-08	Dilution Control	60	Bellmer	HMX	55 %
Malaysia	PM 7	Board	October-09	Dilution Control	64	Bristol formers	Yokogawa	71 %
Germany		board	October-09	Dilutionvalves	44	Bellmer		N/A
India	PM 5	fine paper	October-09	Slice actuators.	24	Voith	Abb 1190	54 %
Norway	PM 1	book paper	March-10	Slice actuators.	41	Metso	Measurex	N/A
Malaysia	PM4	board	July-10	Slice actuators.	24	Holder	Abb	65 %
Malaysia	PM 6	liner	October-10	Slice actuators.	40	Holder ?	Abb	
Malaysia	PM8	liner	November-10	Dilution Control	64	Black Clawson	Mahlo	69 %
Germany		Rumania projekt	May-11	Dilution valves	56	Octapus	Abb	
Spain			July-11	Dilution Control		Bellmer	LSC	
England	PM1	Filter paper	July-11	Dilution Control	40	Parsons Reiss		
Germany		Argentina	July-11	Dilution valves	56	Octapus	Honeywell	
England/USA	KM 1	special paper	September-11	Dilution Control	118	Bristol formers	ABB	65 %
Brazil		finepaper	November-11	slice control	18	Holder	Format	> 50
Bilt India		fine paper	December-11	upgrade Bw slice	33	Voith	Abb	2 sigma 0.16
			February-12	Dilution valves	55	Octapus		
Thailand	PM 3	Craft	September-12	Slice Control	40	Overmeccanica.	Yokogawa	64 %

