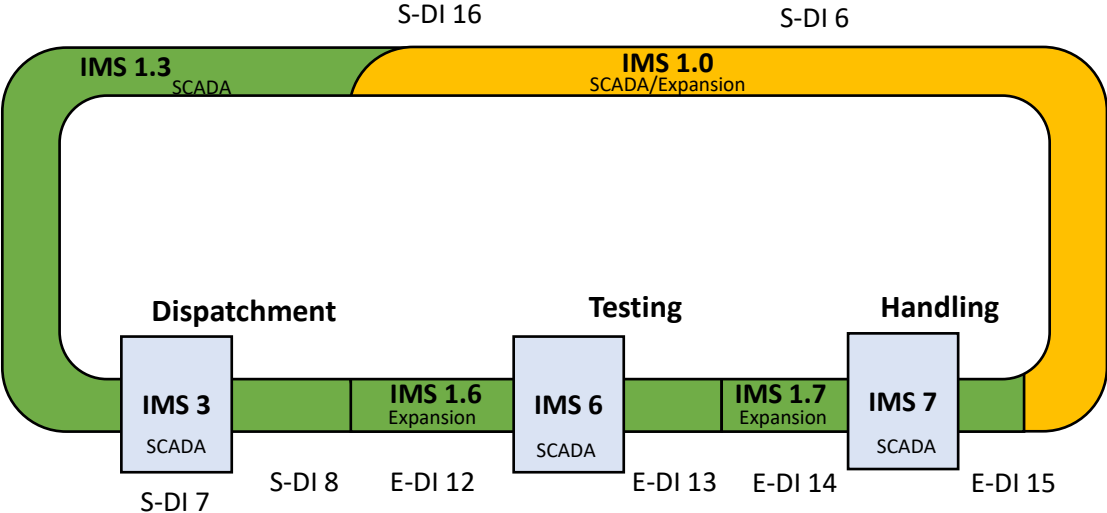
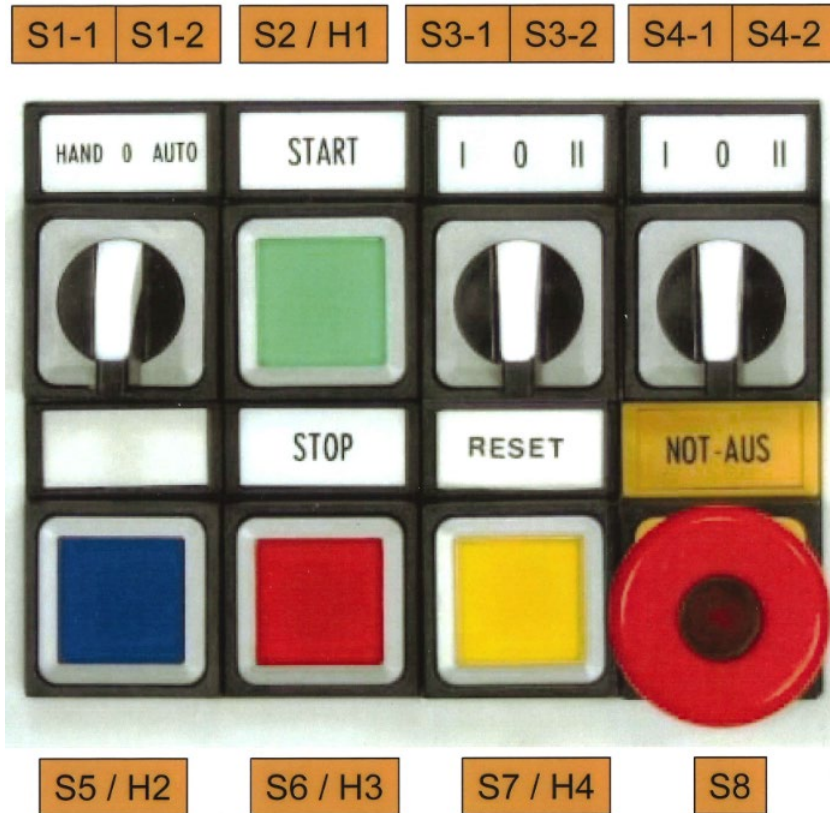


Production line with 3 subsystems



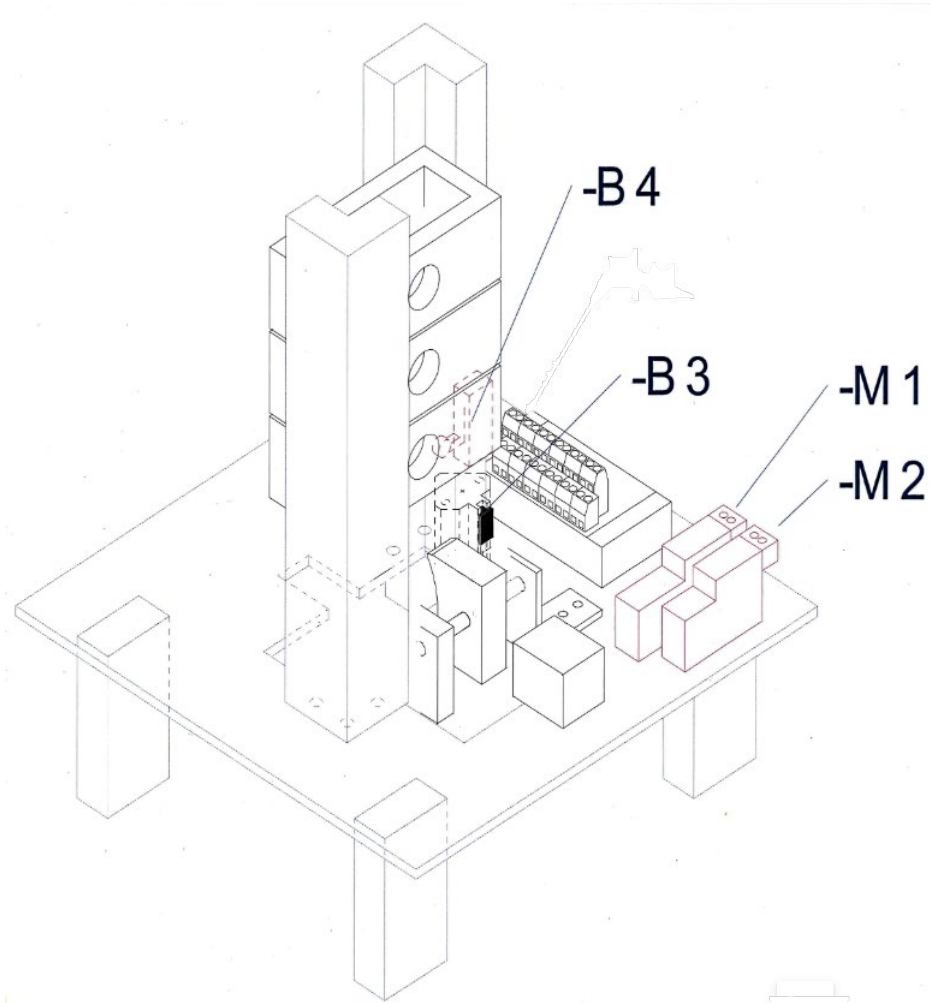
Description	Pin		Input				Output			
			IMS 1.0	IMS 1.3	IMS 1.6	IMS 1.7	IMS 1.0	IMS 1.3	IMS 1.6	IMS 1.7
End limit sensor	B1	1	S-DI 6	S-DI 7	E-DI 12	E -DI 14				
End limit sensor	B2	2	S-DI 16	S-DI 8	E-DI 13	E -DI 15				
Forwards (clockwise)		5					E-DO 2	S-DO 1	E-DO 4	E-DO 3

IMS - Manual Operating Device



Description	Switch type	ID	Pin	Input	Output
Manual Control	Switch, n.o. contact	S1-1	1	E-DI 1	
Automatic operation	Switch, n.o. contact	S1-2	2	E-DI 2	
Start	Pushbutton, n.o. contact	S2	3	E-DI 3	
Freely configurable	Pushbutton, n.o. contact	S3-1	4	E-DI 4	
Freely configurable	Pushbutton, n.o. contact	S3-2	5	E-DI 5	
Freely configurable	Switch, n.o. contact	S4-1	6	E-DI 6	
Freely configurable	Switch, n.o. contact	S4-2	7	E-DI 7	
Initialisation	Pushbutton, n.o. contact	S5	8	E-DI 8	
Stop	Pushbutton, n.c. contact	S6	9	E-DI 9	
RESET	Pushbutton, n.o. contact	S7	10	E-DI 10	
EMERGENCY CUT-OUT	Switch, n.o. contact	S8	11	E-DI 11	
green light		H1	14		E-DO 5
blue light		H2	15		E-DO 6
red light		H3	16		E-DO 7
yellow light		H4	17		E-DO 8

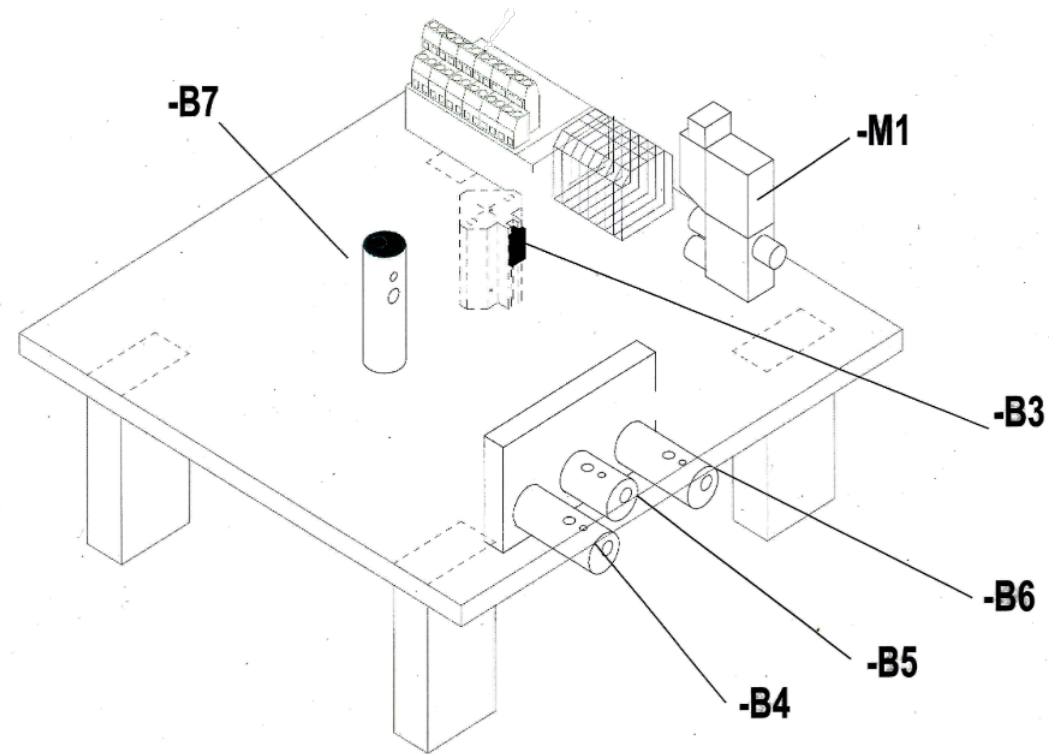
IMS 3 – Sorting Subsystem



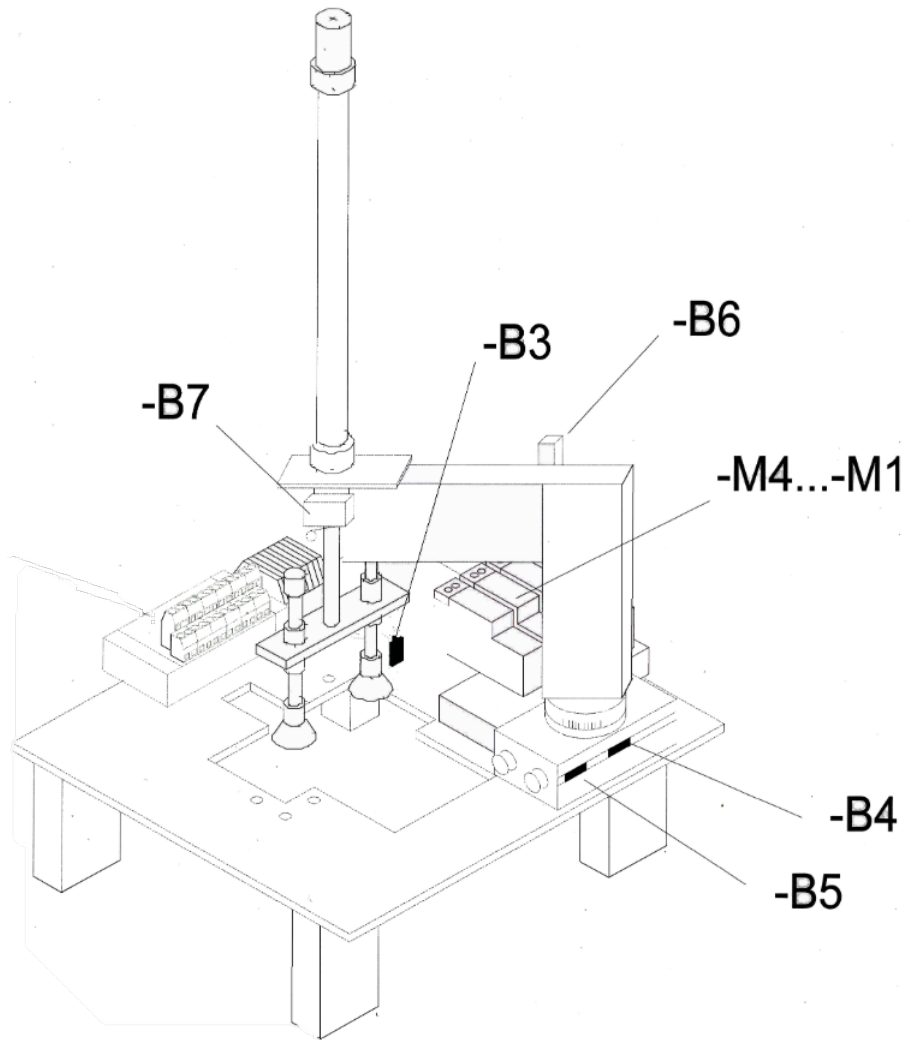
Description	ID	Pin	Input	Output
Magnetic sensor (stopper at top)	-B3	3	S-DI 14	
Sensor (magazine occupancy)	-B4	4	S-DI 15	
Lower stopper	-M1	14		S-DO 7
Sort	-M2	16		S-DO 8

IMS 6 – Testing Subsystem

Description	ID	Pin	Input	Output
Sensor - stopper at the top	-B3	3	S-DI 1	
Optical sensor for white substructures	-B4	4	S-DI 2	
Inductive sensor for metal bolts	-B5	5	S-DI 3	
Capacitive sensor for detecting presence of a workpiece	-B6	6	S-DI 4	
Optical sensor for white superstructures	-B7	7	S-DI 5	
Lower stopper	-M1	14		S-DO 2

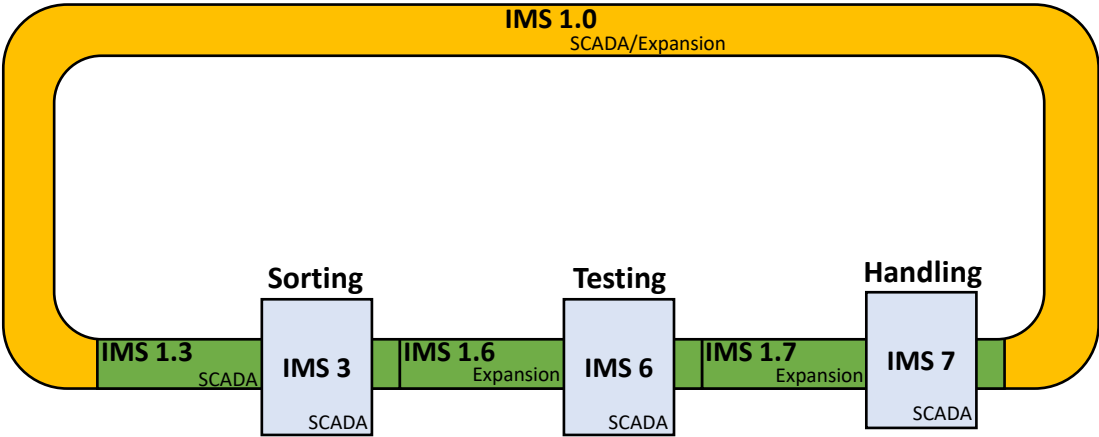


IMS 7 – Handling Subsystem



Description	ID	Pin	Input	Output
Magnetic sensor - stopper at top	-B3	2	S-DI 9	
Magnetic sensor swivel table 0 deg	-B4	3	S-DI 10	
Magnetic sensor swivel table 90 deg	-B5	4	S-DI 11	
PE-Contact vacuum monitoring	-B6	5	S-DI 12	
Microswitch lift cylinder at top	-B7	6	S-DI 13	
4/2-way valve swivel table from 0 to 90 deg	-M1	14		S-DO 3
4/2-way valve lower stopper	-M2	15		S-DO 4
4/2-way valve lower cylinder	-M3	16		S-DO 5
3/2-way valve vacuum on	-M4	17		S-DO 6

Production line with 3 subsystems



Belt	Subsystem	
IMS 1.0	-	
IMS 1.3	IMS 3	Sorting
IMS 1.6	IMS 6	Testing
IMS 1.7	IMS 7	Handling

Description	Pin	IMS 1.0	IMS 1.3	IMS 1.6	IMS 1.7
End limit sensor	B1 1	S-DI 6	S-DI 7	E-DI 12	E -DI 14
End limit sensor	B2 2	S-DI 16	S-DI 8	E-DI 13	E -DI 15
Forwards (clockwise)	5	E-DO 2	S-DO 2	E-DO 4	E-DO 3
M12 Socket	(X3) 3				
M12 Socket	(X4) 4				
Reverse (counterclockwise)	6				
Crawl speed	7				

Description	Pin	IMS 1.0	IMS 1.3	IMS 1.6	IMS 1.7
End limit sensor	B1 1	S-DI 6	S-DI 7	E-DI 12	E -DI 14
End limit sensor	B2 2	S-DI 16	S-DI 8	E-DI 13	E -DI 15
Forwards (clockwise)	5	E-DO 2	S-DO 1	E-DO 4	E-DO 3