

Step	Description	Date	Start time	End Time	Duration	Gap	Production transport gap
10	release a part on stopper 1	27/08/2022	11:48:02	11:48:16	00:00:14	00:00:00	00:00:14
20	place cover to assembly place RASS1	27/08/2022	11:55:28	11:55:59	00:00:31	00:07:12	00:07:43
30	assemble part from box on RASS1 - MAIN PCB	27/08/2022	11:56:00	11:56:55	00:00:55	00:00:01	00:00:56
40	switch on pcb RASS1	27/08/2022	11:56:56	11:57:09	00:00:13	00:00:01	00:00:14
50	read QR RASS1	27/08/2022	11:57:10	11:57:11	00:00:01	00:00:01	00:00:02
60	assemble part from box on RASS1 - DISPLAY	27/08/2022	11:57:12	11:57:47	00:00:35	00:00:01	00:00:36
70	move part to pallet on belt RASS1	27/08/2022	11:57:48	11:58:39	00:00:51	00:00:01	00:00:52
80	measure a part (analog)	27/08/2022	11:58:54	11:58:56	00:00:02	00:00:15	00:00:17
90	place cover to assembly place RASS2	27/08/2022	12:02:16	12:02:45	00:00:29	00:03:20	00:03:49
100	assemble part from box on RASS2 - ANALOG	27/08/2022	12:02:46	12:03:45	00:00:59	00:00:01	00:01:00
110	assemble part from box on RASS2 - GYROSCOPE	27/08/2022	12:03:46	12:04:20	00:00:34	00:00:01	00:00:35
120	move part to pallet on belt RASS2	27/08/2022	12:04:21	12:05:12	00:00:51	00:00:01	00:00:52
130	check analog	27/08/2022	12:05:26	12:05:31	00:00:05	00:00:14	00:00:19
140	check gyroscope	27/08/2022	12:05:32	12:05:39	00:00:07	00:00:01	00:00:08
150	place cover to assembly place RASS3	27/08/2022	12:09:00	12:09:28	00:00:28	00:03:21	00:03:49
160	assemble part from box on RASS3 - FRONT COVER	27/08/2022	12:09:29	12:10:01	00:00:32	00:00:01	00:00:33
170	move part to pallet on belt RASS3	27/08/2022	12:10:02	12:10:24	00:00:22	00:00:01	00:00:23
180	test connection to IoT main PCB	27/08/2022	12:10:38	12:10:41	00:00:03	00:00:14	00:00:17
190	test the function the touch display	27/08/2022	12:10:42	12:10:48	00:00:06	00:00:01	00:00:07
200	test the analog input/output schield	27/08/2022	12:10:49	12:30:55	00:20:06	00:00:01	00:20:07
210	check the historical gyroscope data	27/08/2022	12:30:55	12:31:18	00:00:23	00:00:00	00:00:23
230	print label	27/08/2022	12:31:18	12:31:28	00:00:10	00:00:00	00:00:10
240	deliver part	27/08/2022	12:31:30	12:31:40	00:00:10	00:00:02	00:00:12
250	store a part from stopper 2	27/08/2022	12:31:40	12:31:59	00:00:19	00:00:00	00:00:19

Start time gap	End time gap
00:00:00	00:00:00
00:07:26	00:07:43
00:00:32	00:00:56
00:00:56	00:00:14
00:00:14	00:00:02
00:00:02	00:00:36
00:00:36	00:00:52
00:01:06	00:00:17
00:03:22	00:03:49
00:00:30	00:01:00
00:01:00	00:00:35
00:00:35	00:00:52
00:01:05	00:00:19
00:00:06	00:00:08
00:03:28	00:03:49
00:00:29	00:00:33
00:00:33	00:00:23
00:00:36	00:00:17
00:00:04	00:00:07
00:00:07	00:20:07
00:20:06	00:00:23
00:00:23	00:00:10
00:00:12	00:00:12
00:00:10	00:00:19

Step	Actual Duration (sec)	Optimum (30 sec)	Status
	10	14	30 ✓ Efficient
	20	31	30 ✗ Over Optimum
	30	55	30 ✗ Over Optimum
	40	13	30 ✓ Efficient
	50	1	30 ✓ Efficient
	60	35	30 ✗ Over Optimum
	70	51	30 ✗ Over Optimum
	80	2	30 ✓ Efficient
	90	29	30 ✓ Efficient
	100	59	30 ✗ Over Optimum
	110	34	30 ✗ Over Optimum
	120	51	30 ✗ Over Optimum
	130	5	30 ✓ Efficient
	140	7	30 ✓ Efficient
	150	28	30 ✓ Efficient
	160	32	30 ✗ Over Optimum
	170	22	30 ✓ Efficient
	180	3	30 ✓ Efficient
	190	6	30 ✓ Efficient
	200	1206	30 ✗ Over Optimum
	210	23	30 ✓ Efficient
	230	10	30 ✓ Efficient
	240	10	30 ✓ Efficient
	250	19	30 ✓ Efficient

Efficient Steps (≤30s):	15
Over Optimum Steps (>)	9
Total Steps:	24
Efficiency Rate:	62.5%