



SARS-CoV-2 / HIV / HCV / TP / HBsAg / HBsAb / HBeAg / HBcAb / Dengue / Malaria / Insulin / D-Dimer / MYO / HCG / LH...

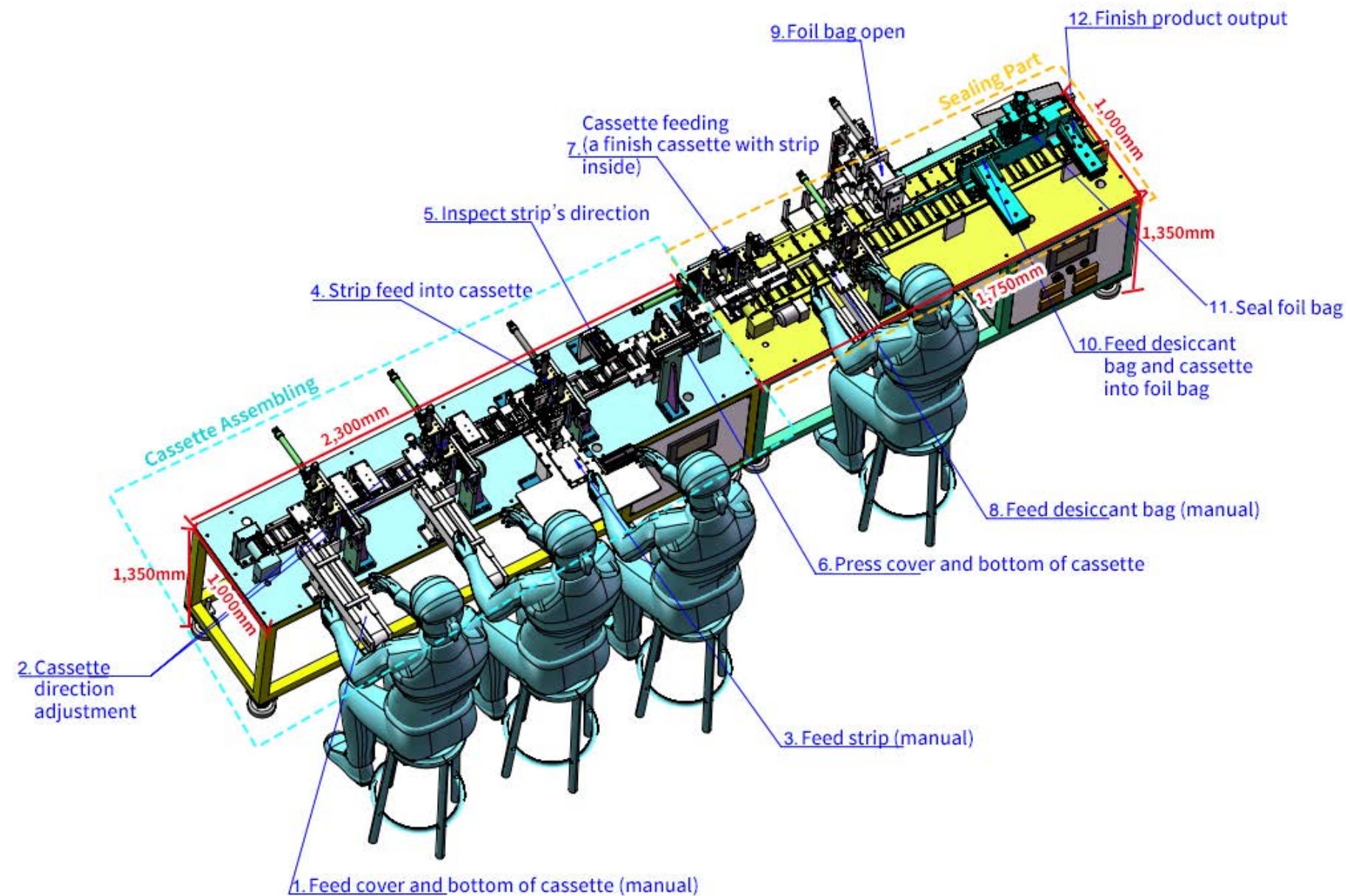
How To Setup A Manufacturing Unit For Later Flow Rapid Test?

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Rapid Test Assembly Machine (Semi-Automated)

Cat. No. TKAM-200



Parameters

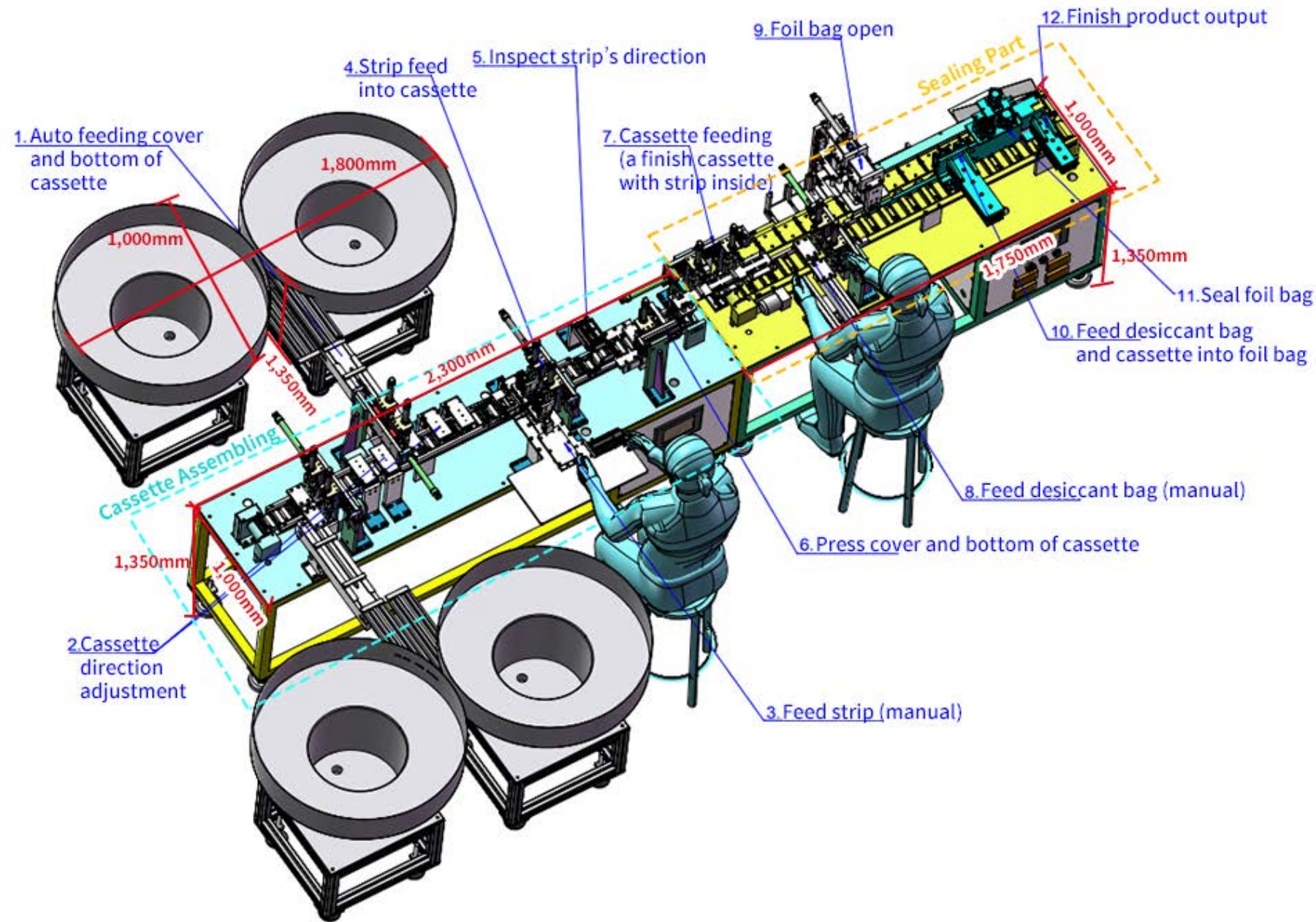
Rapid Test Assembly Machine	
Production Output	3000 pcs/hour
Labour Intensity	4 workers
Cassette Dimension	70 * 20mm (Standard)
Power	3500 W
Power Supply	220V / 50Hz
Weight	270 kg
Dimension (two part)	4,050mm * 1,000mm * 1,350mm (L * W * H)
Cassette Assembling	2,300mm * 1,000mm * 1,350mm (L * W * H)
Sealing Part	1,750mm * 1,000mm * 1,350mm (L * W * H)

Total 12 procedures

1. Feed cover and bottom of cassette (manual)
2. Cassette direction adjustment
3. Feed strip (manual)
4. Strip feed into cassette
5. Inspect strip's direction
6. Press cover and bottom of cassette
7. Cassette feeding (a finish cassette with strip inside)
8. Feed desiccant bag (manual)
9. Foil bag open
10. Feed desiccant bag and cassette into foil bag
11. Seal foil bag
12. Finish product output

Rapid Test Assembly Machine (Semi-Automated)

Cat. No. TKAM-200




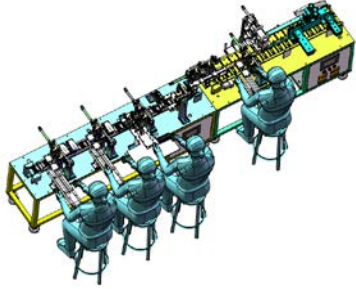
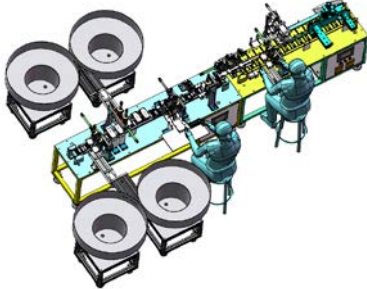
Parameters

Rapid Test Assembly Machine	
Production Output	3000 pcs/hour
Labour Intensity	4 workers
Cassette Dimension	70 * 20mm (Standard)
Power	3500 W
Power Supply	220V / 50Hz
Weight	270 kg
Dimension (three part)	4,050mm * 2,070mm * 1,350mm (L * W * H)
Cassette Assembling	2,300mm * 1,000mm * 1,350mm (L * W * H)
Sealing Part	1,750mm * 1,070mm * 1,350mm (L * W * H)
Vibrating Feeder	1,800mm * 1,000mm * 1,350mm (L * W * H)

Total 12 procedures

1. Auto feeding cover and bottom of cassette
2. Cassette direction adjustment
3. Feed strip (manual)
4. Strip feed into cassette
5. Inspect strip's direction
6. Press cover and bottom of cassette
7. Cassette feeding (a finish cassette with strip inside)
8. Feed desiccant bag (manual)
9. Foil bag open
10. Feed desiccant bag and cassette into foil bag
11. Seal foil bag
12. Finish product output

Full Automated VS Semi-Automated

VS	TKAM-100	TKAM-200	TKAM-201
Automatic	Full automated	Semi-automated	Semi-automated
Design	Close	Open	Open
Exterior			
Price	High	Save 60%	Save 50%
Labour Intensity	2 workers	4 workers	2 workers
Production capacity	2000 cassette/H	3000 - 3500 cassettes/H	3000 - 3500 cassettes/H
Training	Complex	Easy	Easy
Maintenance	Complex	Easy	Easy
Installation	Complex Need support	Easy	Easy
Operation	Complex	Easy	Easy
Structure	Complex	Simple	Simple
Dimension (L * W * H)	4,500*2,400*2,000mm	4,050mm*1,000mm*1,350mm	4,050mm*2,070mm*1,350mm
Weight	2,200kg	270kg	650kg
Power	4,000W	3,500W	3,500W
Power Supply	220v/50Hz	220v/50Hz	220v/50Hz
Controller	PLC	PLC	PLC

Advantages of Semi-automated

1. Price save up to 50% - 60%
2. Production capacity increase 50% - 60%
3. Training is easy
4. Installation is easy
5. Maintenance is easy
6. Operation is easy
7. Small dimension
8. Lighter weight
9. Faster delivery

Disadvantages of Full Automated



1. High cost per machine
2. Low production capacity
3. Training is complex
4. Installation is complex, need support
5. Maintenance is complex
6. Operation is complex
7. Big dimension
8. Big weight per machine
9. Long lead time for delivery

Equipments For Lateral Flow Assay Test Kit Manufacturing Universal Device

		
Lateral Flow Strip Cutter	Lateral Flow Cassette Presser	Seal & Print Machine

Materials & Accessories For For Lateral Flow Assay Test Kit







Universal Materials

			
Uncut Sheet	Lateral Flow Cassette	Mylar Bag	Desiccant Bag

The Optional Materials

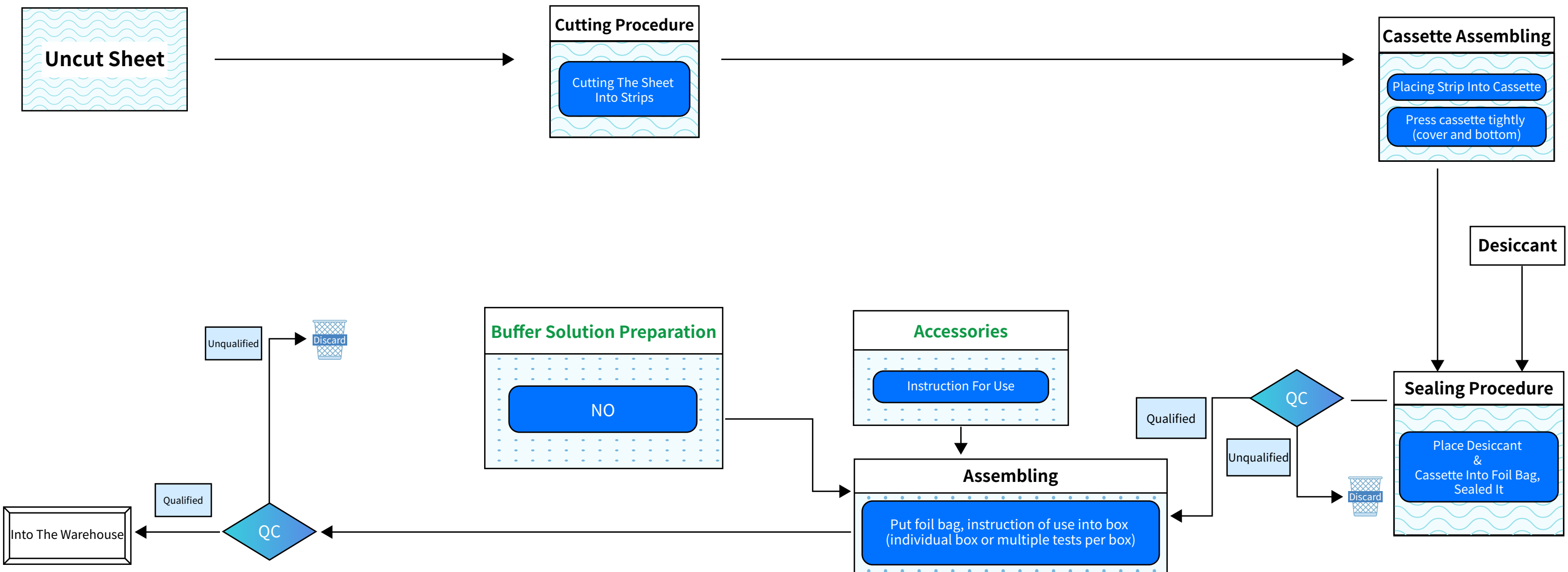
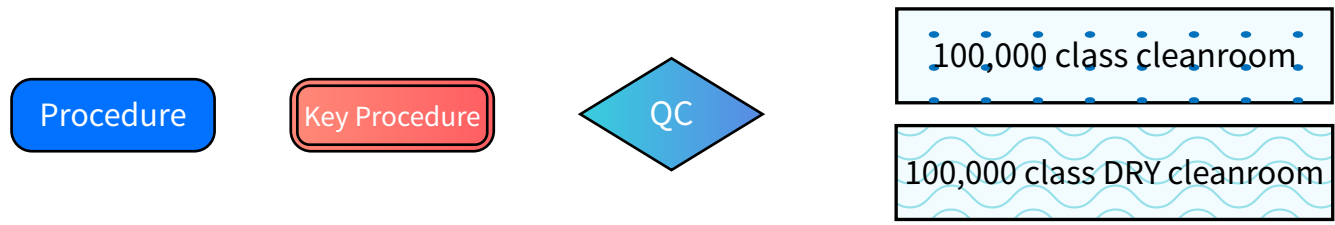
			
Swab	Extraction tube	Saliva Collection Kit	Buffer Solution

Optional Device (Covid-19 buffer or other rapid test kit) Buffer Filling Machine

		
		
6,000 vials/hour	2,500 vials/hour	2,500 vials/hour
Full Automated	Full Automated	Semi-Automated

Rapid Test Kit Manufacturing Flow Chart

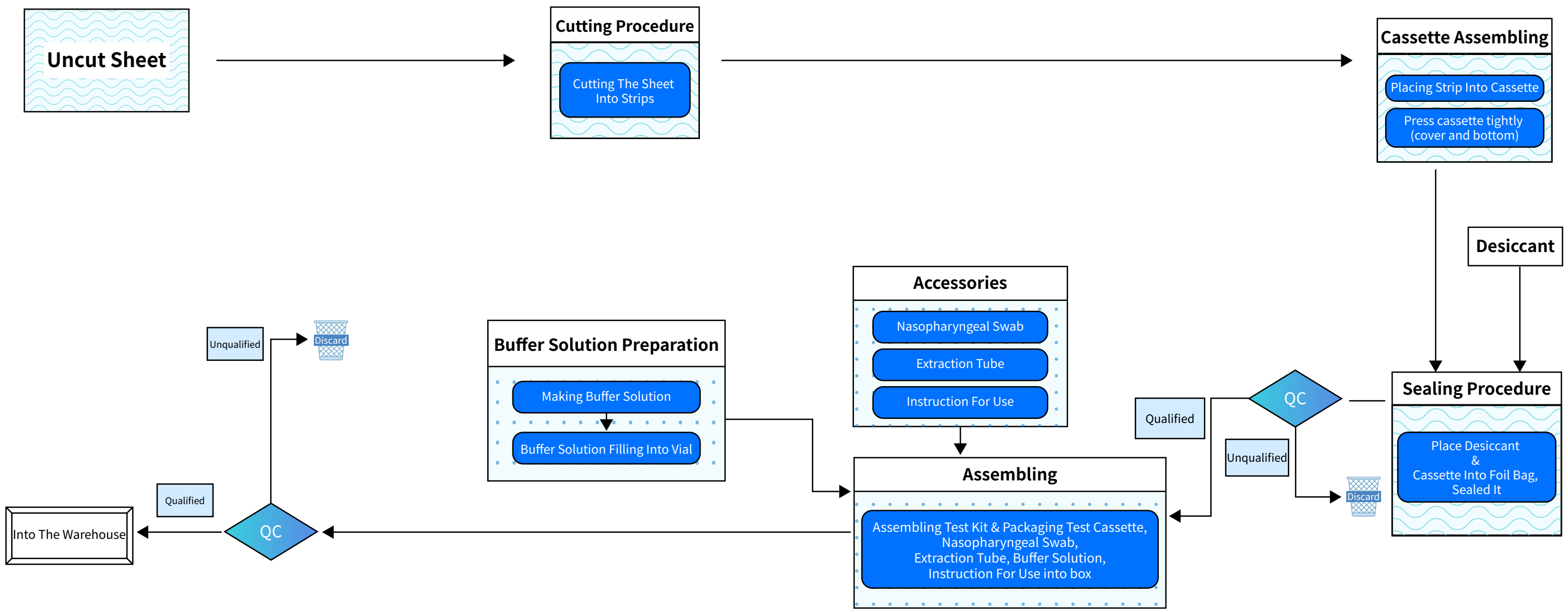
1. No special surrounding requirement in QC step
2. All procedures should be finished in 100,000 class cleanroom
3. Some key procedure should be finished in 100,000 class cleanroom, relative humidity <30%.



Different product will request different accessories and buffer solution. For example, HCG test, there are no buffer solution and accessories, except for instruction of use. But covid 19 test kit will require buffer solution, swab, extraction tube, etc.

Covid 19 Rapid Test Kit Manufacturing Flow Chart

1. No special surrounding requirement in QC step
2. All procedures should be finished in 100,000 class cleanroom
3. Some key procedure should be finished in 100,000 class cleanroom, relative humidity <30%.



How To Select Equipment For Rapid Test Manufacturing?

PLAN A

For universal rapid test kit

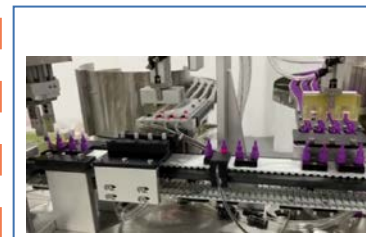
Dengue, Malaria, HCG, LH, Insulin, HbA1c, MYO, D-Dimer, 25-OH, vitamin D, HIV, HbsAg, HbAb,...etc

			
Strip Cutter	Cassette Presser	Seal & Print Machine	Rapid Test Assembly Machine

PLAN B

For Covid-19 Rapid Test Kit



			
Strip Cutter	Cassette Presser	Seal & Print Machine	Rapid Test Assembly Machine



Buffer Filling Machine

Optional Facilities

Molds

	
Lateral Flow Cassette	Extraction Tube

DISTRIBUTOR



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