



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

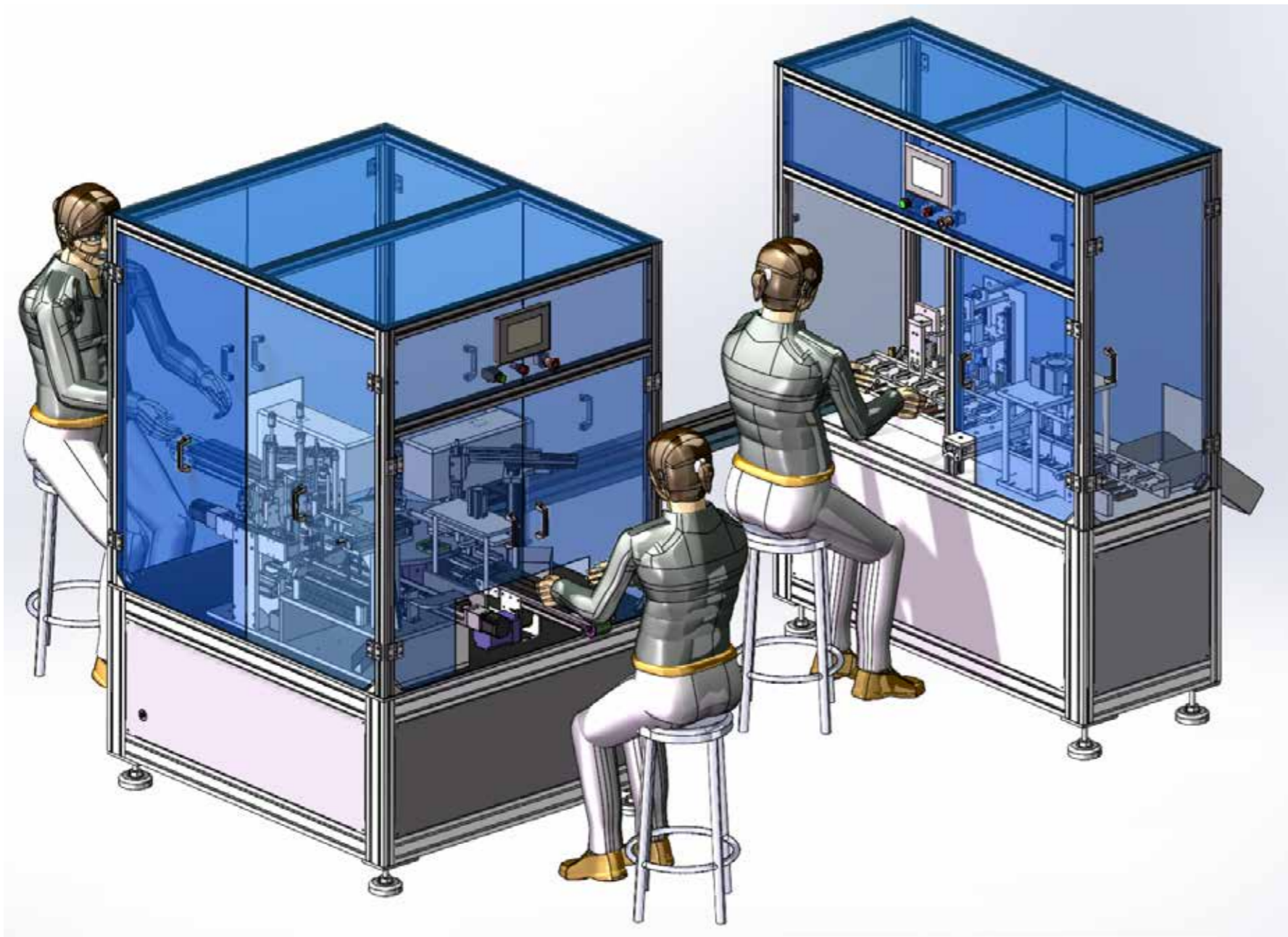
## How To Setup A Manufacturing Unit For Later Flow Rapid Test?

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Semi Automated Rapid Test Assembly Machine

Cat. No. TKAM-300



Parameters

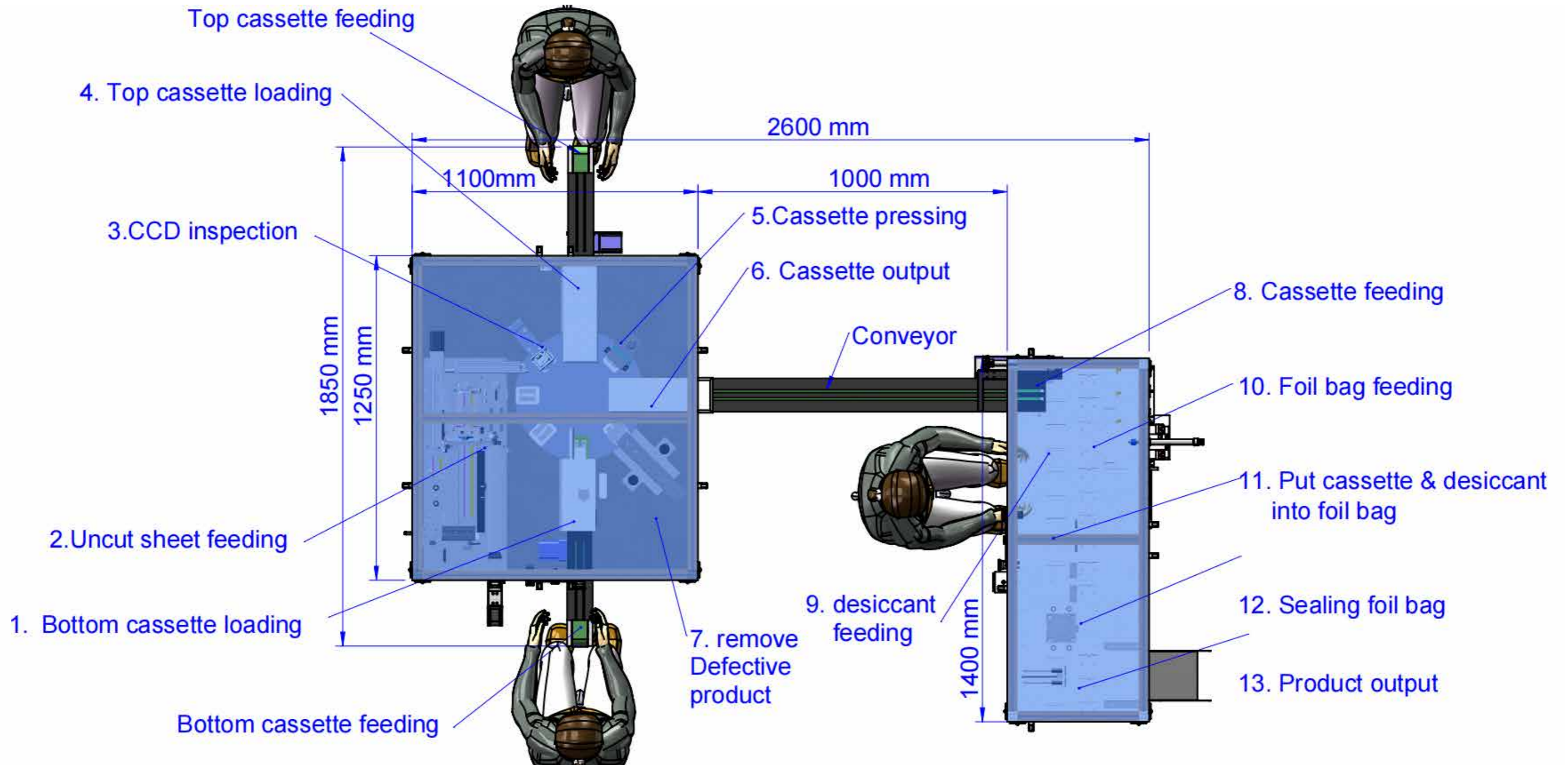
Rapid Test Assembly Machine	
Capacity	2,500-3,000 cassettes/hour
Labour Intensity	3 workers
Uncut Sheet Cutting	Include
Power	3500 W
Power Supply	220V / 50Hz
Weight	270 kg
Dimension	1,850mm* 2,600mm*1,800mm

Semi Automated Cassette Preparing

- A. Top cassette feeding (manual)
  - B. Bottom cassette feeding (manual)
1. Bottom cassette loading
  2. Uncut sheet feeding
  3. CCD inspection
  4. Top cassette loading
  5. Cassette pressing
  6. Cassette output
  7. Remove defective product
  8. Cassette feeding
  9. Desiccant feeding (manual)
  10. Foil bag feeding
  11. Put cassette and desiccant into foil bag
  12. Sealing foil bag
  13. Product output

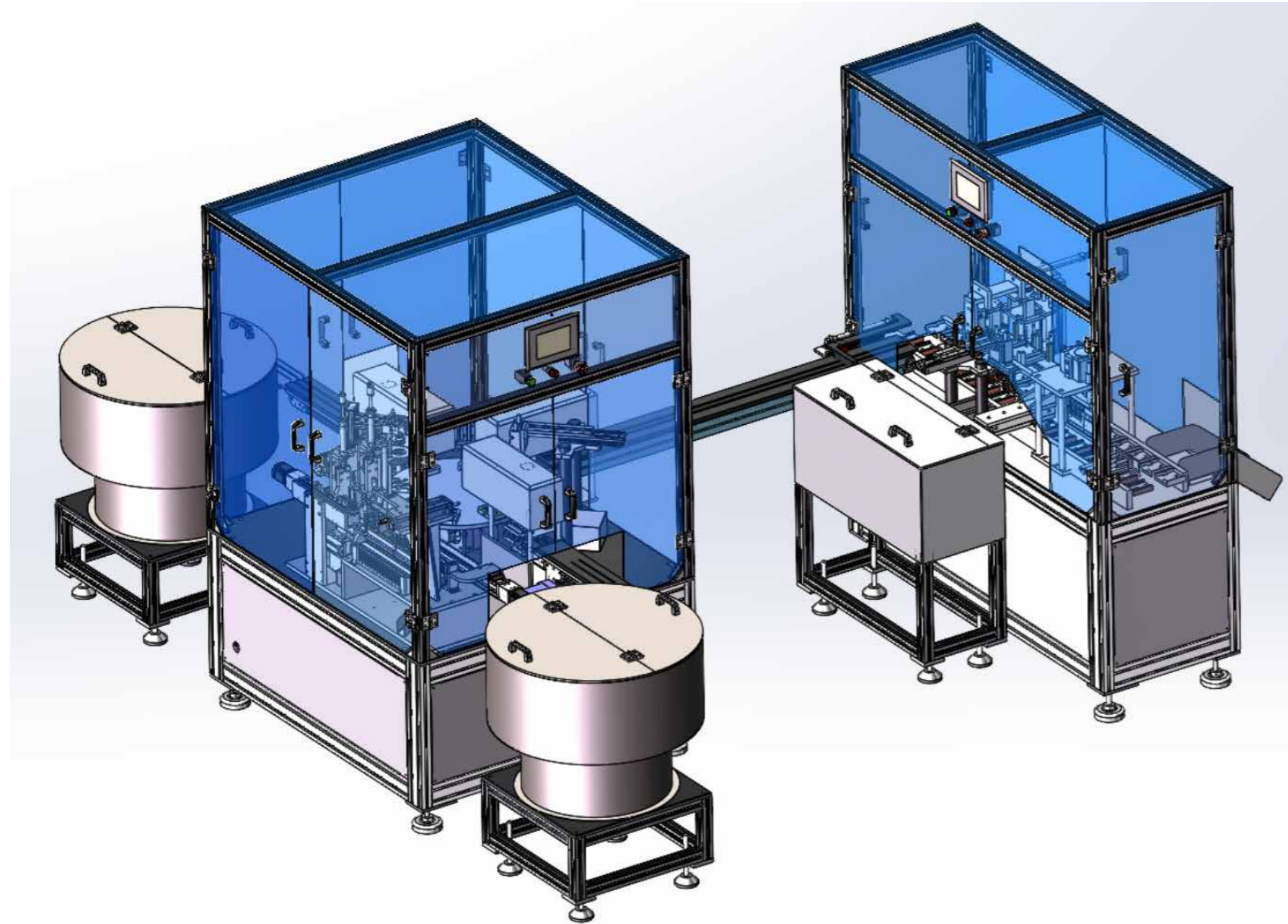
Semi Automated Rapid Test Assembly Machine

Cat. No. TKAM-300



Fully Automated Rapid Test Assembly Machine

Cat. No. TKAM-301



Parameters

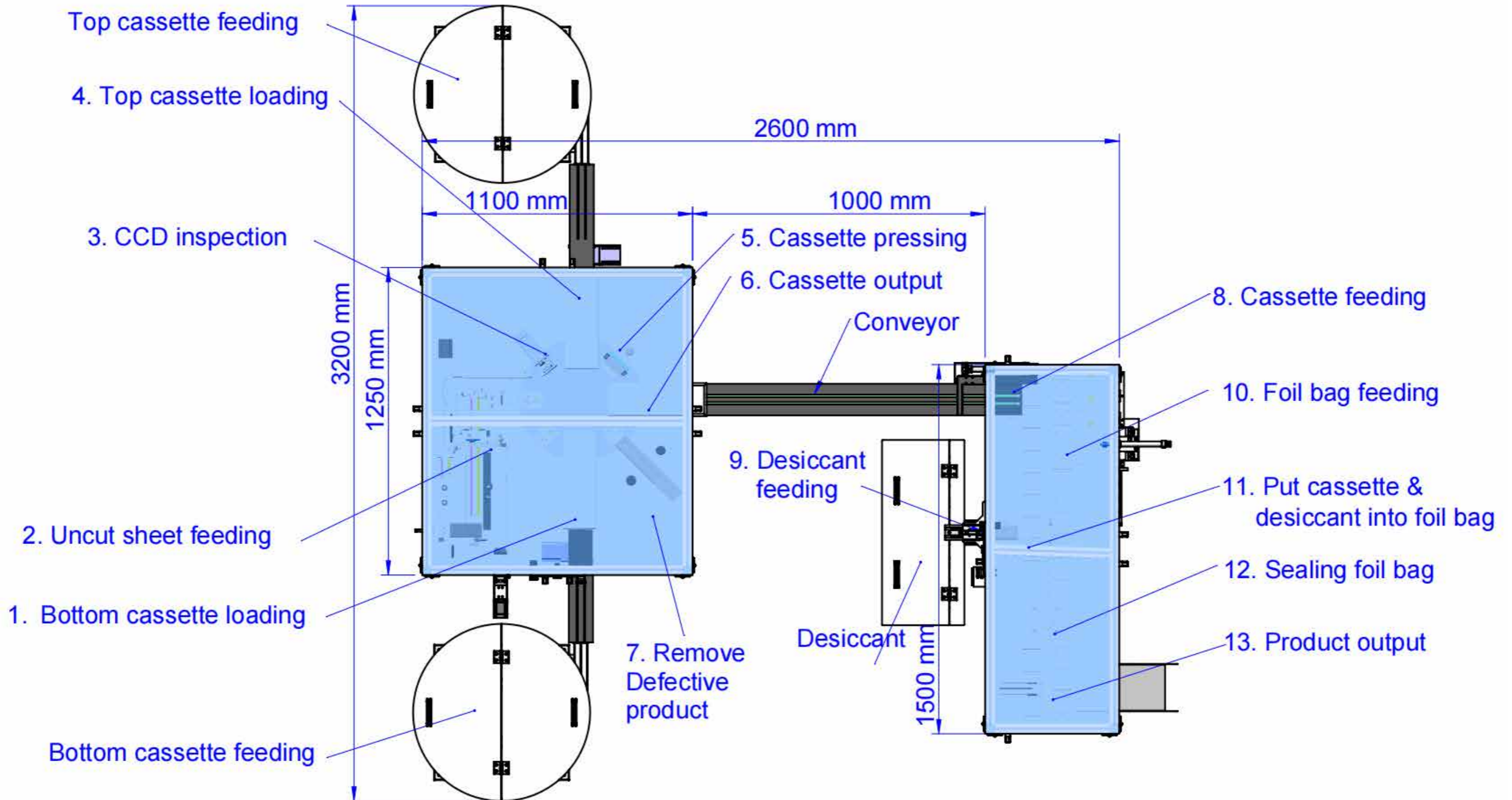
Rapid Test Assembly Machine	
Capacity	3,000 cassettes/hour
Labour Intensity	0
Uncut Sheet Cutting	Include
Power	4500 W
Power Supply	220V / 50Hz
Weight	400 kg
Dimension	3,200mm*2,600mm*1,800mm

Fully Automated Cassette Preparing

- A. Top cassette feeding
  - B. Bottom cassette feeding
1. Bottom cassette loading
  2. Uncut sheet feeding
  3. CCD inspection
  4. Top cassette loading
  5. Cassette pressing
  6. Cassette output
  7. Remove defective product
  8. Cassette feeding
  9. Desiccant feeding
  10. Foil bag feeding
  11. Put cassette and desiccant into foil bag
  12. Sealing foil bag
  13. Product output

Fully Automated Rapid Test Assembly Machine

Cat. No. TKAM-301



Comparison with other brand rapid test kit assembly machine

ITEM	BALLYA	OTHERS
Price	Low	High
Professional	Lateral Flow Team has over 15 years lateral flow assay development and manufacturing experience	Not in this field
Capacity	3,000 cassettes/hour	2,000 cassettes/hour
Installation	Easy	Complex, need technicians on-site degugging and installation
Operation	Easy	Complex
Maintenance	Easy	Complex
Dimension	Small size	It' s big dimension

Full Automated VS Semi-Automated

VS	TKAM-100	TKAM-300	TKAM-301
Automatic	Full automated	Semi-automated	Full automated
Exterior			
Price	High	Save 60%	Save 50%
Labour Intensity	0	3 workers	0
Capacity	2000 cassette/H	2,500-3,000 cassettes/hour	3,000 cassettes/hour
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	1,850* 2,600*1,800mm	3,200*2,600*1,800mm
Weight	2,200kg	270kg	400kg
Power	4,000W	3,500W	4,500W
Power Supply	220v/50Hz	220v/50Hz	220v/50Hz
Controller	PLC	PLC	PLC



## Advantages of BALLYA

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 Other Brands

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

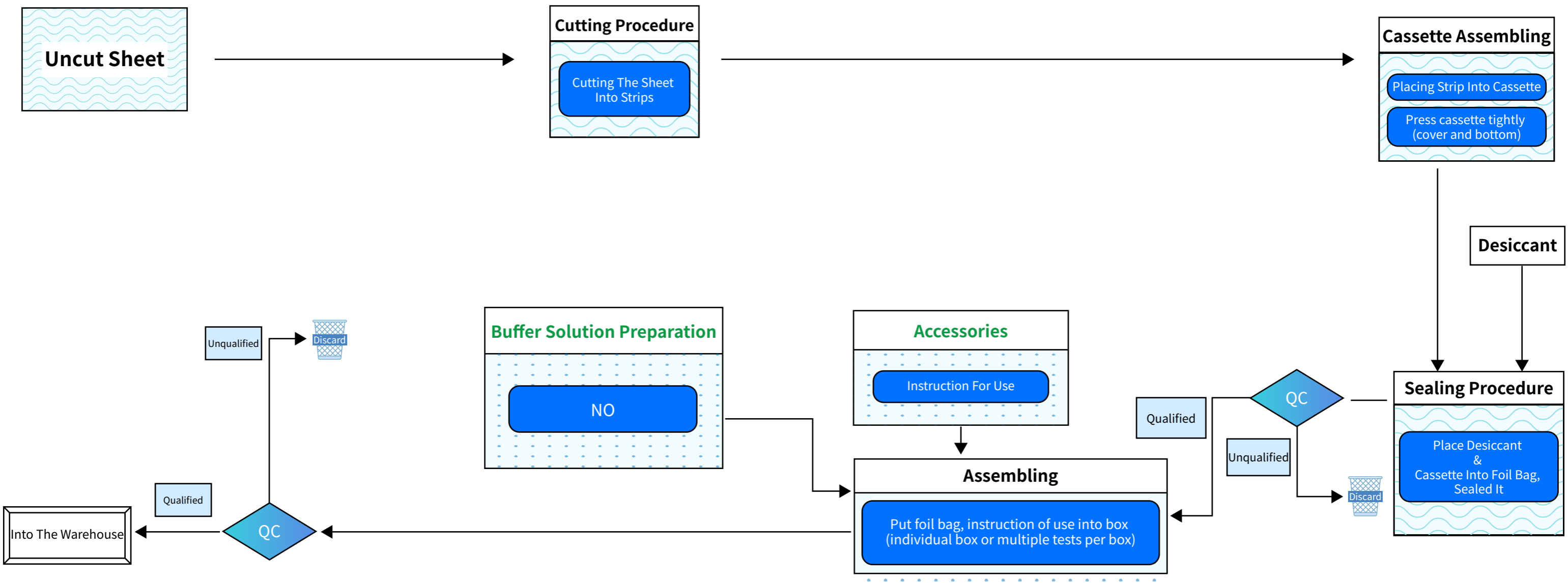
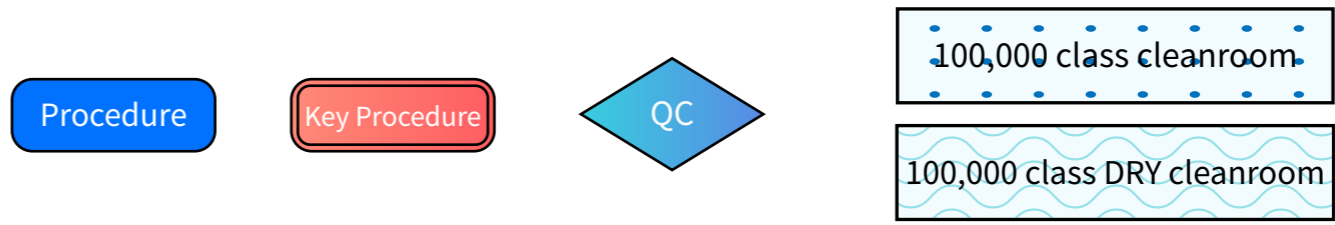
			
Swab	Extraction tube	Saliva Collection Kit	Buffer Solution

## 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

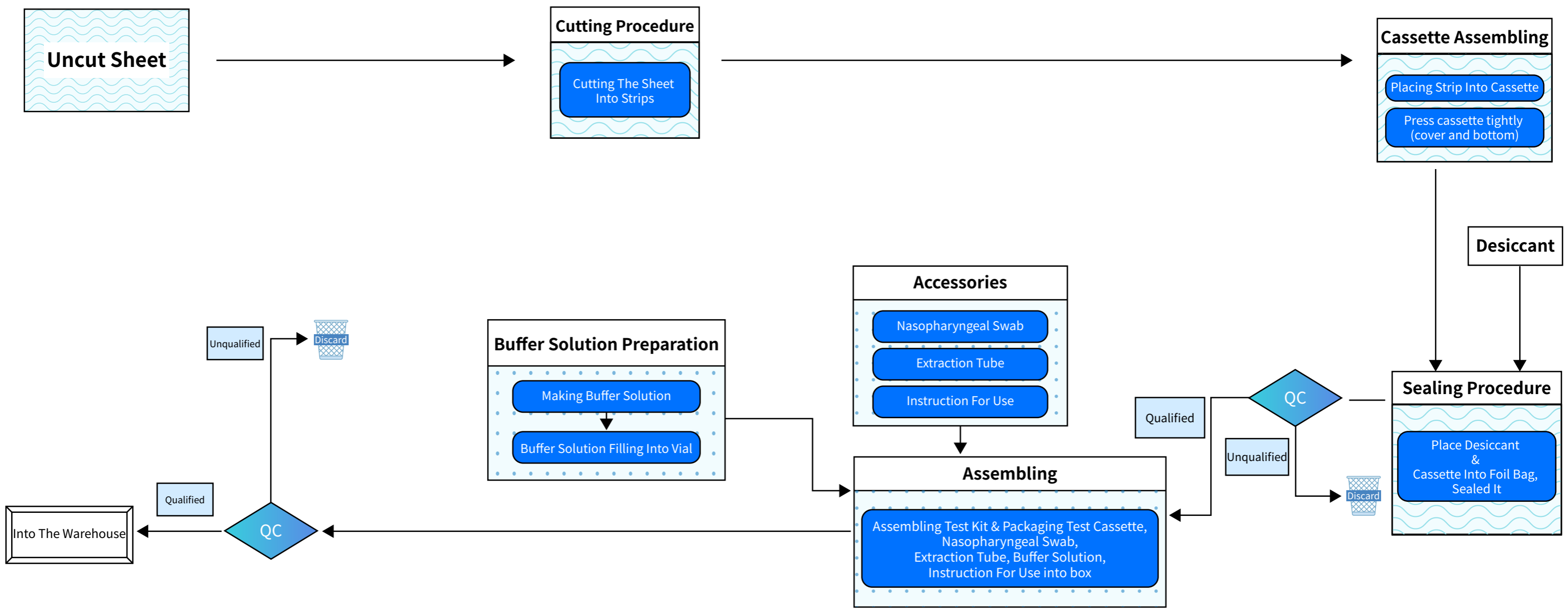
1. No special surrounding requirement in QC step  
 2. All procedures should be finished in 100,000 class cleanroom  
 3. Some key procedure should be finished in 100,000 class cleanroom, relative humidity <30%.



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



**BALLYA**<sup>®</sup>  
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