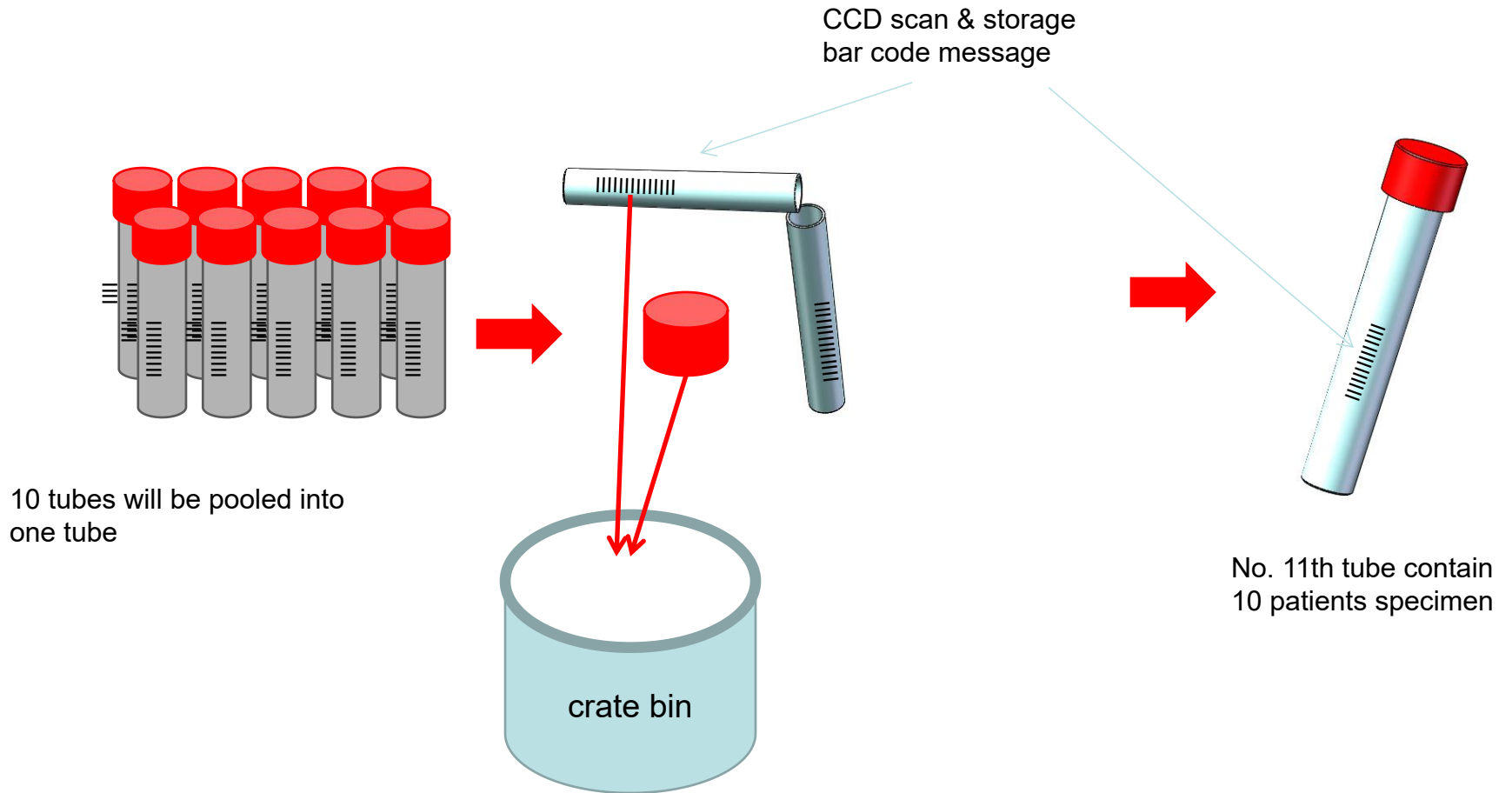


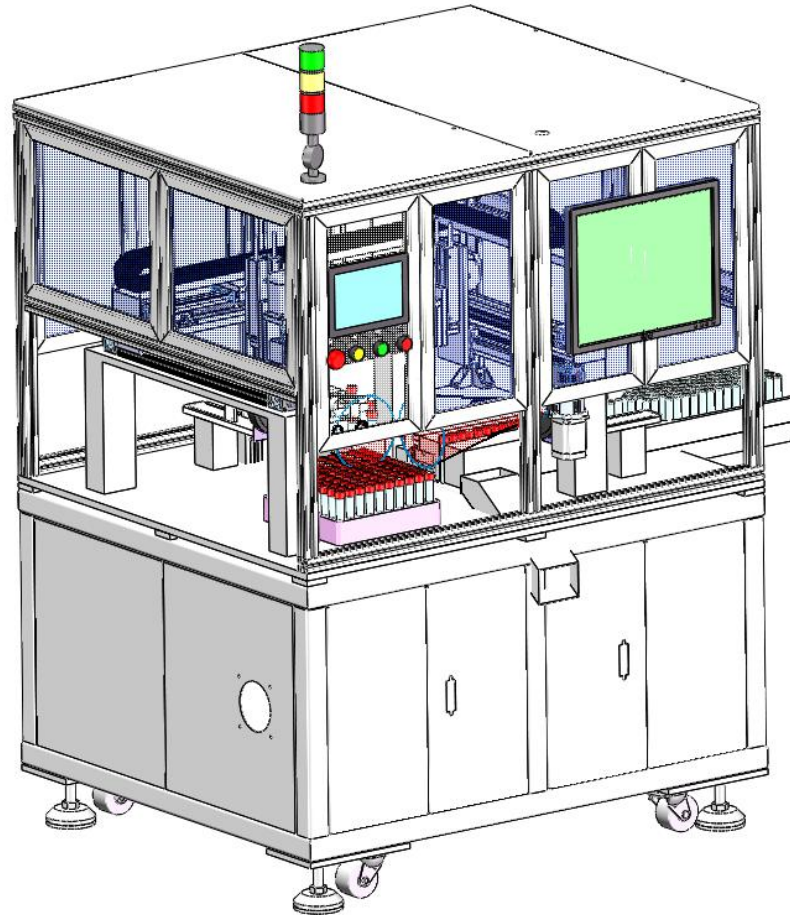
VTM Kit Sample Pooling System

**Fully Automatic
Reduce infection
1,020 tubes/hour**

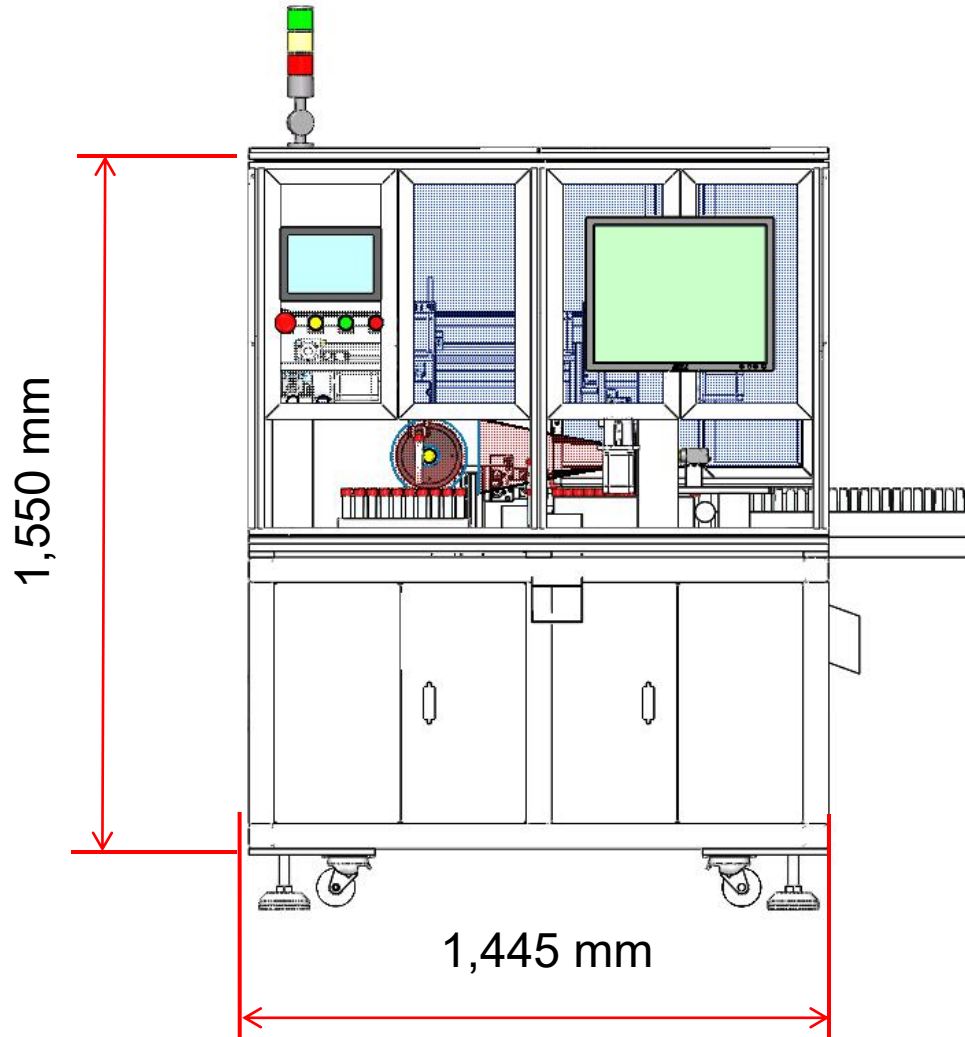
Principle



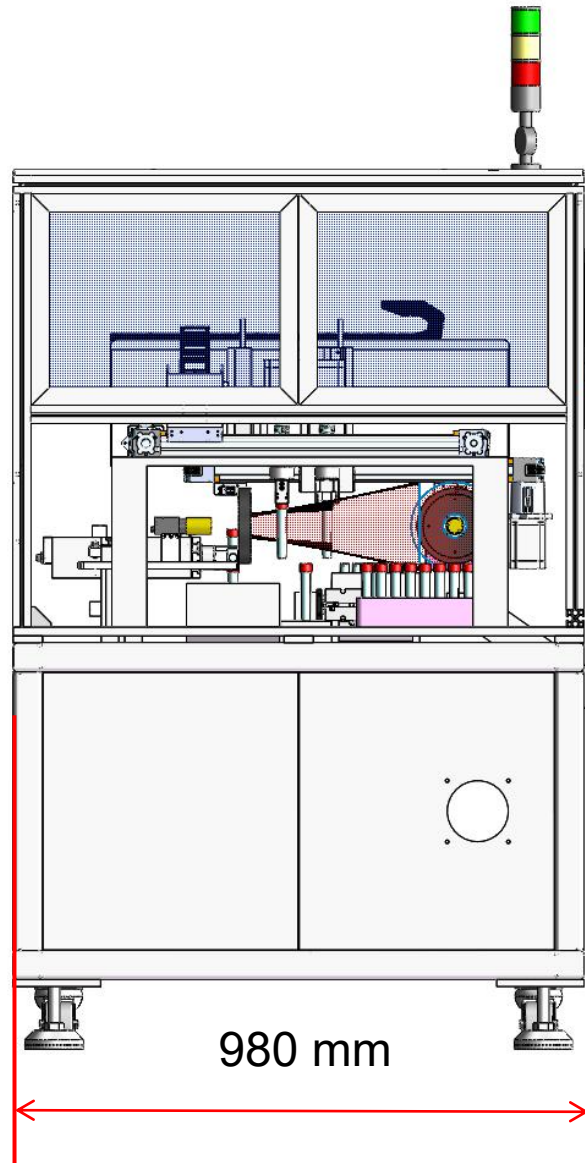
Overview



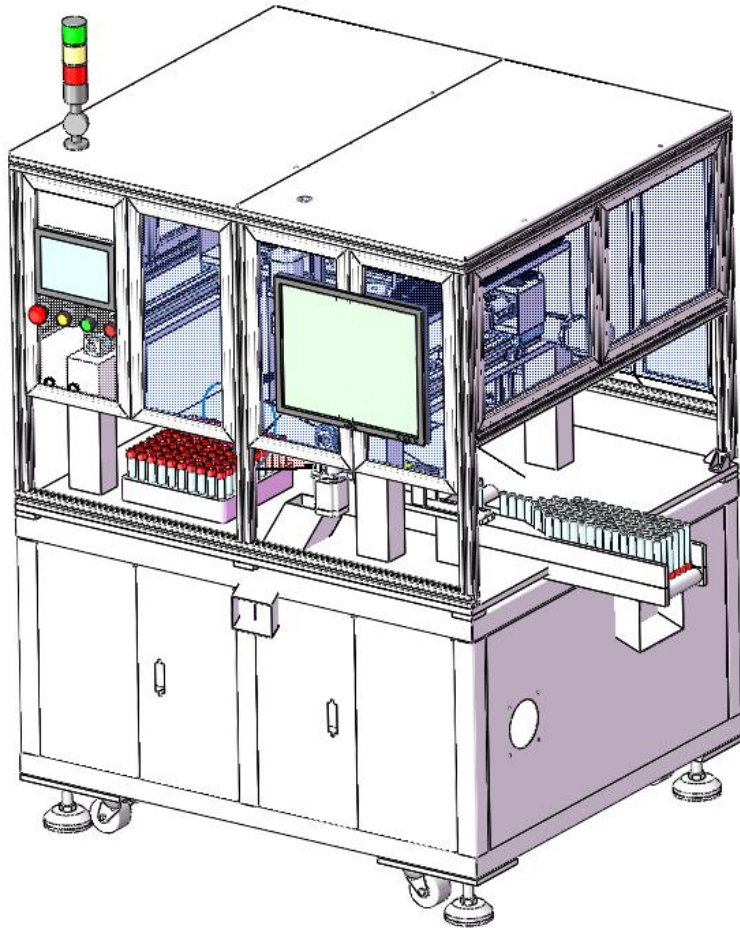
Overview



Overview



Overview

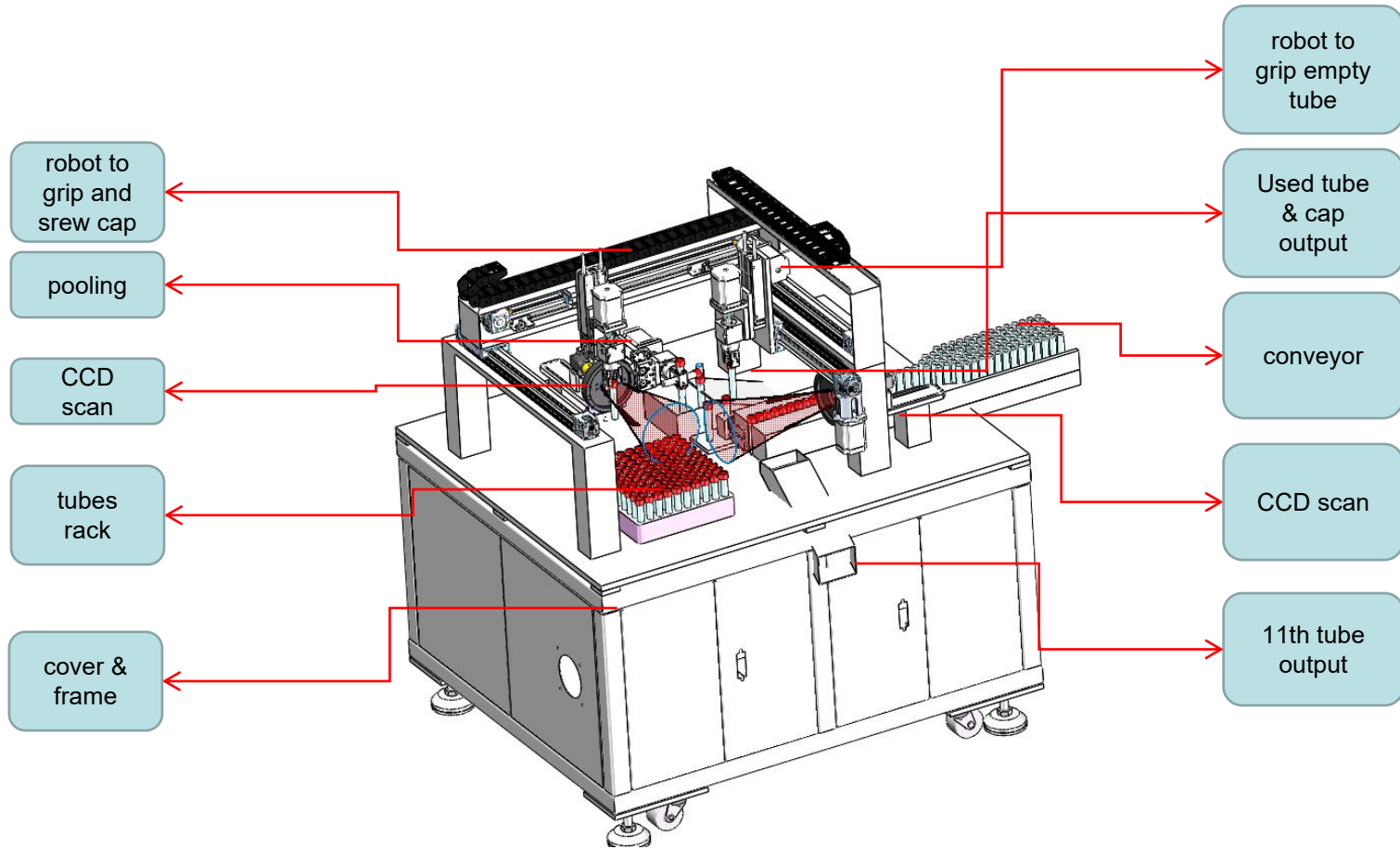


Features:

Easy to operate, easy to understand

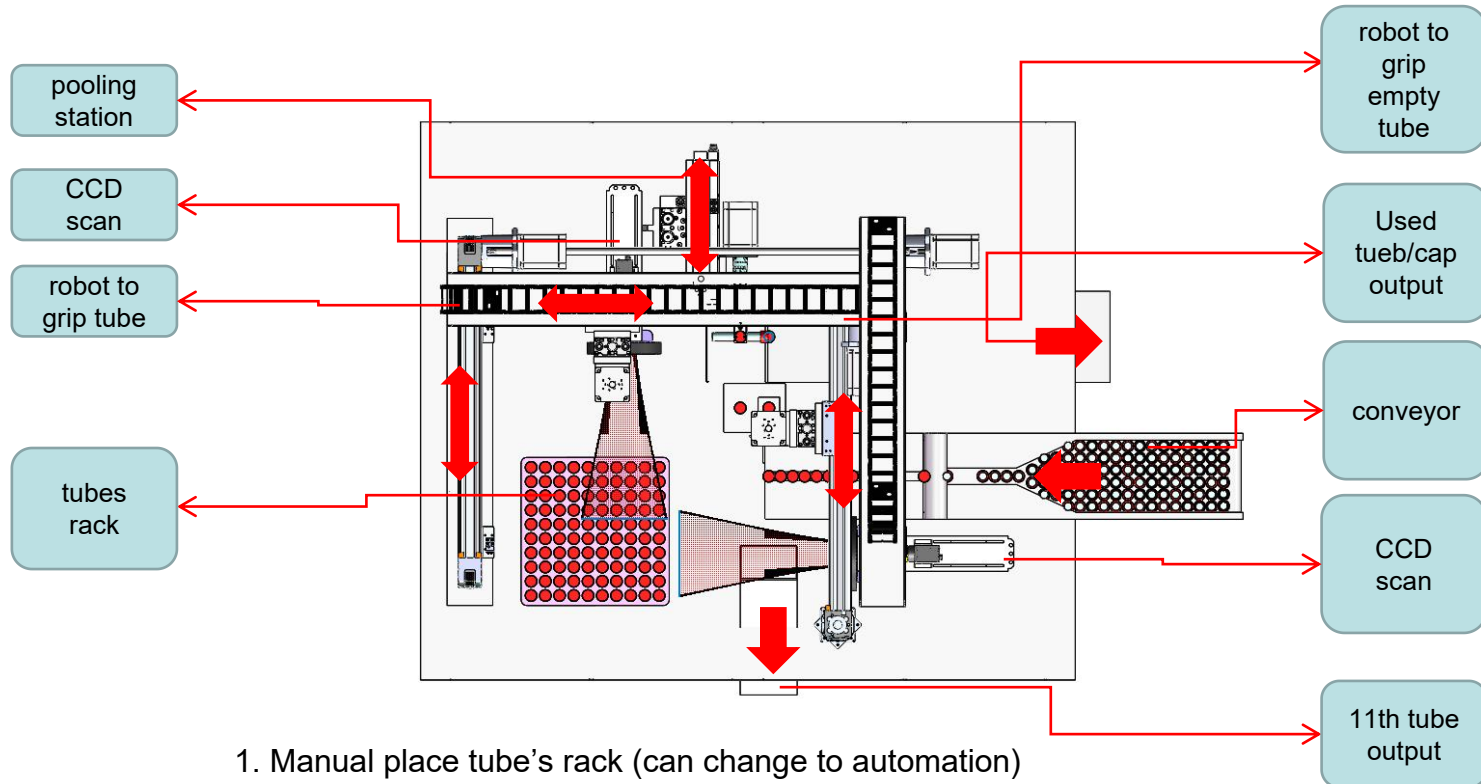
1. robot transfer tubes
2. CCD scan bar code and storage information;
3. Auto grip tube, screw cap, collect waste tube/cap, pooling, collect 11th tube.
4. Automatic counting

Overview & Workflow



Speed: 1,020 tubes pool into 102 tube (11th) per hour

Overview & Workflow



1. Manual place tube's rack (can change to automation)
2. work flow:
 - 2.1 grip tube and screw cap out,
 - 2.2 discard used tube/cap into crate bin
 - 2.3 10 tubes pool into 11th tube and scan each tube information
 - 2.4 robot feed cap for 11th tube and screw tightly
 - 2.5 CCD scan 11th bar code
 - 2.6 finish output

Time & Capacity

No.	Station	Procedure	Time (s)	Total Time (s)	Remark
1	Tube feeding	take tube, scan label & storage information	3.5	3.5	
2	Capping	screw up, discard cap	3.5	3.5	
3	Pooling	pooling liquid	3.2	3.2	
4	Discard	grip empty tube and discard	3.5	3.5	
5	Finish product	screw tightly cap & output	3.5	3.5	
6	Waste	insert waste cap and tube into a bag, sealing and labeling			

UPH: $(3,600/3.5) = 10,20$ tubes/h (102 the 11th tubes/hour)