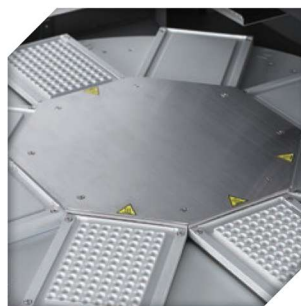


# Maelstrom™ 9610

## REVOLUTIONIZING MAGNETIC BEAD HANDLING

Maximize Throughput and Eliminate  
Cross-contamination



## Patented Maelstrom Spin Mixing Technology

The novel technology in the Maelstrom products delivers improved performance for applications in molecular diagnostics and life sciences. The Maelstrom Series are FDA and CE approved, and the patents are granted in Canada, China, EU, Korea, Japan, Taiwan, and USA.



### Fully Automated

- Simultaneous processing and purification of DNA, RNA samples
- Automation of complicated manual steps
- Independent temperature control modules ensure stability of purification performance



### Patented Whirl Stirring Mixing Technology

- Processing volume up to 1,600µl
- Spin tips stir magnetic beads at speeds up to 3000 rpm
- Effective prevention of aerosol cross contamination



### Easy Operation

- Intuitive user interface and easy menu navigation
- Parameters can be fine-tuned based on experimental requirements



### Time Saving

- High-throughput: 96 samples can be processed simultaneously
- High stirring efficiency with variable speeds for considerable time savings

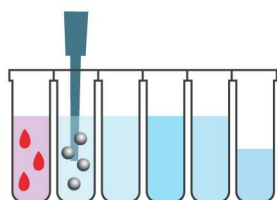


## Principle of Nucleic Acid Extraction

● Sample   ● Bead   ● DNA

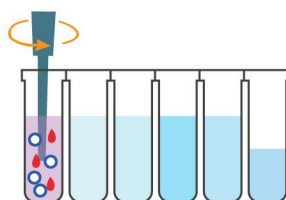
### Step 1

Activate beads



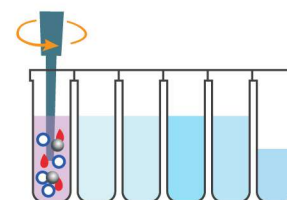
### Step 2

Mix sample with Lysis Buffer



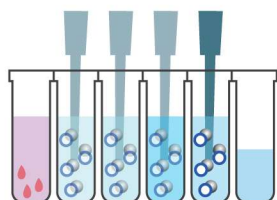
### Step 3

Mix sample with beads



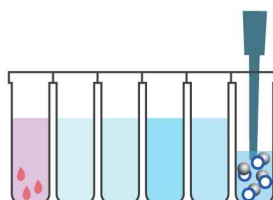
### Step 4

Wash bead-DNA from #2 ~ #5 well



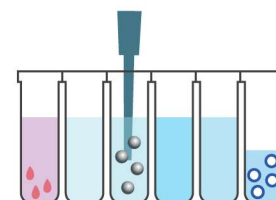
### Step 5

Elute DNA



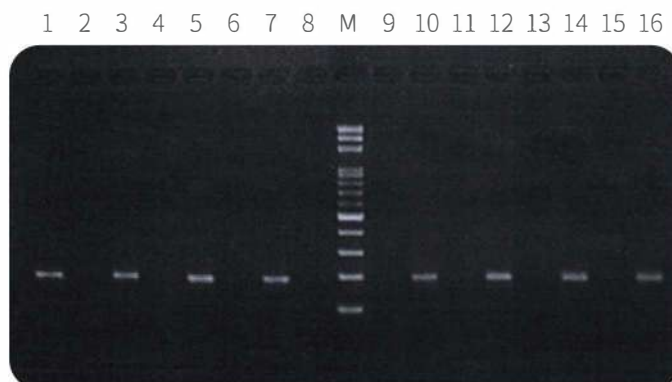
### Step 6

Release beads



## Performance

- ✓ The coefficient of variation of nucleic acid extraction concentration is less than 5%
- ✓ High consistency
- ✓ No cross-contamination to neighbor well  
Experimental results ▶



## Specification

|                    |                    |
|--------------------|--------------------|
| Model              | Maelstrom™ 9610    |
| Run Time           | 25~60 min          |
| Max. Throughput    | 96 samples per run |
| Weight (NW)        | Approx. 95 kg      |
| Dimensions (WxDxH) | 87x57.5x70cm       |
| Power Supply       | AC 220-240 V       |
| Processing volume  | 50μl - 1,600μl     |
| Magnetic Rod       | >3,900 gauss       |
| Spin Speed         | up to 3,000 rpm    |
| Temp control       | 4 set              |
| Heating Block      | Yes (4 pcs)        |
| Heating            | RT~130°C           |
| UV & HEPA          | Available          |
| Display            | 7-inch touchscreen |

## Patents

|        |               |
|--------|---------------|
| USA    | US09616398B2  |
| EU     | EP2937136B1   |
| Canada | CA2862946     |
| Japan  | JP6151735B2   |
| Korea  | KR101696517B1 |
| China  | CN104971638B  |
| Taiwan | TWI526245B    |

## Reagent kits

| Sample   | Description                          | Test | Reference No. | Thomas No. |
|----------|--------------------------------------|------|---------------|------------|
| Blood    | TANBead Blood DNA Auto Plate         | 96   | W611A46       | 301186     |
| Plant    | TANBead Plant DNA Auto Plate         | 96   | W613A46       | CHM03V734  |
| cfDNA    | TANBead OptiPure cfDNA Auto Plate    | 96   | W61CA46       | CHM03V748  |
| Virus    | TANBead OptiPure Viral Auto Plate    | 96   | W665A46       | CHM03V744  |
| Tissue   | TANBead Tissue DNA Auto Plate        | 96   | W612A46       | 301190     |
| Bacteria | TANBead Gram Bacteria DNA Auto Plate | 96   | W61GA46       | CHM03V740  |
| Stool    | TANBead Stool Cell DNA Auto Plate    | 96   | W6SCA46       | CHM03V750  |



## Consumables

| Images | Product Name       | Format                  | Description                                                                                                                                                      | Ordering No.  |
|--------|--------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
|        | 96 deep well plate | Auto Plate              | <ul style="list-style-type: none"> <li>Processing volume 50µl-1,600µl</li> <li>Widely used for molecular diagnostics</li> </ul>                                  | 083.MWP01.20X |
|        | 96-spin tips box   | Auto Plate              | <ul style="list-style-type: none"> <li>96 pcs of Medium(pen-shape) spin tips in one box</li> </ul>                                                               | 083.MSP01.20X |
|        | 6 tube B           | Auto Tube               | <ul style="list-style-type: none"> <li>Special Package for single or small number of tests</li> <li>Minimal consumable waste</li> <li>No reagent loss</li> </ul> | 104143        |
|        | 16-Base B          | Auto Tube               | <ul style="list-style-type: none"> <li>Incorporate with 6 tube B for small number of tests</li> </ul>                                                            | 104026        |
|        | Spin tips          | Auto Plate<br>Auto Tube | <ul style="list-style-type: none"> <li>A unique design to maximize mixing efficiency</li> </ul>                                                                  | 056.CSM03.101 |

