Set blocks in the sample tray. On the operation panel, designate the blocks to be sectioned, enter the sectioning parameters and start the machine.

Consecutive section images shows that all sections are stained equally. The mounting positions are also nearly uniform.

Auto Blade Changer

Detects the surface angle of the block relative to the cassette and the height of the block to automatically adjust the tilt angle and height of the cassette. This avoids the risk of accidents that could occur during manual blade replacement procedures.

Automatic Orientation Function

The touch sensor measures surface angle and height. Using information about surface angle and height, the machine tilts the block until it is parallel to the cutting line.

Consecutive section images are used to confirm that all sections are stained equally. The mounting positions are also nearly uniform.
At Dainippon Seiki, we develop machines that automate the sectioning process involved in slide preparation. In addition to being equipped with conventional microtome functions, our AS-410 Auto Slide Preparation System completely automates the entire sectioning process, including block feeding. The system can be customized by combining different units. It comes with an automatic blade replacement function as standard to ensure safety during sectioning, and a mechanism that removes or realigns from sections to simplify everyday maintenance.

Other optional features are available. That reads barcode information on cassette slides and prints them on slides, and a function that automatically recognizes tissue surface during feasting. The AS-410 makes slide preparation more efficient and offers a wider range of operation capabilities such as digitizer operation.

**Features**

- **Auto Blade Change**
  - Comes standard with an automatic blade replacement function to ensure safety.
  - Comes standard with an automatic filling function.
  - Automatic sample management reduces human error and speeds up operation.
  - Automatic blade replacement function automatically recognizes the current blade (optional).
- **Mounting Uniformly Function**

**Optional Features**

- **Sample Identification Function**
  - Reads barcodes on cassette slides and prints it onto slides.
- **Barcode Detection Function**
  - Slices the sample information on the cassette slide.
  - Prints the barcode information onto the slide.
  - The block is on the sectioning position on the slide.

**Example Systems**

- **System 1**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg
  - Installation capacity: 1,600 kg

- **System 2**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg
  - Installation capacity: 1,600 kg

- **System 3**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg
  - Installation capacity: 1,600 kg

**Specifications**

- **Drying Unit**
  - Weight: 800 kg
  - Installation capacity: 1,600 kg

- **Slide Feeding and Drying Unit**
  - Weight: 800 kg
  - Installation capacity: 1,600 kg

**Installation Space**

- **System 1**
  - Width: 2,600 mm
  - Depth: 1,500 mm
  - Height: 1,800 mm

- **System 2**
  - Width: 2,600 mm
  - Depth: 1,500 mm
  - Height: 1,800 mm

- **System 3**
  - Width: 2,600 mm
  - Depth: 1,500 mm
  - Height: 1,800 mm

**Rough Surface Detection**

- The machine automatically detects roughed blocks using a camera and analytical technologies. Note: It may not be possible to use this feature when a block has been cut transversely or in an abnormal manner.

- **All Surface Detection**

**Expander-Slicer Unit**

- 2 Different and combinations are available to meet your needs. The system can be configured with block feeding with 6-block, 24-block, or 96-block capacities, and slide feeding and drying/storage units with 100-slide and 400-slide capacities.

**Versatile Storage Unit**

- The block feeding unit of 96-block capacity can be used for in-house storage. The storage capacity will depend on the number of blocks used.

**Installation Area**

- **System 1**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg

- **System 2**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg

- **System 3**
  - Minimum weight: 1,280 kg
  - Maximum weight: 3,680 kg
  - Unit weight: 800 kg

**Mounting onto slides**

- Smoothing value for mounting onto slides with 100-slide and 400-slide capacities.

**System 4**

- **Auto Sample Management**
  - Comes standard with an automatic sample management function to ensure safety.
  - Automatic sample management reduces human error and speeds up operation.
  - Automatic sample management reduces human error and speeds up operation.
  - Automatic sample management reduces human error and speeds up operation.

**System 5**

- **Automatic Barcode Detection Function**
  - Reads barcodes on cassette slides and prints it onto slides.
  - Slices the sample information on the cassette slide.
  - Prints the barcode information onto the slide.
  - The block is on the sectioning position on the slide.
**Basic Operation and Sectioning Performance**

- Set section thickness: Adjust the section thickness to the desired level.
- Water pressure and flow: Control the water pressure and flow rate for optimal sectioning.
- Sectioning completion: Indicate when the sectioning process is complete.
- Consecutive section images: Compare the staining of consecutive sections to ensure uniformity.

**Standard Functions**

- Auto thickness adjustment: Automatically adjusts the section thickness.
- Automatic orientation function: Adjusts the orientation of the block to ensure consistent sectioning.
- Residual vacuuming function: Removes any remaining tissue or residue from the block.

**Optional Features**

- Automatic thickness adjustment:
  - Set blocks: Enter parameters
  - Cutting line: Adjust the cutting line

**Specifications**

- Model: AS-410
- Sectioning capacity: 15.11.PP
- Sections range: 1-100
- Sectioning speed: 0-100
- Sectioning method: Frontal, frontal or oblique, horizontal, vertical, or oblique

**Optional Features (Continued)**

- Automatic thickness adjustment:
  - Set blocks: Enter parameters
  - Cutting line: Adjust the cutting line

**Supplies**

- Consumables:
  - Block cassettes
  - Slide cassettes
  - Coverslips
  - Microscope slides

**Contact Information**

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  - Fax: +81 (0)6-6349-4878
  - Website: http://www.dainippon.co.jp/en/index_e.html

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**Dainippon Seiki Co., Ltd.**

**Auto Slide Preparation System**

**AS-410**

**Specifications**

- Model: AS-410
- Sectioning capacity: 15.11.PP
- Sections range: 1-100
- Sectioning method: Frontal, frontal or oblique, horizontal, vertical, or oblique

**Optional Features**

- Automatic thickness adjustment:
  - Set blocks: Enter parameters
  - Cutting line: Adjust the cutting line

**Supplies**

- Consumables:
  - Block cassettes
  - Slide cassettes
  - Coverslips
  - Microscope slides
Fully automated sectioning from paraffin blocks to glass slides.

**Features**

- Auto Slide Change
- Automatic Orientation Function
- Sample Identification Function
- Automatic Runtime Detection
- Extension Shelves Available
- Block Surface Temperature Detection Function

**Optional Features**

- Reads barcodes on cassettes and prints it onto slides
- Expansion Units Available
- System 3
- System 4

**Example Systems**

- System 1: 2,400x700x1,390 mm, approx. 800 kg
- System 2: 2,400x700x1,390 mm, approx. 800 kg
- System 3: 2,400x700x1,390 mm, approx. 800 kg
- System 4: 2,400x700x1,390 mm, approx. 800 kg

**Block Feeding and Storage Unit Combinations**

- 6-block
- 9-block
- 96-block

**Dimensions (W×D×H in mm)**

- 1,600
- 450
- 450

**Weight**

- 50 kg

**Area of maximum tissue embedding**

- 1,600

**Block Surface Temperature**

- The block surface temperature is measured before sectioning and the block is only sectioned if it is at or below the set temperature.

**Block Surface Temperature Detection Function**

- Temperature sensor

**Automatic Surface Detection**

- Analyzes images to calculate the area of maximum tissue embedding (theoretical value).

**System 1**

- System 2
- System 3
- System 4

**Auto Surface Detection**

- Calculates the area based on the surface before sectioning and captures images.

**Temperature Sensor**

- Monitors the block temperature during sectioning to ensure accuracy.

**Automatic Orientation Function**

- Adjusts the block orientation based on the images captured during sectioning.

**Fully automated sectioning**

- Combines with an automatic slide replacement function to ensure safety.

**Software**

- Optional features include a barcode reader that reads barcodes on cassettes and prints it onto slides.

**System 1**

- System 2
- System 3
- System 4

**Optional Features**

- Optional features include a barcode reader that reads barcodes on cassettes and prints it onto slides.

**System 1**

- System 2
- System 3
- System 4
Fully automated sectioning from paraffin blocks to glass slides.

At Danipan Seki, we develop machines that automate the sectioning process involved in slide preparation. In addition to being equipped with conventional microscope functions, our AS-410 Auto Slide Preparation System completely automates the entire sectioning process, including block feeding. The system can be customized by combining different units. It comes with an automatic blade replacement function as standard to ensure safety during sectioning, and a mechanism that removes unsectioned sections to simplify everyday maintenance.

Optional Features

- **Auto Block Change**
- **Automatic Orientation Function**
- **Automatic Identification Function**
- **Automatic Alarm Detection**
- **Automatic Buffer Detection**
- **Block Identification Detection Function**
- **Hand Block Surface Temperature Detection Function**
- **3D Block Surface Temperature Detection Function**
- **Auto Blade Changer**
- **Auto Surface Detection**
- **Auto Block Surface Identification**

**Features**

- Comes standard with an automatic blade replacement function to ensure safety.
- Comes standard with an automatic tilting function.
- Automatic sample management reduces human error (optional).
- Automatic buffer detection function automatically recognizes the absence of buffer (optional).
- Expansion units offer high scalability (optional).
- Provided as a standard function, the system ensures parallelism for optimal sectioning.
- Automatic block surface temperature detection function automatically recognizes the absence of buffer (optional).

**Example Systems**

- **System 1**: 1,800×700×1,980mm, approx. 800 kg
- **System 2**: 1,800×700×1,980mm, approx. 800 kg
- **System 3**: 1,800×700×1,980mm, approx. 1,000 kg

Note: 100- and 400-slide feeding units require no change to the system designation.
### Basic Operation and Sectioning Performance

- The machine can produce sections with almost no variation in thickness because it maintains the sectioned area within a set temperature range and cuts with a set timing.

#### Optional Features

- **Auto Blade Changer**
- **Automatic Orientation Function**
- **Section Residue Vacuuming Function**

#### Standard Functions

- **Automatic cutting and start**
- **Auto wash accessories**
- **Auto wash accessories**
- **Auto wash accessories**

#### Operating Panel

- **Sectioning completion**
- **Sectioning completion**
- **Sectioning completion**
- **Sectioning completion**

### Specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
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<tbody>
<tr>
<td>Model</td>
<td>AS-410</td>
</tr>
<tr>
<td>Motor</td>
<td>AC motor</td>
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<tr>
<td>Rail travel capacity</td>
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<td>Blade size</td>
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<td>Blade thickness</td>
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<tr>
<td>Sectioning precision</td>
<td>±10%</td>
</tr>
<tr>
<td>Mounting position</td>
<td>±10%</td>
</tr>
</tbody>
</table>

### Optional Features

- **Auto Blade Changer**
- **Automatic Orientation Function**
- **Section Residue Vacuuming Function**

### Supplies

- **Replacement blade cassette installation**
- **Supplies**
- **Supplies**
- **Supplies**
- **Supplies**

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**Notice**

- **Contact**
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