

## XTRIM

Grinding Machine for  
Concrete Cylinders  
and Cubes



## A new approach to Sample Preparation

XTRIM, our fully automatic grinding machine has been designed with accuracy in mind, to ensure the precise grinding of concrete cylinders and cubes. Capable of handling multiple samples with different shapes and sizes, it also guarantees the repeatability in specimen preparation. XTRIM is built with a completely enclosed structure, which not only ensures safety but also prevents dust dispersion, maintaining a clean working environment and limited noise.

Intuitive 7" touchscreen capacity color display for easy setting grinding and polishing programs coupled with physical buttons to make start/stop easier

Easy clamping system for sample positioning, holding and automatic movement of the cradle

Grinding performed with water-cooled diamond disk for efficient material removal and smooth finishing



Optimized for grinding multiple samples with different shapes and sizes

Protective cover equipped with an electrical safety lock prevents accidental door opening while the grinding wheel is in motion

Integrated water recirculation system eliminates the need for an external water supply, reducing installation requirements and maintenance

### Key Features

#### High-Capacity & Versatile

- Suitable for cylinders (Ø38-160 mm) and cubes (100-150 mm)
- Multi sample cradles
- Customizable grinding programs
- Water-cooled diamond grinding wheel for precise finishing
- Adjustable grinding parameters: wheel speed, lateral pass speed, carriage approach speed, finishing time
- PLC-controlled grinding cycle with variable speeds for roughing and finishing

#### Robust & Safe

- Fully enclosed system preventing dirt splashes and dust
- Mechanical movement of the diamond disk and sample tray with minimal maintenance
- Integrated water recirculation system, no need for external water supply
- Compact design and safety lock system prevents door opening during operation

# Precision and Efficiency Combined

Designed for demanding laboratory environments, our grinding machine ensures high reproducibility and minimal operator effort. With its automated grinding cycles, multiple samples can be processed simultaneously, increasing efficiency without losing precision. The enclosed structure not only enhances safety but also reduces contamination risks, making it ideal for rigorous Quality Control applications.

## Technical Specifications

| Feature                    | Details                                                                                                                        |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Grinding Capacity          | Cylinders: Ø100-160 mm (cradle included), Ø50-100 mm and Ø38-50 mm (cradle as opt.)<br>Cubes: 100-150 mm side (cradle as opt.) |
| Max Sample Length          | 320 mm                                                                                                                         |
| Operation                  | Physical buttons + 7" touchscreen<br>(2 easy clamps included with the equipment)                                               |
| Clamping System            | Easy clamping with adjustable crosshead                                                                                        |
| Water System               | Integrated 45L tank with recirculating pump and dust decanting system                                                          |
| Safety                     | Protective cover with electrical lock                                                                                          |
| Grinding wheel             | Ø220 mm                                                                                                                        |
| Weight                     | 295 kg                                                                                                                         |
| Overall Dimensions (WxDxH) | 900x800x1600 mm<br>(1820 with open door)                                                                                       |

### Model Available

**55-C0203**  
XTRIM  
220-240V / 50-60Hz / 1ph

**55- C0203/Z**  
XTRIM  
110V / 60Hz / 1ph

### Accessories

**C0203/1**  
Cradle for up to 3 cylinders (Ø50-100 mm)

**C0203/2**  
Cradle for up to 5 cylinders (Ø38-50 mm)

**C0203/3**  
Cradle for cubes 100 mm and 150 mm

**C0203/6**  
Lever clamp

**C0203/8**  
Spare grinding wheel

**Note:** add the correct number of clamps according to the number of samples hosted by the cradle. Two easy clamps are already included with the equipment.



Easy clamping system for sample holding



Detail of the grinding chamber with automatic cradle



Frontal panel with PLC and physical buttons

## CONTROLS Customer Care

As one of the longest established manufacturing companies in the world of Construction Materials Testing solutions, we are dedicated to supplying high quality, accurate, affordable, easy to use systems.

As a valued customer of CONTROLS, you will receive continuous, expert support and advice for your equipment. Furthermore, we can offer full installation and training in the correct operation of your CONTROLS equipment.

For support from our expert Customer Care Team, contact your local CONTROLS office / distributor or email [customercare@controls-group.com](mailto:customercare@controls-group.com).

For more information, please visit [www.controls-group.com](http://www.controls-group.com).

---

## CONTROLS

### Italy (HEAD OFFICE)

t +39 02 92184 1

f +39 02 92103 333

e [sales@controls-group.com](mailto:sales@controls-group.com)

[www.controls-group.com](http://www.controls-group.com)

### France

[info-fr@controls-group.com](mailto:info-fr@controls-group.com)

### Mexico

[info-mx@controls-group.com](mailto:info-mx@controls-group.com)

### Poland

[info-pl@controls-group.com](mailto:info-pl@controls-group.com)

### UK

[info-uk@controls-group.com](mailto:info-uk@controls-group.com)

### USA

[info-usa@controls-group.com](mailto:info-usa@controls-group.com)