

# NEW CHARPY IMPACT TESTING MACHINE

## 70-C9913/XX

### Description:

The Charpy impact testing machine is designed to measure the impact resistance of metals and other materials.

This model features fully enclosed protection, an intuitive digital touchscreen and semi-automatic operation. Specimen data and other information is entered via digital touchscreen display, then the impact hammer is automatically lifted up and set in position for test execution. Specimen is positioned with centering pliers on the dedicated supports, then safety hatch is closed and hammer released. Experimental data and graphs are automatically saved on the firmware and can be exported on software. The machine is integrated with an automatic broken specimen collection system. Every machine includes impact hammer of the desired energy (300J, 450J or 750J), R2 impact striker, pliers for centering the specimen in position and specimen supports.



### Features:

- Wide digital touchscreen display.
- One-body frame design of pendulum seat and column, ideal for high stability and rigidity.
- High-rigidity pendulum arm prevents axial and transverse vibrations.
- Simple interchange of impact hammers to satisfy different impact energy requirements.
- Electromagnetic clutching and release of pendulum hammer to damp harmful vibrations.
- High-rigidity protective enclosure with safety hatch. When hatch is open most functions are disabled.
- Motorized conveyor belt for broken specimen collection.

### Models:

- **C9913/30** Charpy pendulum impact testing machine, maximum impact energy 300J.
- **C9913/45** Charpy pendulum impact testing machine, maximum impact energy 450J.
- **C9913/75** Charpy pendulum impact testing machine, maximum impact energy 750J.

### Technical specifications:

| Model                                    | C9913/30                                 | C9913/45                                 | C9913/75                                 |
|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| Maximum impact energy                    | 300J                                     | 450J                                     | 750J                                     |
| Optional pendulums                       | 150J                                     | 150J - 300J                              | 150J - 300J - 450J - 600J                |
| Impact speed                             | 5.24m/s                                  | 5.24m/s                                  | 5.24m/s                                  |
| Angle resolution                         | 0.025°                                   | 0.025°                                   | 0.025°                                   |
| Pendulum shaft and impact point distance | 750mm                                    | 750mm                                    | 750mm                                    |
| Striking angle                           | 150°                                     | 150°                                     | 150°                                     |
| Support span                             | 40mm                                     | 40mm                                     | 40mm                                     |
| Radius of support edges                  | 1.5mm                                    | 1.5mm                                    | 1.5mm                                    |
| Tapering angle of support edges          | 11°                                      | 11°                                      | 11°                                      |
| Striking edge radius                     | 2mm                                      | 2mm                                      | 2mm                                      |
| Striking thickness                       | 16mm                                     | 16mm                                     | 16mm                                     |
| Striking tip angle                       | 30°                                      | 30°                                      | 30°                                      |
| Standard specimen sizes                  | 55x10x10mm<br>55x10x7.5mm<br>55x10x5.5mm | 55x10x10mm<br>55x10x7.5mm<br>55x10x5.5mm | 55x10x10mm<br>55x10x7.5mm<br>55x10x5.5mm |
| Power supply                             | 380VAC 50Hz 3Ph                          | 380VAC 50Hz 3Ph                          | 380VAC 50Hz 3Ph                          |
| Overall dimensions                       | 2220x2220x900mm                          | 2220x2220x900mm                          | 2220x2220x900mm                          |
| Net weight                               | 1000kg                                   | 1000kg                                   | 1000kg                                   |

### Accessories and spare parts:

- **C9913/H15** Charpy pendulum impact hammer 150J.
- **C9913/H30** Charpy pendulum impact hammer 300J.
- **C9913/H45** Charpy pendulum impact hammer 450J.
- **C9913/H60** Charpy pendulum impact hammer 600J.
- **C9913/SR2** Charpy pendulum R2 impact striker, striking edge radius 2mm, UNI EN 10045-2 and ISO 148.
- **C9913/SR8** Charpy pendulum R8 impact striker, striking edge radius 8mm, ASTM E23.
- **C9913/PLR** Spare centering pliers for Charpy specimens.
- **C9913/SPT** Spare Charpy specimen supports.
- **C9913/RCH** Refrigeration chamber for Charpy specimen, temperature range -80°C up to 30°C.

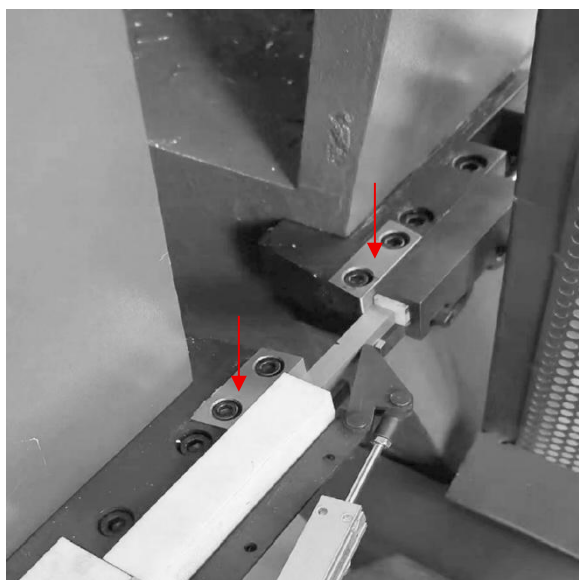
### Reference Standards:

- ASTM E23
- UNI EN 10045-2
- ISO 148
- GB/T 12778
- GB/T 229
- GOST 9454

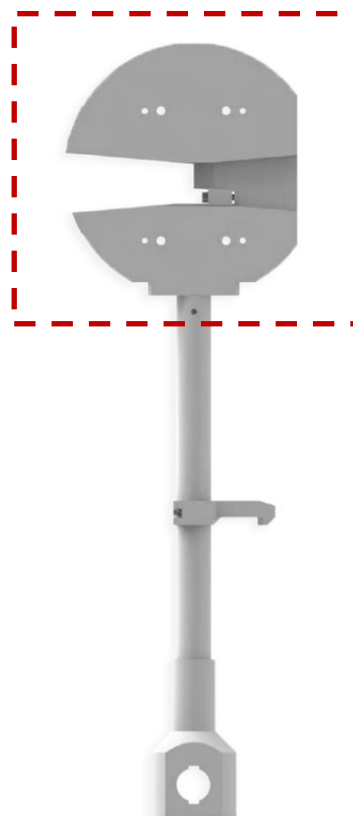
### Accessories Images:



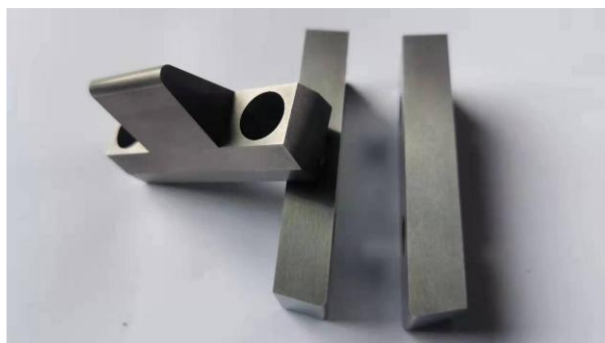
**C9913/PLR** centering pliers for Charpy specimens



**C9913/SPT** spare Charpy specimen supports



**C9913/HXX** Charpy pendulum impact hammer (150J, 300J, 450J, 600J)



**C9913/SR2** and **C9913/SR8** impact strikers  
with 2mm and 8mm edge radius respectively



**C9913/RCH** Refrigeration chamber for Charpy  
specimens, temperature range -80°C up to 30°C.