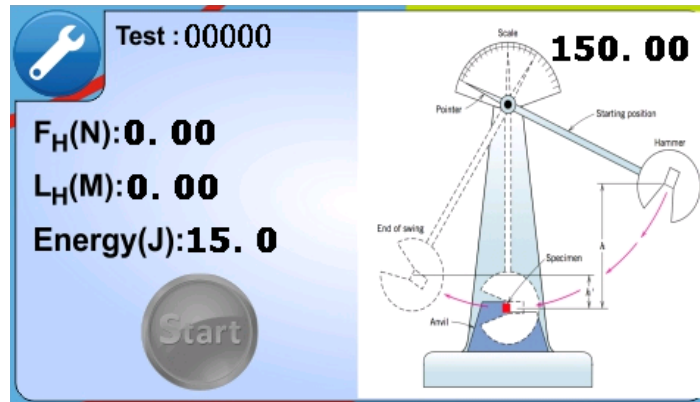

Charpy Impact Test Procedure

By connecting the device to power and turning on the power switch, the front panel of the device will light up, and the operating system will start.

After the operating system is fully loaded and the system is ready for operation, the following screen will be displayed.



On the displayed screen, a schematic of the device and some test parameters are shown, which include:

Test: Displays the total number of tests performed with the device.

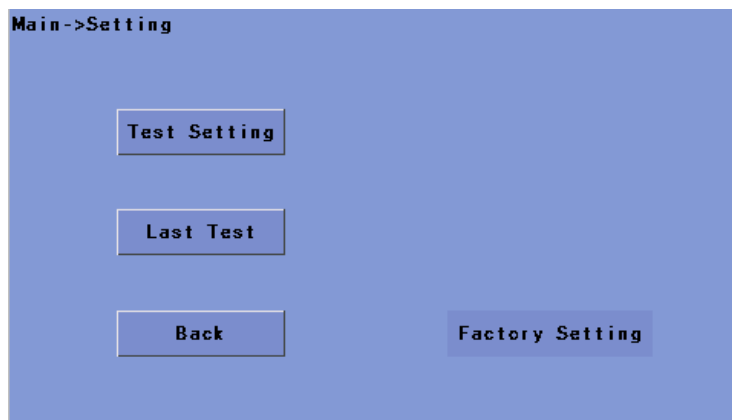
FH (N): The force in the horizontal position at a specific distance, measured in Newtons.

LH (M): The specified distance that determines FH when the pendulum is in a horizontal position, measured in meters.

Energy (J): The energy of the pendulum at the initial angle (release), measured in joules.

Angle Gauge: Located in the upper right corner, it displays the pendulum angle in degrees.

To adjust the values and select the pendulum, you need to enter the settings menu. To do this, tap the wrench icon at the top left of the screen.



This menu consists of three sections, which are described as follows:

1. Test Setting

Main->Setting->Test Setting		
Test Type:		
<input checked="" type="radio"/> CHARPY	<input type="radio"/> CHARPY/TENSILE	<input type="radio"/> IZOD
Pendulum:	- - -	
F _H (N):	0.00	Friction(J): 0.05
L _H (N):	0.00	Width: 0.01
L _I (N):	0.00	Thickness(mm): 0.01
Start Angle:	0.00	
Cancel		OK

In this menu, the operator selects the appropriate values based on the sample and standard.

Test Setting

- **Test Type:** Depending on the test type, the operator must choose one of the following options: **CHARPY**, **CHARPY/TENSILE**, **IZOD**.
- **Pendulum Selection:** If ordered from the manufacturer, the operator can select the required pendulum for the test by clicking on any of the values in the left box to enter the pendulum menu.
- **Friction (J):** To obtain accurate results, the pendulum friction must be entered in joules. To determine this parameter, after mounting and selecting the pendulum, perform a test run without a sample. The displayed values represent the friction of the device's mechanical components.
- **Width:** The operator enters the sample width in millimeters.
- **Thickness (mm):** The operator enters the sample thickness in millimeters.

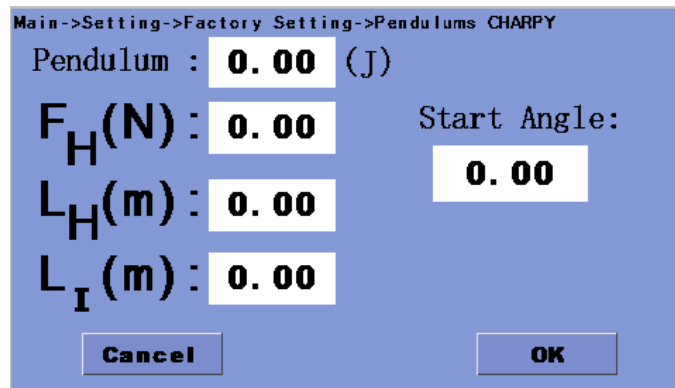
2. Last Test:

Main->Setting->Last Test		
Absorbed Energy:	500 KJ /	
Impact Strength:	500 KJ / m2	
First Angle(deg):	000.0	
End Angle(deg):	13.5	
Impact Velocity(m/s):	3.45	
Energy (J):	15.00	
OK		Print

In this menu, the results of the last test are displayed. This menu automatically appears on the screen after the test is performed. To print the test results, the operator can enter the **Print Menu**.

On this page, the pendulums ordered from the manufacturer are entered into the system.

To **save a pendulum**, click on one of the parameters in each row to open the following menu.



The screenshot shows a software menu titled "Main->Setting->Factory Setting->Pendulums CHARPY". The menu contains the following parameters and values:

Parameter	Value
Pendulum (J)	0.00
F _H (N)	0.00
L _H (m)	0.00
L _I (m)	0.00
Start Angle	0.00

At the bottom of the menu, there are two buttons: "Cancel" and "OK".

These values correspond to the pendulum parameters:

- **Pendulum:** The energy of the pendulum in joules.
- **F_H:** The force at a 90-degree angle relative to the bottom of the device.
- **L_H:** The distance from the pendulum's support shaft to the point where the force is calculated.
- **L_I:** The distance from the pendulum's support shaft to the impact point.
- **Start Angle:** The release angle of the pendulum, measured in degrees.

After entering the required values, press the **OK** button to save the pendulum.

Note: For the device to function correctly, it must be precisely leveled at the installation location. This can be achieved using digital leveling tools.

Depending on the test type, a specific sample must be prepared for the corresponding test.