



Three-axis automatic falling ball impact testing machine Product Specifications

Model: ID6150

Equipment use:

This machine adopts PLC control mode. The suction nozzle uses vacuum negative pressure to clamp steel balls of different sizes. Press the drop button, and the suction nozzle clamps and releases the steel ball instantly. The steel ball will undergo a free fall test, impact the surface of the sample, and detect the sample. Impact resistance, suitable for impact testing of mobile phones, tablets, audio and other electronic products.

Features:

- The equipment uses a vacuum adsorption method to absorb steel balls, which is more accurate than the mechanical clamping method. At the same time, it is equipped with an integrated high-speed X-Y platform, which can be programmed to implement automatic multi-point cycle testing to improve testing efficiency.
- The X, Y, and Z axes are driven by Japanese Panasonic servo motors and precision ball screw transmissions, which are low-noise and durable.
- The language can be switched between Simplified Chinese and English operating interfaces, which is suitable for global customers.
- The software operation interface is simple and easy to operate. The program is designed with a fool-proof function to ensure the accuracy and safety of each test.
- Unique automatic reset and automatic pickup of dropped balls enable unattended and automatic cycle testing. According to the conventional test setting parameters, when starting the operation, the steel ball impacts the sample. The steel ball bounces up and is clamped by the splint to prevent secondary impact on the sample. When the XY platform is positioned to the position of the cone hole and the ball, Release the cylinder and put down the steel ball. The steel ball will automatically reset to the center of the tapered hole. After the Z-axis descends to pick up the ball, the cycle will be executed.
- The whole machine adopts a floor-standing structure design, and the operation panel can be rotated to bring the operator closer to the test area and make sample loading and unloading more convenient.
- The equipment provides a complete fault detection mechanism of operating status and provides corresponding error message prompts. It detects and handles servo faults, sensor faults, X, Y, Z axis limit faults and other phenomena in real time to maximize personal protection. and equipment safety.

- The equipment is equipped with an infrared laser function, which can accurately locate the landing point, making it convenient for testers to accurately determine the test location.
- The test recipe is stored in the system's ROM, which is simple and convenient to retrieve and change the test position.

Technical Parameters:

Parameters	Value
Steel ball specifications:	20g、500g or specify
Acrylic ball specifications:	160gor specify
Test height:	50-1200mm
Height tolerance:	±1mm
X-axis travel:	420mm
Y-axis travel:	300mm
X-axis speed range:	1~100mm/s
Y-axis speed range:	1~100mm/s
Z-axis speed range:	1-200mm/s
Equipment size:	1140×1200×2700mm
Equipment weight:	1140×1200×2700mm
Working power supply	AC220V 2A 50Hz
Equipment power:	1200W

Device control interface:



McgsPro 模拟器

2023-07-22 14:27:41

全自动钢球冲击试验机

项目	数值	项目	数值
已测次数	0次	测试次数设定	0次
落球冲击高度	0mm	产品厚度	0.0mm
球体直径	63.5mm	底板厚度	0.0mm
接球延时补偿	0ms	安全门状态	关闭中
当前选择配方	0	当前执行点位	0# / 0#

激光OFF 复位

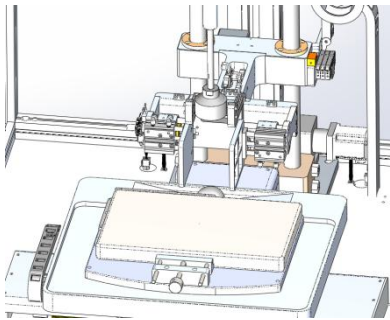
GO 多点模式

停止 启动

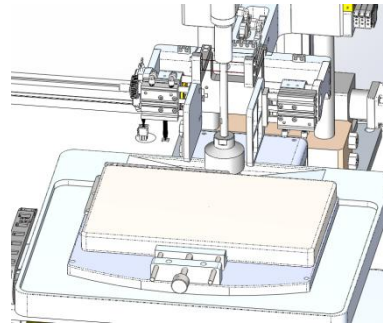
清零

主界面 参数设置 配方编辑 帮助界面

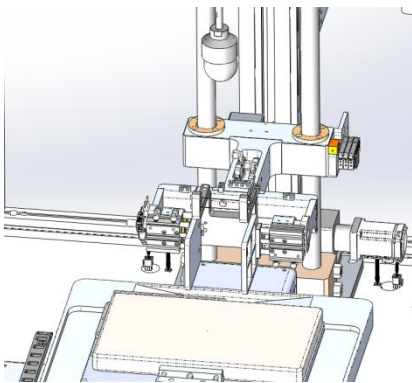
Action flow chart:



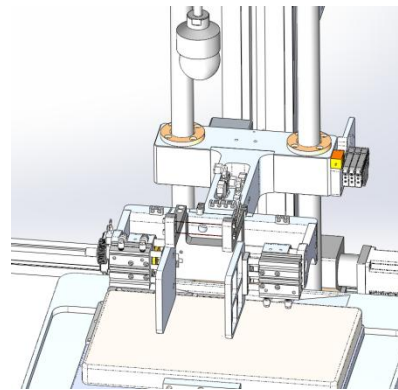
1. Clamp the sample and place the ball at the cone hole



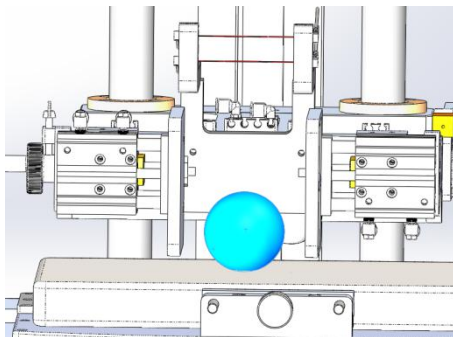
2. The Z-axis descends and absorbs the steel ball



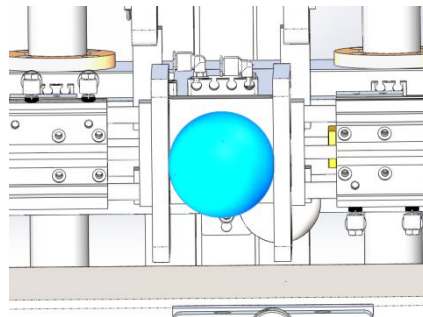
3. Pick up the steel ball and rise to the set impact height



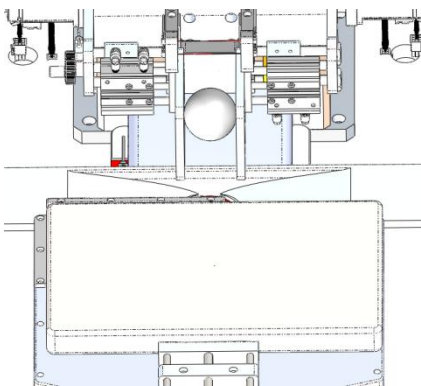
4. The X and Y platforms are positioned at the impact point



5. The ball falls and hits the point of impact



6. The moment the ball bounces, the cylinder stretches out to clamp the steel ball to prevent secondary impact.



7. After the XY platform is positioned to the position of the taper hole and is coaxial with the ball, the cylinder is released and the steel ball is lowered. The steel ball automatically resets to the center of the taper hole. After the Z-axis drops to pick up the ball, the cycle is executed.