

Case studies in welding technology

How ultrasonic welding works

焊接技术中的应用案例 – 超声焊接是如何工作的

Ultrasonic welding has its unique advantages over traditional welding techniques. When the solder is heated and then melted, the ultrasonic helps to remove the air between the melted solder and the surface and to form a robust structure.

与传统的焊接技术相比，超声焊接具有其独特的优势。当焊料被加热，随后融化，超声波能有效去除焊料与焊接表面之间的空气，并促进形成坚固的焊接结构。

However, without a complete understanding of the entire welding process, it is difficult to push this promising and widely used technology to new heights.

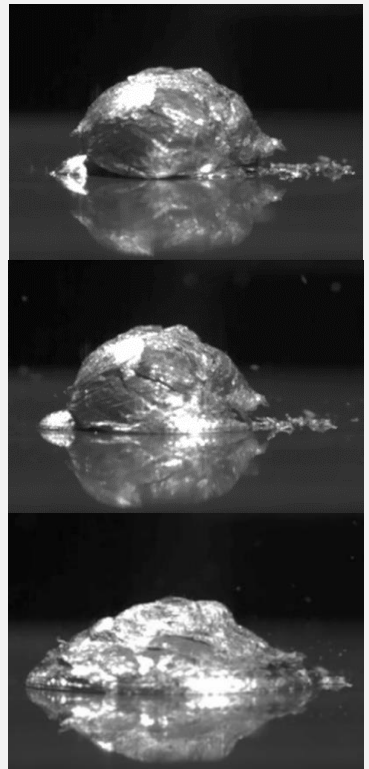
但若缺少对整个焊接过程的完整认识，是难以将这种充满前景且应用广泛的技术推到新的高度。

The surface and state of solder show the features of the procedure. The melted solder changes rapidly. pco.dimax cameras are capable of recording the details of such fast changes due to their high sensitivity so the state of the melted solder is presented clearly in the captured images.

融化的焊料迅速变化，需要利用像 PCO.dimax 那样具备高灵敏度的高速相机，搭配合适的照明进行记录。焊料表面的细节能被清晰地捕捉和展现。



View of the experiment
实验场景



Changes of the melted solder
焊料的变化