



SHANGHAI DRWO TECHNOLOGY CO., LTD.

Metal Mesh Touch Sensor Technology

Second-Generation Metal Mesh Capacitive Touch Film

PRODUCT INTRODUCTION | MAY 2019

Company and Industry Background

Since 2015, Shanghai DRWO Technology Co., Ltd. has developed metal mesh touch-sensing technology and originated the interlocking mesh geometry that became a widely adopted reference pattern in the industry.

Invention patent No. 201510059688.5. This geometry also forms part of the DRWO logo. After launch, the pattern gained strong market acceptance and was widely imitated, becoming a common template for industry products.

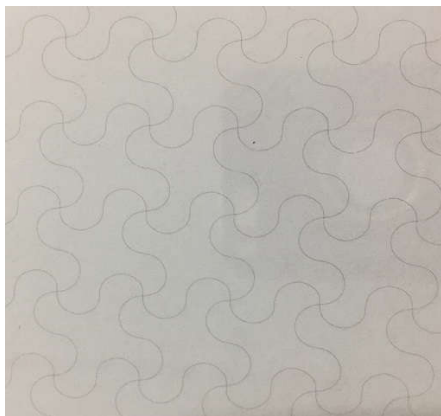


Figure 1 DRWO product



Figure 2 Industry product

Focused Expertise, Open Controller Ecosystem

- DRWO believes specialized work is best handled by specialists. The company focuses on metal mesh film sensors.
- For touch-controller boards, DRWO cooperates with established controller and chipset partners.
- Early cooperation with Shanghai Silead supported validation and testing of fundamental data and theory.
- Later cooperation with Taiwan-based SiS helped confirm controller-board standardization for metal mesh touch film.
- As the market expanded, more controller-board suppliers entered the industry.

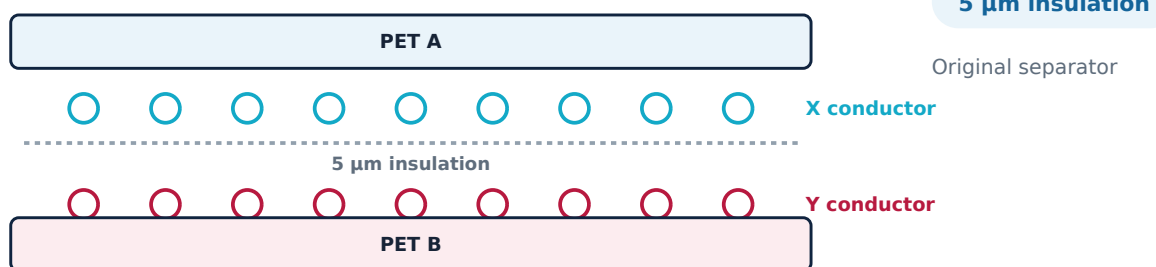
A More Robust Three-PET-Layer Stack

Shanghai DRWO formally released the new generation in May 2019.

The second-generation metal mesh capacitive touch film introduced two major improvements. The first was a redesigned material stack.

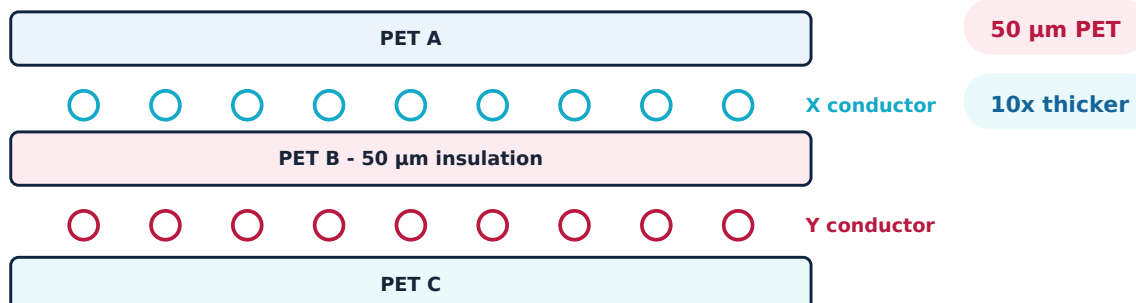
FIRST-GENERATION STRUCTURE

PET / X conductor / 5 μm insulation / Y conductor / PET



SECOND-GENERATION STRUCTURE

PET / X conductor / PET / Y conductor / PET



Why the Structural Change Matters

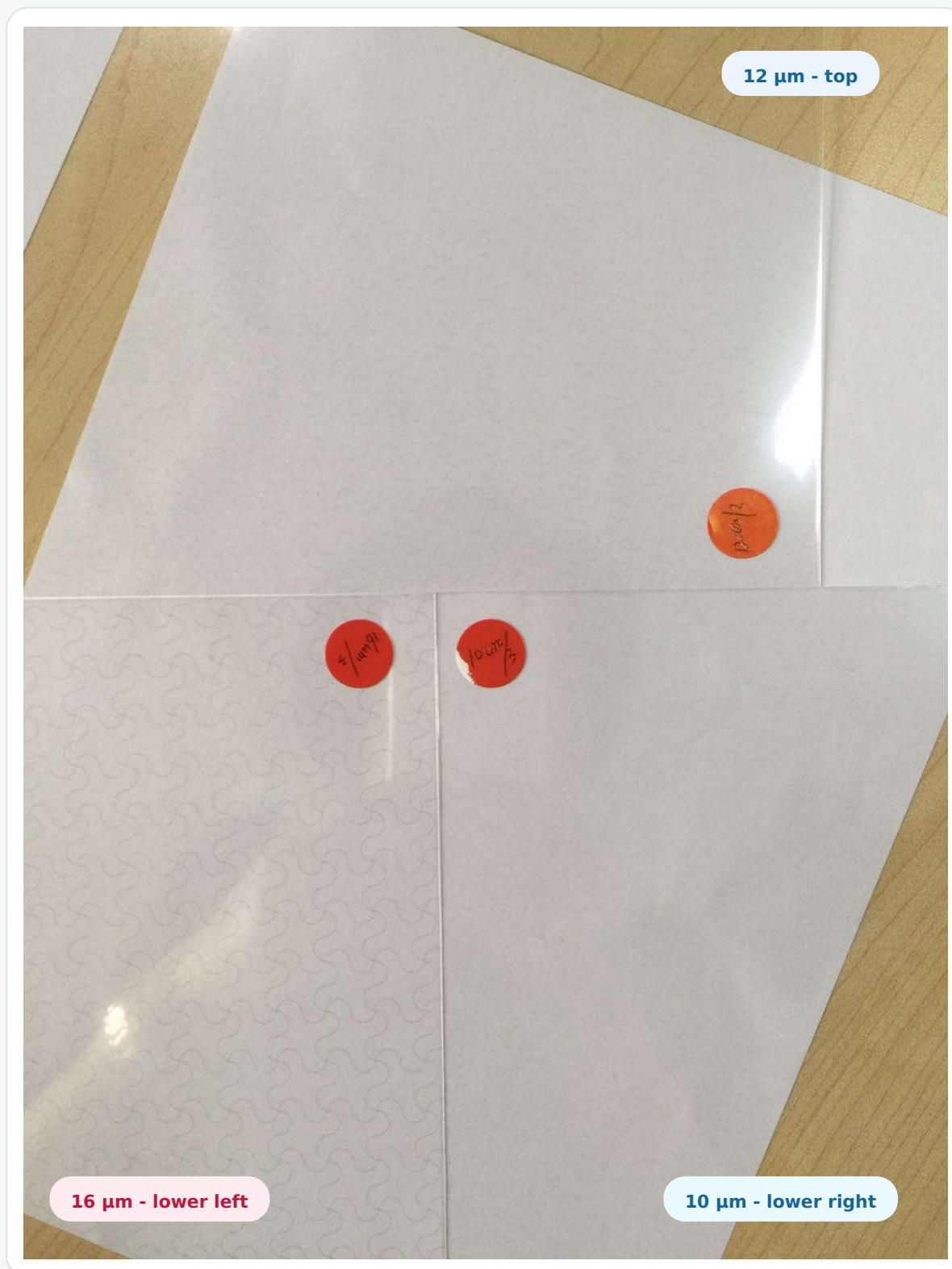
- The original 5 μm insulating layer was replaced by a 50 μm PET insulating layer.
- The insulating thickness increased tenfold, addressing point dielectric breakdown and micro-short-circuit risks.
- Reliability was improved, with greater tolerance to power-supply conditions in finished equipment and at installation sites.

Structure diagrams are schematic and for reference only.

10 μm , 12 μm and 16 μm Product Series

Building on the structural upgrade, DRWO further reduced the metal mesh conductor diameter. The minimum diameter reaches 10 μm for a finer visual appearance.

DRWO introduced 10 μm , 12 μm and 16 μm series products so customers can select the most suitable option for their project.



Comparison image: 12 μm at top; 16 μm at lower left; 10 μm at lower right.

Image for reference only

Second-Generation Product Selection

Product Comparison

The table below reproduces the product overview in the original brochure.

Model	Structure	Diameter	Micro-short risk	Stability
AB16	2 PET layers	16 μm	Yes	Medium
ABC16	3 PET layers	16 μm	No	High
ABC12	3 PET layers	12 μm	No	High
ABC10	3 PET layers	10 μm	No	High

What Changed in Generation Two

- A three-PET-layer structure replaced the earlier two-layer construction.
- A 50 μm PET insulating layer replaced the 5 μm insulation layer.
- Conductor options expanded to 10 μm , 12 μm and 16 μm .
- The ABC series is listed as having no micro-short-circuit risk and high stability.

Project Enquiries and Sample Requests

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METAL MESH TOUCH SENSOR TECHNOLOGY

Original Chinese brochure date: May 6, 2019. Product details are subject to project confirmation.