

Superior Optics, Robust Design

Resistive Touch Screen Versatility, Performance and Economy Without Sacrificing Clarity

Reduced Glare Improves Clarity

In a typical resistive touch screen, the dielectric separator dots used to isolate the conductive layers intensify veiling glare, the scattering of light transmitted through the touch screen. Veiling glare significantly reduces contrast and resolution, creating a visible haze that reduces clarity (see Figure 1).

Standard Dielectric Separator Dots

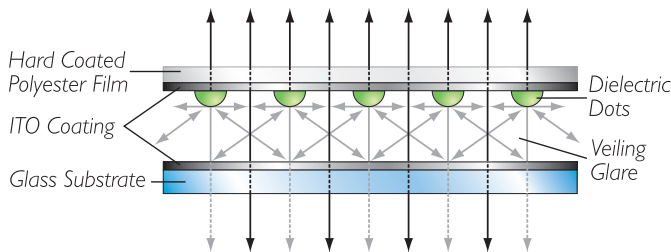


Figure 1

Bergquist 5-Wire resistive touch screens feature a patented configuration of dielectric separator dots that significantly reduce veiling glare. Color indexed to the 5-Wire's conductive coating, Bergquist's separator dots allow light to pass through the substrates with minimal veiling glare (see Figure 2). The result is an enhanced level of clarity and contrast that provides a sharper image for improved readability of text and graphics.

Bergquist Dielectric Separator Dots

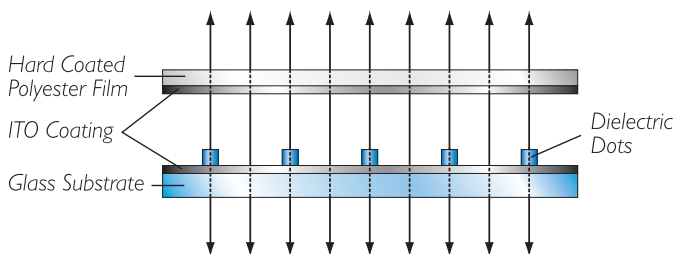


Figure 2

Durable Dots Make the Difference

Another key factor in the durability of Bergquist 5-Wire touch screens is the nature of the dielectric separator dots. Bergquist separator dots are applied to the surface of the glass, providing consistent, reliable performance. In contrast, (refer to Figure 3), some manufacturers' separator dots can be misshapen (A), deform during use (B), or fail completely under application pressure (C). Structural failure of the separator dots will significantly increase resistance thereby degrading electrical contact.

Standard Dielectric Separator Dots

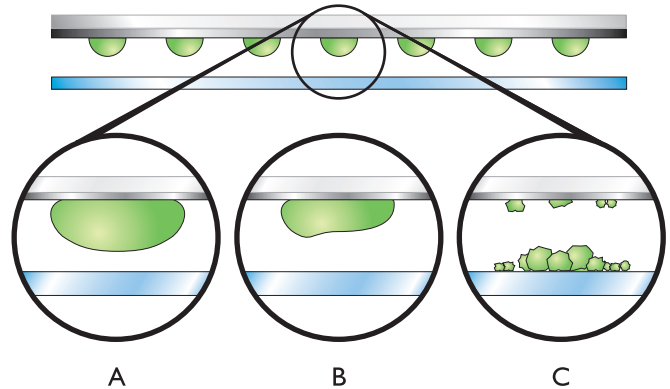


Figure 3

Bergquist Optical Clarity

Transmittance	Glass <0.1" (2.54mm) thick; 89% ± 2
	Glass ±0.1" (2.54mm) thick; 87% ± 2
Haze & Clarity	Hardcoat 500303 — Haze 1%, Clarity 98%, Transmission 91%
	Hardcoat 500304 — Haze 1%, Clarity 98%, Transmission 85%
	Hardcoat 500269 — Haze 5%, Clarity 81 - 91%, Transmission 91%
	Hardcoat 500246 — Haze 8%, Clarity 80 - 91%, Transmission 85%
	Hardcoat 500293 — Haze 4%, Clarity 87 - 93%, Transmission 86%
	Hardcoat 500294 — Haze 8.5%, Clarity 79 - 85%, Transmission 86%

NOTE: All values gained using BYK Gardner Hazegard Plus. Selection of film will determine final values.

U.S. Patents: 5,736,688; 6,424,339; 6,559,835; and 6,611,256.