

TEKRA NEWS

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DISCOUNT & OPPORTUNITY BUYS



TRADE SHOW

Visit Tekra at Booth #3784 at the 2012 SGIA Expo

Booth #3784 is the place to be as Tekra is returning to the [SGIA Expo](#) this year in Las Vegas, NV on October 18th-20th. New to this year's SGIA Expo is the Printed Electronics & Membrane Switch Symposium, bringing you twice the value for your show dollar.



Within the show, there are various "educational zones". In the [Industrial & Printed Electronics Zone](#), Tekra will be putting on a free educational presentation. Come listen to our "Advancements in Films & Other Materials Used in Printed Electronics" presentation, on Friday October 19th at 12:00 p.m. It will be a panel presentation with speakers from [Tekra](#), [3M™ Converter Markets](#), [DuPont Teijin Films™](#), [DuPont Microcircuit Materials](#), and [SABIC Innovative Plastics™](#) about the advancements in films, inks, and adhesives for printed electronics in 2013 and beyond.

We look forward to seeing you at the show!

[Click here for more info on the SGIA Expo](#)

NOW AVAILABLE

UV Inkjet Coated Polycarbonate Yields Improved Ink Adhesion

Many of our customers are investing in UV inkjet equipment to produce everything from labels to display panels. A benefit of UV ink printing is that it is compatible with a variety of films. However, often when adhesive is applied over the ink, the adhesive can damage the print. To demonstrate, Tekra used ASTM D3359 tape test standards on uncoated and Tekra coated polycarbonate samples (see figure I for the uncoated version).



Fig. I

increasing the bond of the UV ink to the film (see figure II for the JetView® coated version). Printed samples have been tested with great results on a variety of presses, including Océ, Mimaki, and EFI.

If you have a UV inkjet system or are thinking of purchasing a new press, Tekra will provide free samples for testing purposes. We currently have JetView® Gloss/Gloss and Velvet/Matte Polycarbonate in a variety of thicknesses on hand, but this coating can be applied to any polycarbonate finish.

Contact Tekra at (800) 437-0273 for [free samples](#) of these products.



Fig. II



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2012 Customer Survey Results

Beginning in 2006, Tekra has conducted a Customer Satisfaction Survey every two years. From survey to survey we ask an identical set of core questions about the quality of our products and services as we look to areas in need of improvement. We very much appreciate the roughly 100 responses received this year and the thoughtful comments offered. The survey is a component of our ISO program and external feedback helps us to identify broader operations that could benefit from continuous improvement resources and improve our offerings.

TEKRA SPOTLIGHT

Ninety one percent of customers would be willing to recommend Tekra to other companies as a supplier of plastic films and adhesives, virtually the same results as 2010. The survey starts with the "How satisfied are you?" question and ends with the "Would you recommend us?" question. It was good to see that both before and after evaluating all of Tekra's goods and services, we are satisfying more than 90% of customers.

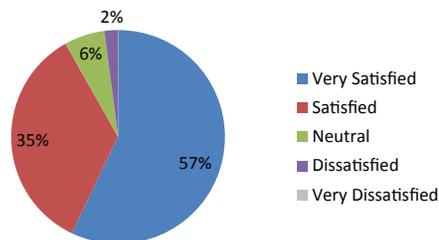
Departmental Data

Responders are asked to rate all of our major service departments. This year Invoicing Accuracy edged out Customer Service, 94% to 93%. Invoicing accuracy is a measure of overall business process integrity and Customer Service spends the most time of all departments in direct contact with customers, so we are pleased to see these results.

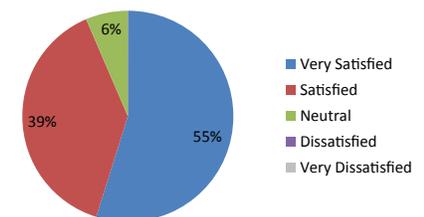
Overall

We are pleased that 92% of responders indicated they are satisfied or very satisfied with Tekra's overall products and services. Although this is slightly down from previous years, only two responses rated us less than neutral and our surveyed group included a greater diversity of customers than previous years.

Overall Satisfaction with Tekra's Products & Services



Satisfaction with Invoicing Accuracy



One area worth noting that saw significant growth compared to prior years is Inventory Availability with a 92% satisfaction rating, an increase of 6% over 2010. Increasing the amount and the diversity of stocked items has been a focus for us since the 2010 survey.

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Survey Results - Continuous Improvement

Products

The year over year product ratings were very consistent with one exception. The [DuPont Teijin Films \(DTF\)](#) line of polyester saw a small satisfaction score decline of 4% overall. We attribute this to DTF's restructuring of their U.S. operations over the last two years that led to some products being delayed or discontinued. Those business changes at DTF are mostly completed and we do not foresee any additional impacts for our PET film users going forward.

General Feedback

The open-ended responses and comments received are always of great interest. Comments offered about our **strengths** included *"knowledgeable sales and customer service, excellent quality products, willing to listen if we have a problem, prompt service, very clean materials"*, and, our favorite... *"always makes me feel important as a customer"*.

As most of you know, Tekra has historically chosen to specialize in a limited number of high value films and adhesives. By staying focused

on fewer products, we can better support our technical customers and earn these sorts of feedback.

TEKRA SPOTLIGHT

Some comments offered on Tekra **weaknesses** were *"can occasionally be disorganized or disjointed at times, Tekra seems to be locked in to a few suppliers, and we would like more notice about price increases"*.

A quick reply to those observations is *"fair, and we do the best we can, but sometimes things are beyond our control"*. Disjointed comes mostly from the complexity

of our parts driven system where slight change creates additional parts and complexity. Are we locked in to our partners? No... but we are going to start with their offerings as we believe them to be best in class so we give that impression. Price increases are announced 30 days in advance wherever we can and our suppliers know this and usually accommodate us.

Thank you again for the help and interest in our survey. These results will allow us continue to find ways to better support your needs as we help each other grow!

FEATURED PRODUCT



The Power of PEN

Do you have a demanding flexible electronic or display application? [Teonex® PEN films](#), from [DuPont Teijin Films™](#), deliver a powerful balance of key properties in harsh operating environments.

What differentiates Teonex® PEN from other thermal engineered plastic films is its strength, heat resistance, anti-hydrolysis, dimensional stability, low oligomer extraction, and barrier properties. PEN film is a UL recognized 94VTM-2 product.

Teonex® PEN is used for applications ranging from flexible printed circuits (FPC) and optical displays to more industrial uses such as insulation, battery, and automotive applications.



Tekra supplies a variety of Teonex® PEN film types, from hazy and non-treated to clear and heat stabilized. The PEN film product range is from 100 to 1000 ga.

For more information on Teonex® PEN films visit the [Tekra website](#) or contact Tekra customer service at (800) 437-0273. We will be pleased to provide data sheets, [samples](#), and technical assistance for your most demanding projects!

For more information on Teonex® PEN films, [click here](#)

PRODUCT SPOTLIGHT



Cast or Calendered?...That is the Question

Cast Vs. Calendered

Vinyl film can be produced in cast or calendered film. While the films are made from the same basic ingredients, the manufacturing process and type of plasticizers used result in significant differences.

Cast films are considered the industry premium. These films start in a liquid state with the ingredients blended together and then poured onto a casting sheet. The casting process produces a thin gauge film (typically 1 to 2 mil thick). By casting film on a sheet, the film stays in a more relaxed state, resulting in a durable, flexible, conformable, and dimensionally stable film that retains color well. These films are ideal for complex surfaces such as vehicles and where a smooth finished look is expected.

Calendered vinyl films are often called intermediate or short-term films. It starts with a molten mixture that is extruded through a die and fed through a series of calendering rolls. The rolling and stretching process produces thicker films (3 to 4 mil) that have some inherent memory, making the film less dimensionally stable and less conformable with a tendency to shrink when exposed to heat. However, they are less expensive, somewhat more scratch resistant, and their heavier weight makes them easier to handle than cast films. These films are well suited for flat and simple curved applications on a variety of substrates.

3M Cast Vinyl Offering

3M offers a full range of cast vinyl films for the inkjet marketplace. Things to consider when selecting a cast film from the 3M portfolio include: durability, application surface, film opacity, adhesive characteristics—including desired level of removability and ease of application—and cutting methods. Popular 3M brand cast films include IJ3552C (air release channels, changeable, 8-year durable) and IJ170Cv3 (air release channels, removable, 10-year durable).

3M Calendered Vinyl Options

If you're looking for shorter term, lower cost vinyl options, consider some of 3M brand calendered vinyl products for wide-web digital printing such as 3M™ ControItac™ Graphic Film IJ60C (air release channels, removable, 7-year durable) and 3M™ ControItac™ Graphic Film IJ-35 (permanent, 5-year durable). For vinyl material options for screen printing, flex printing, or even wide-web inkjet printing, consider 3M™ Label Material 7045 (Matte White Vinyl with UL Approved adhesive), 7051SA (3.8 mil extended life 5 year vinyl with 3M micro-channel adhesive), 7052 (4 mil Soft Clear Vinyl with Perm Acrylic Adhesive) or FV1405 (4 mil Soft Clear Vinyl with Removable Adhesive).

Contact Tekra today to request [samples](#) of these and other 3M products.