Global Leader in Premium High Performance Coatings

In 2008, Mitsui Chemicals, Inc. (MCI) acquired SDC to enhance profitability in the Vision Care Materials business, a core business driven by ophthalmic lens materials through entry into ophthalmic lens coating materials that create significant value to accelerate expansion in this market. Since then, SDC has grown significantly adding even greater synergy with complementary business acquisitions; a strategic partnership, creating business value through quality and technical innovation advanced by the addition of these new businesses.

About SDC

SDC Technologies, Inc. (SDC) was established in 1986 as a joint venture between Swedlow Coatings Inc. and Dow Corning Enterprises, Inc. to develop and market transparent abrasion resistant coating technologies for a variety of commercial and aerospace applications. A recognized leader in the development, manufacture and distribution of premium high-performance abrasion resistant CrystalCoat™ coating systems; SDC holds hundreds of proprietary coating patents which add premium performance, appearance and durability to eyewear, sunglasses, safety lenses, automotive and aerospace products, electronic devices and other custom applications for plastics, glass and metal substrates. SDC has a long and successful record of continuous growth through technical innovation with a global network of locations in the USA, Asia and Europe.

Can you tell more about the synergy you bring to Mitsui ?

Our mission is to be a one-stop with a robust portfolio of products to support MCI globally by helping them to expand their Vision Care business segment with an extensive line of products to support the group. Our goal is to bridge the gap by providing coatings for numerous substrates represented by KOC, Acomon and further advancing development of coatings specifically for the MR™ Series. Robust products for a variety of applications such as dip, flow, spin and spray which are index-matched and compatible with anti-reflective (A/R) coatings. To streamline the supply chain for our customers with a larger global network of solutions; creating a one-stop solution with an extensive portfolio of coatings, coating equipment, and compatibility with a larger portion of MCI's monomers and lens substrates.

What types of businesses has SDC acquired to provide complementary coating technologies ?

Our vision is to acquire strategic companies that provide green technologies, coatings that are environmentally safe and also provide energy and production efficiency solutions to support the sustainability initiatives of our customers. To deliver coatings which support the environment, elevate product quality, and improve our customer's bottom line.

In 2010, SDC acquired FSI Coating Technologies (FSICT), formerly Film Specialties, Inc. founded in 1986 to develop and market anti-fog scratch resistant hard coating, film and sheet products for commercial and industrial markets. A pioneer of condensation control material science, FSICT's anti-fog coating applications bring sustainable energy efficient film and new markets to our business. FSICT provides solutions to the automotive, commercial refrigeration, electronics, medical, safety, security, sunglass and sports eyewear industries. In the anti-fog coated film segment, FSICT's technology delivers energy efficiency, improved visual clarity, and safety to a number of applications never before imagined. Anti-fog coated film applied to commercial freezer display cases reduces energy consumption by as much as 30% and wear on heated doors by eliminating unnecessary usage caused by temporary fogging while also enhancing visual merchandising. Anti-fog coated film applied to mirrors in hotel bathrooms (laboratories) eliminates the need for heaters to defog mirrors, another energy saver. Today our anti-fog mirrors are being sold at one of the largest home improvement retailers for consumer use as well. New markets and applications are also opening up for us in automotive windows to promote safety with enhanced visual clarity and impact resistance.

In 2014 SDC purchased a majority ownership of Lens Technology I, LLC (LTI), strengthening its advanced technology and global expansion in high performance abrasion resistant coating solutions. LTI was formed in 1985 to address the optical industry's requirement for hard and tintable coatings for plastic and polycarbonate lenses. LTI is the recognized leader in the development and manufacture of high-performance, proprietary UV curable anti-scratch coatings for the ophthalmic market. A world leader in ophthalmic hard coatings, LTI and has received Awards of Excellence from the Optical Laboratories Association for best-in-class coating equipment. This allows SDC to offer equipment solutions coupled with UV curable coatings which are faster curing, reducing the production process. LTI also offer's solvent-free (100% solids) technology with no volatile organic compounds or toxic emissions making these attractive from a health and environmental perspective. LTI is at the forefront of development of 100% solids technology and pioneered the use of these coatings in the ophthalmic lens industry.

What have you done to expand the company ?

Quite a few things actually! –In October 2011, we opened our China lab operations in Shanghai to complement our sales office that was in place from 2008. This allowed SDC to become much closer to its Chinese customers demonstrating a commitment to the region through an expanded workforce with a diverse skillset of talents from both

coating and Anti-reflective technology know how.

In October 2013, we opened our Singapore operations, strategically located to enable SDC to expand its leadership in high performance coatings systems across Asia and emerging world economies, and to advance its global vision and collaboration with customers. The location allows SDC to increase its manufacturing capabilities with a contingency supply and larger global footprint in the Asia-Pacific Rim. We chose Singapore as the gateway to South-east Asia, a leading business hub, an ideal location to expand service and support to customers in this region. It also has a stable government, extensive skill base, offers closeness to the market while at the same time a diverse, yet English speaking culture for easier integration into our USA headquarters. Singapore ranks at the top globally for investment potential and competitiveness, a winning combination to support strategic growth, strengthen opportunities, and maximize stakeholder value.

Additionally, we continue to invest in and expand our US facility in Irvine, California such that we will be integrating the LTI business effective January 2015 with a more focused approach to the market encompassing both thermal and UV technologies.

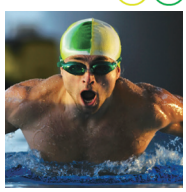
What have you done to elevate your company?

Over the past three decades SDC has become recognized as the global leader in premium performance based abrasion resistant coating technologies and has distinguished itself with a sustainable technology platform, world-class operations, and exceptional customer relationships. We have done this through strategic acquisitions that add value and sustainability to our organization but have also focused on rebranding the company as a "premium, high performance" coatings solution.

No longer are we a company that merely sells functional coatings. We have invested in redesigning our logos from input from focus groups, and globally registered our product brand names to protect our brand equity, and we continue to move forward in extensive research for the continuous development of innovative product technologies. We have transformed the company into a manufacturer of premium high performance coatings to the world's most prestigious brands. Coatings that don't just serve a functional purpose, coatings that one wants to protect any premium luxury product.

CrystalCoat™
Visgard® Vistex®

We offer world-class specialty abrasion resistant coatings for an array of substrates and vertical industries. From the space helmets used by NASA to the swim goggles used in the Olympics. We elevate the brand of the world's most recognizable products with the ultimate in optical clarity and durability. Highly versatile our coatings are available for multi-purpose, index-match, tintable, weatherable, anti-fog, formable, primerless, solvent-free, UV or thermal cure coatings for dip, flow, spin, spray and roll-to-roll applications.



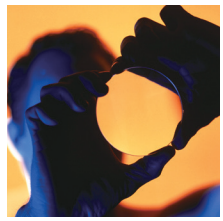
What are benefits of coating lenses ?

Approximately 70% of lenses sold in the United States are hard coated. Adding coatings to lenses drastically improves functional performance and increases the lens life-span and value. The popularity of coatings continues to grow as technology advances and awareness of the benefits of coatings build in the market place. Over the past 20 years hard coatings for ophthalmic eyewear have grown as a way to differentiate lenses as a specialty product. Coatings are also gaining popularity along with the demand for thinner mid- and high-index lenses, and lighter polycarbonate (PC) lenses popular in rimless eyewear. In fact, most premium progressive lens materials are sold with a hard coat automatically built into the lens.

Premium ophthalmic lenses combine several thin layers of different coatings during fabrication to enhance durability, each coating builds an additional layer of scratch resistance to enhance the lens during this process. Premium lenses are manufactured (cast or injected molded) in several steps, cast, cleaned and coated several times, some with up to seven (7) different coated layers. Each coating layer adds more durability and enhances their value as a specialty product. PC lenses and AR coatings require hard coatings to improve durability and scratch resistance.

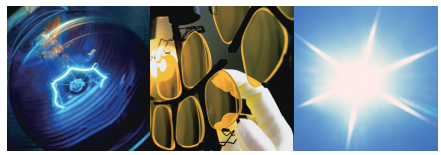
What types of coatings are there?

To maximize visual clarity, ophthalmic lenses are designed with several thin coating layers to provide an array of features such as ultraviolet-light blocking, anti-fog, chemical, smudge, abrasion (the ability to withstand damage from rubbing as in cleaning a surface), scratch (the ability to withstand damage from a sharp object) and dust protection to impact resistance. A number of factors impact the effectiveness of abrasion and scratch resistance performance and coating thickness requirements. This includes chemical formulation (solvent, 100% solids, water-based, polysiloxane, low VOC), application (dip, flow, spin, spray, roll-to-roll), curing from thermal heat cured (1- 4 hours) or ultra-violet light cured (30-60 minutes).



What are the differences between thermal and UV-cure coatings ?

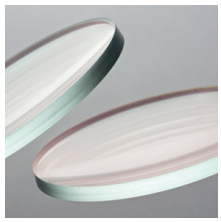
Thermal cure coatings are based on polysiloxane chemistry; they offer high performance characteristics and are particularly well suited as a base for thin film coatings. They also cure across complex geometries that may not allow for Ultra-violet (UV) light exposure. Application techniques for thermal cure are typically dip, spin or flow and are solvent-based. Solvents are more durable but not as environmentally friendly as solvent-free 100% solids based coatings. While offering less performance than thermal, UV-cure coatings offer savings in the production process. Hybrid coatings which are UV-cure followed by a 30 minute back side thermal cure to accelerate performance and adhesion offer the best of both worlds accelerating the production process by as much as 50%, are compatible with AR coatings and offer better abrasion resistance than UV cure coatings. This speed is essential in retail environments



where lens processing is promoted at 1 hour to 30 minutes. SDC offers all versions, solvent, solvent-free, thermal, UV-cure and hybrid alternatives for dip, spin, spray, flow and roll-to-roll coat applications for a multitude of substrates (plastic, glass and metal) for numerous industry applications.

There is a trade-off between rapid cure, versatility of the production environment, and the level of protection performance a coating offers. Thermal coatings are generally used by lens casters (manufacturers) on the front side of a semi-finished lens blank because they are abrasion resistant, AR compatible and used with primers to improve adhesion, tintability and impact resistance. While UV-cure coatings are used more in lens laboratories because they have a quicker cure time and are compatible with multiple substrates. However UV coatings have lower abrasion resistance and are less compatible with AR and mirror coatings.

Applying coating on the front and back surface of a lens allows the lab retailer to add more premium hard coating performance on both surfaces and on multiple substrates. Thermally cured coatings are applied over a primer to maximize adhesion on a variety of substrates. The result is premium abrasion resistance, optical clarity and compatibility with AR coatings on both surfaces and all substrates.



Highly versatile, SDC has coatings available for all these possible coating parameters.

Wide array of compatible coating options

SDC coatings deliver high-performance abrasion and chemical resistance and are also compatible with other features that may be present in the lens processing such as tinting, anti-reflective or metalizing coatings. The use of hard coatings on the front and back surface of a lens optimizes the adhesion and consistency of optics on both surfaces. SDC offers UV-cure backside coatings to complement and accelerate the production process. SDC primers improve coating performance with better adhesion, accelerated tintability, enhanced abrasion, and improved impact resistance by preventing cracking from hard and AR coatings which make the lens more brittle.

What are your future goals ?

Our future strategic business goals are to continually develop new and innovative coating technologies for an ever expanding global environment, while broadening the type of industries we serve. We also plan to continue acquisitions in technologies that provide even more synergy and accelerate the product development process as we move forward. SDC is continually looking into new market coating applications for automotive, aerospace, architecture, electronics and medical devices that will expand our product lines and business opportunities. By leveraging our dedicated technical support and expert scientific team, we strive to improve the performance of products in multiple industries for decades to come.

Company Overview

sdc Technologies

Firm Name: SDC Technologies, Inc. (President & CEO: Antonios Grigoriou)
Business: Development, manufacturing and sale of high performance coating systems
Headquarters: Irvine, California (CA) USA
Manufacturing Locations: Singapore, Irvine, CA
Research and Development: Irvine, CA
Sales: Irvine, CA, USA/Cwmbran, UK/Shanghai, China/Singapore
Established: 1986


Headquarters USA


Sales: UK


Shanghai Sales Office


Manufacturing Singapore

CrystalCoat™
Visgard®
Vistex®

HISTORY — Continuous Product Innovation Since 1986

1986 Joint Venture of SDC (Swedlow Coatings, Inc. and Dow Corning Enterprises, Inc.) for Automotive & Aerospace Hard Coatings
1988 Partnered with Nippon Sheet Glass in Japan for Asia expansion
1989 Opened European Site
1996 SDC developed and patented a wide range of abrasion resistant products
2006 Established China Office to expand presence in Asia
2008 Expanded & Relocated Headquarters to Irvine, CA
2008 Acquired by Mitsui Chemicals Inc. in Japan
2010 SDC Acquired FSI Coating Technologies, Inc., Anti-fog Technology Leader
2013 Opening SDC Technologies Asia-Pacific Singapore office
2014 SDC Purchases Majority Ownership of Lens Technology I, LLC, Ophthalmic Hard Coatings

Antonios Grigoriou
CEO and President