Durable Anti-Fingerprint Coating on Anti-Reflective Cover Glass

DARO® coating minimizing fingerprints – the breakthrough for any professional touch application – now available on CONTURAN®

SCHOTT has developed a new coating combination with durable anti-reflective, anti-fingerprint, easy to clean and anti-smudge (oleo- & hydrophobic) characteristics, a breakthrough for any professional touch application.

Anti-reflective coatings are significantly enhancing the contrast of today’s high resolution displays, but their usage in touch applications suffers from the issue of fingerprint visibility on the surface of such low-reflective glass.

The availability of a super tough and super durable anti-fingerprint coating, along with an anti-reflective coating has been requested for a long time and is now being offered by SCHOTT on its well known material CONTURAN®, now available as CONTURAN® DARO.

SCHOTT is well equipped to deliver cut-to-size materials with complex edge-processing, screen-printing (organic and ceramic colors are available) and tempering or chemical hardening. We’re looking forward to support your products with our expertise.

Applications
- Touch-screen displays
- Ruggedized displays
- Command and control displays
- Medical displays
- GPS displays (e.g. automotive)
- Kiosks/Public displays
- Gaming displays

Advantages
- Anti-reflective
- Anti-fingerprint
- Durable
- Easy-to-clean
- Water repellent
- Great haptics

Long-term Durability
In order to use an AR coating in a touch application it must have an oleophobic coating that can withstand hundreds of thousands of finger touches and rubs. CONTURAN® DARO fulfills this demand and maintains its properties such as reduced visibility of fingerprints, easy-to-clean properties and good haptics even if subjected to harsh mechanical and chemical stress.

Proof of Durability for Touch Applications
- Inherently resistant to salt spray environments; more than 90 days
- Rub resistance greater than 400,000 rubs per MIL-C-675C (equals >20 years lifetime based on 10 cleaning cycles per day with 5 rubs/cycle)

* DARO stands for Durable Anti-Reflective Oleophobic
CONTURAN® DARO

Surfaces of touch-screens need to withstand hundreds of thousands of finger touches. Touching the surface leads to mechanical abrasion and to chemical wear because of salt in the sweat on our fingers. In order to prove the durability of CONTURAN® DARO we perform mechanical abrasive tests (cheesecloth rubs) as well as chemical resistance tests (salt spray):

In addition SCHOTT’s R&D has developed a method to characterize the fingerprint adhesion on untreated and treated glass sheets. With this test procedure it is possible to get reproducible and quantitative results of the amount of fingerprint transfer onto defined substrates.

ABREX® test:
A combination of mechanical and chemical wear is simulated by the ABREX® test commonly used in the automotive industry, tested using artificial sweat. CONTURAN® DARO slightly surpasses the performance of painted plastic parts in automotive industry (e.g. for gear selectors) according to DIN EN 60068-2-70/IEC 68-2-70. CONTURAN® DARO can be used on the gear selector in your car and the oleophobic coating will stand the lifetime of your vehicle.

Specifications (Dimensions & product range)
Glass thickness from 1.1 mm up to 6.0 mm
Available in sizes up to 990 mm x 1,770 mm (72” diagonal)
CONTURAN® Standard
CONTURAN® Magic
CONTURAN® Grey
CONTURAN® BOROFLOAT®
Can be combined with all necessary processing as screen printing, tempering, laminating etc.