
CRUDO VULCANO
CRUDO45 - CRUDO42
THE REFINED ELEGANCE OF EBONITE
Angular Momentum
of Switzerland

About Ebonite (Vulcanite)

Ebonite was invented in 1839 and unveiled in the “Goodyears Vulcanite Court” at the World's Fair’s Crystal Palace in London 1851. Goodyear's presentation was a full-fledged room installation. Three rooms were designed using hard rubber. The walls, ceilings, and furnishings demonstrated that the material was not only suitable for technical applications but could also serve as an alternative to ivory and hardwood. In addition, ebonite objects were on display, such as combs, walking sticks, brooches and rings, jewelry boxes, opera glasses, fountain pens and pencils, bookmarks, brushes, cigar cases, mugs and bottles, letter openers, surgical instruments



Charles Goodyear's Exhibition of Hard India Rubber Goods at the Crystal Palace, Sydenham, England.
(From a print published at the time.)

Ebonite is made from natural rubber through vulcanization with a high sulfur content. The curing process enhances its overall strength and durability to withstand wear and tear. The material is extremely lightweight, warm and smooth with a chestnut-like brownish-black color. It is of an exceptional hardness, harder than modern plastics like hard PVC, Polyamide, or Polycarbonate. It is dimension-stable and superior chemical and corrosion resistant, virtually immune to aggressive chemicals, acids, and alkalis

Uses of Ebonite Today

Ebonite is used today for making fountain pens, combs, jewelry, buttons, brooches, bowling balls, electrical insulators, musical instruments, mouthpieces for clarinet and saxophone and tobacco pipes, high-speed printing presses and rollers that withstanding extreme conditions, from high temperatures and abrasive chemicals to immense pressure and continuous high-speed rotation. Laboratory equipment for chemical-resistant parts, lining of chemical containers and stables, protective coatings in acid tanks, lining of reaction vessels, gears for special applications, guide and sliding elements, laboratory equipment and supplies.

CRUDOVulcano

The Ebonite Watch Collection

Angular Momentum is renowned for nearly 30 years for experimenting with many materials that are unusual in watchmaking. Over the past years, the brand has created collections featuring rare steels, iron treated according to Japanese methods, titanium, aluminum, bronze and brass, zirconium, gold, silver, platinum, and Japanese silver-copper alloys such as Shibuichi and gold-copper alloys such as Shakudo.

This year, I explored ebonite and used it to design and craft an extensive watch collection. The watch cases, movement holders, crowns, dials, and hands are entirely made from this extraordinary material. Parts made of highly luminous “Èmail Lumineuse” are used as additional not only playful components.

Thanks to the light weight of the ebonite material, the ultralight watches weigh less than 50 grams on average, despite featuring an automatic movement, a sapphire crystal and a rubber strap. The lightweight but robust ebonite makes it possible to produce watches with diameters of 42 and 45 mm, which are barely noticeable on the wrist thanks to their light weight

Èmail Lumineuse

In 2004 I found in an old book a receipt for Phosphorescent Paint and Enamel and I have been experimenting for over a year to find a way to produce a bright, luminous powder from sulfurized oyster shells. The powder does not have the purity of modern illuminants such as Super-LumiNova, which is used in the watch industry for example.

The Bioluminescent powder or granulate is also too coarse to be used for printing. It is also not completely homogeneous in larger areas, but it is 100% natural and impresses with its strong and long-lasting luminosity, which will last for years if not forever. For illuminating my watches, I combine the luminous powder mixed with clear, transparent cold enamel. Bioluminescence is the production and emission of light by living organisms. It occurs widely in Marine, invertebrate, fungal, bacterial and terrestrial animals as well as some microorganisms.



Some CRUDOVulcano watches with elements made from bioluminescent Èmail Lumineuse



Manufacturing process of CRUDOVulcano watch cases in my atelier made on traditional hand-operated machines



CRUDOVulcano 45 watch cases, weight around 9 or 10 grams each



The picture shows a CRUDOVulcano 45 watch with a case diameter of 45 mm fits perfectly to my average-sized wrist. The total weight of 49 grams is barely noticeable.

