

CLASSICS *in* 3D

PRESERVING CLASSIC ARTWORK WITH MUSEUM-QUALITY 3D SCANS

BY ERIN HANSON

FIRST HEARD ABOUT 3D SCANNING APPLIED TO FINE ART REPRODUCTION ABOUT TEN YEARS AGO. A university in the Netherlands collaborated with the van Gogh Museum in Amsterdam to create 3-dimensional scans of van Gogh's original paintings. The process was time-intensive and laborious and involved stitching together thousands of individual photographs taken under strict lighting conditions.



Erin with her first scanner, purchased in 2019. The black walls absorb light and prevent light noise.

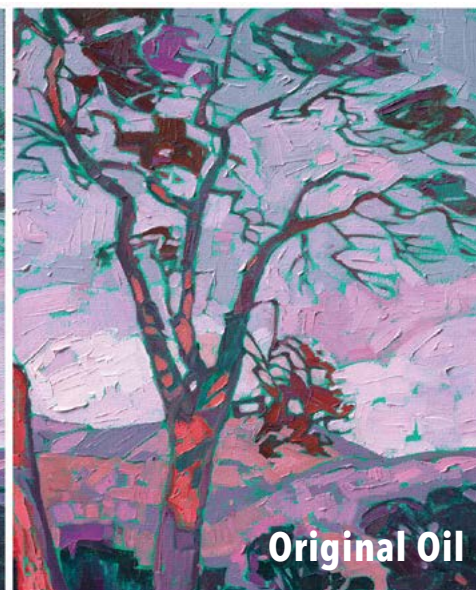
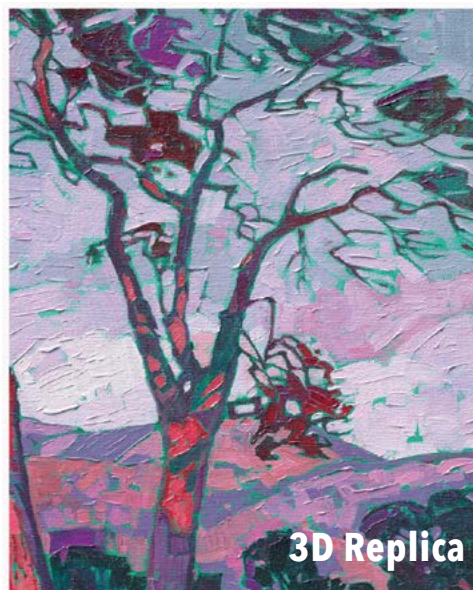
So I wasn't totally unprepared when the German scanning company I was working with told me they could make 3D scans of my artwork.

I had been searching for a scanner that could photograph wet oil paintings to create high resolution images of my work without waiting eight weeks for the painting to dry. I couldn't use a traditional scanner, which required the artwork to be placed face down—the scanner had to light the paintings from above and from the side, to cast shadows that the eye would perceive as texture.

My Cruse scanner was the perfect solution to creating beautiful, two-dimensional reproductions of my paintings with the illusion of texture. But... I was about to discover the magic of 3-D scanning and creating real texture that you could actually touch and feel.

Before my Cruse scanner, I created digital images of my work with flash photography, bouncing the light off huge reflecting walls. The setup was touchy and hard to get exactly right, and it was difficult to get an entire large painting in focus.

Earlier, I was photographing my artwork outside. After years of trial and error, I had developed the following system for photographing my work: first, I would wait for a sunny day with the sun low on the horizon (early morning was best, since the light was clearer in the morning). Next, I would have someone hold up a 6-foot wide metal frame with a thin mesh stretched inside. This was called an "f-stop screen," a photographer's trick for decreasing the amount of light coming through to the subject. I would turn the painting so that the

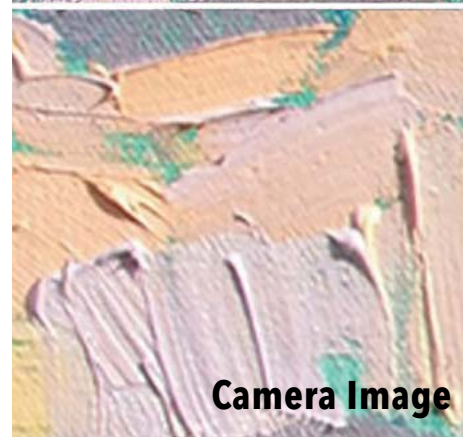
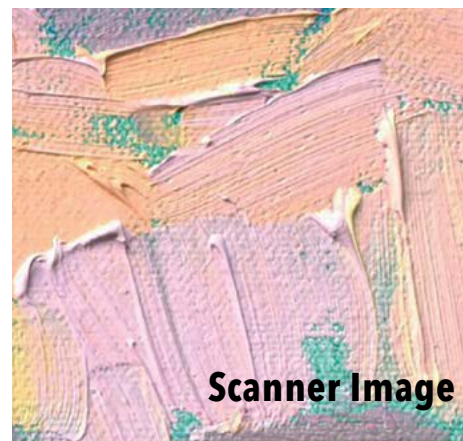


sunlight came from the side and cast little shadows across the artwork. Finally, I used a professional Canon SLR camera fitted with a circular polarizing lens, which cut out any reflective glare caused by the sunlight.

This method worked well to get relatively high resolution images—most of my paintings you see online that were created before 2019 were captured using these photographic techniques.

When I first started painting in my Open Impressionism style back in 2008, I only had a small point-and-shoot camera and no lighting control. It is too bad that most of my early works were photographed so poorly that I can't share them online or print them in books. These early classics will never be made available for prints since the images are out of focus, too low-res, or have too much glare.

Back then, I never imagined I would need to archive my works for future generations, but now every time we get an early classic painting back to varnish or reframe, we jump at the chance to properly scan it in full three-dimensional magnificence.



(ABOVE) You can see the higher resolution captured by the Cruse scanner compared to my old Canon camera.



The Path, one of Erin's classic iconic paintings that will forever be preserved in three dimensions.

With over 3,000 paintings completed and a growing recognition of my Open Impressionism style, it is crucial to have a proper *catalogue raisonné*, which comes from the French phrase “explained catalog” and is used to establish the value of an artist’s work at auction. A *catalogue raisonné* is a list of every single piece of artwork created by an artist, including dimensions, descriptions, owner and exhibition history, copies and forgeries, duplicate painting names, etc. (Did you know when I was first painting, I didn’t bother to name all my paintings? I didn’t have the robust system I have in place now to ensure that I never use the same painting name more than once. So, many of my

classic early works are either unnamed or have the same name as a more recent painting.)

I am glad to have finally discovered a refined way of preserving and archiving my artwork, in more dimensions and detail than any artist before me. Honestly, I think I could teach that university in Amsterdam a thing or two about how to *really* capture the essence of an original Van Gogh.

With 3D printing technology, I can also recreate prints with the exact brushstroke texture of the original oil painting. My “3D Textured Replicas” are beautifully vibrant and richly textured, almost indistinguishable from the original from a few feet away.

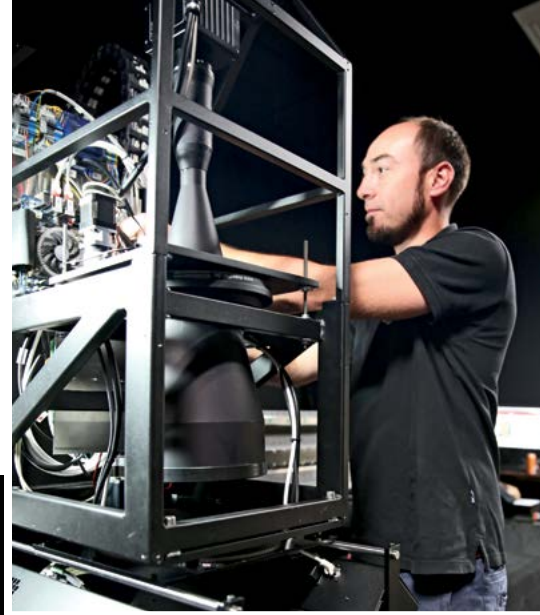
Texture is such a big part of how

I see the world, how I interpret landscapes, and how I communicate color. Texture is the rhythm of my work.

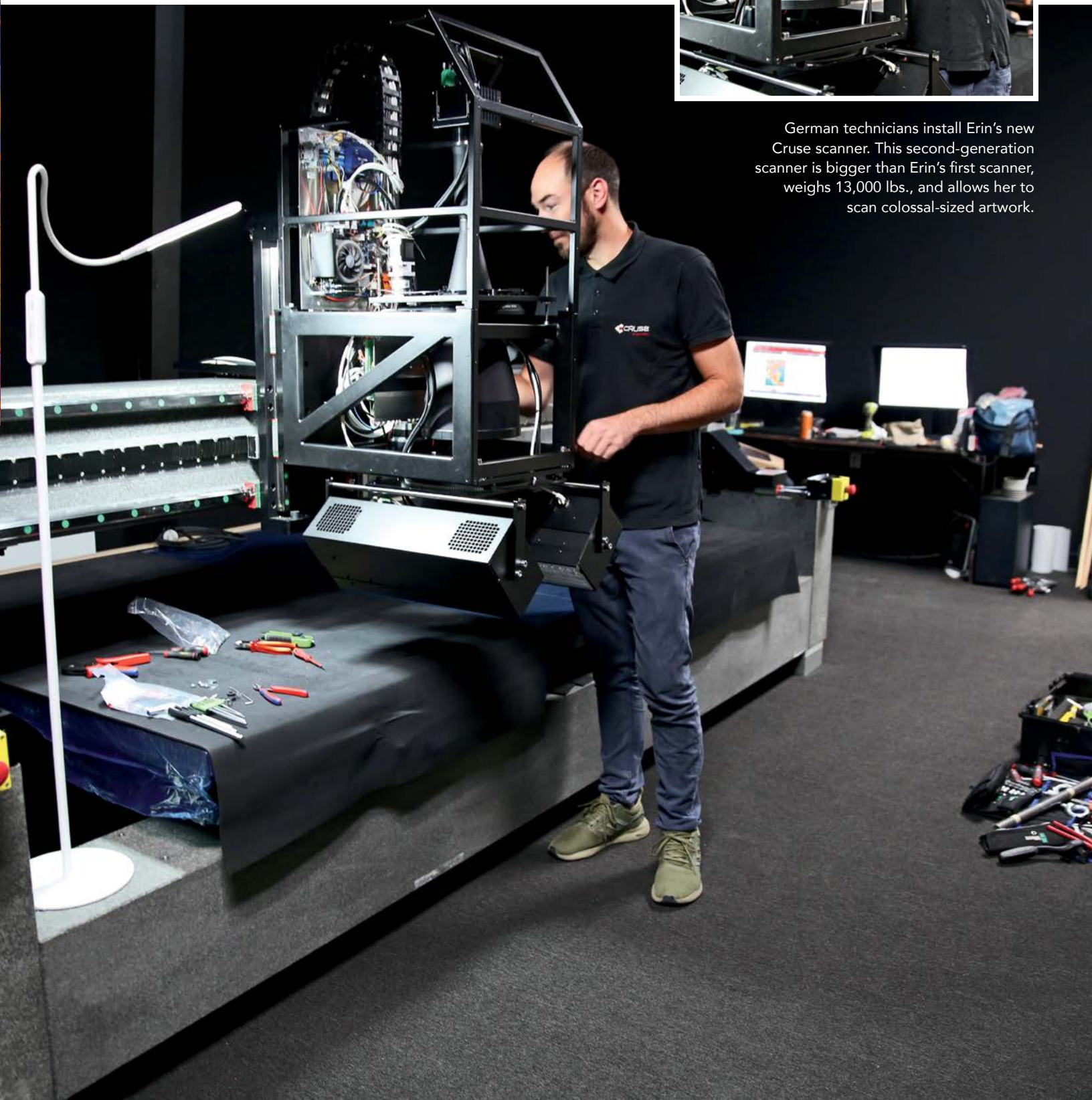
As the first artist to use a Cruse scanner and pioneer textured replicas, I hope to pave the way for future artists to preserve their work in all three dimensions and set a new standard for archiving paintings.



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German technicians install Erin's new
Cruse scanner. This second-generation
scanner is bigger than Erin's first scanner,
weighs 13,000 lbs., and allows her to
scan colossal-sized artwork.



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Cypress Water // Carmel, California
Original oil on canvas, 30 x 30 in



Running Reflections // Lance Creek, Blue Ridge Mountains
Original oil on canvas, 30 x 48 in





Blooming Field //

Oregon countryside
Original oil on canvas,
60 x 48 in

Texan Sky III //

Near Austin, Texas
Original oil on canvas,
48 x 60 in