

World's first graffiti-busting laser helps Florence's 'Angels'

March 8 2019, by Ella Ide



A latest-generation infrared wand is being used to remove graffiti spoiling the city of Florence

A beam of silver light erases scrawled black letters on Florence's historic Ponte Vecchio, as "Angels" wielding a revolutionary new laser wage war



on graffiti in the UNESCO site.

Gold glints in the windows of the tiny jeweller boutiques that line the medieval stone bridge, but it is the scribbled messages left by tourists, and passionate declarations by would-be Romeos, that catch the eye.

"My big cat, I love you," reads one, while others feature interlocking hearts or clumsily drawn flowers.

Now a team of volunteers in the Tuscan city dubbed the "Angels of Beauty" is determined to restore famous monuments to their former glory thanks to a latest-generation infrared wand, donated by Italian laser developer El.En. Group.

"The laser evaporates the graffiti, without damaging the stone underneath," Daniela Valentini, who heads up the Angels' team of cultural heritage restorers, told AFP as she pointed the fibre laser's beam at a scrawled signature.

"Some graffiti is more difficult to remove, certain colours like silver and red for example. And it also depends how long it has been there and how porous the stone is," she said.

There is a sizzle as a white "I was here" message is burned off the grey stone by the 56-year old, a professional restorer who dons protective glasses for the painstaking task, as curious tourists stop to watch.





The laser evaporates the graffiti without damaging the stone underneath

"We have cleaned up areas in at least 28 UNESCO world heritage sites around the world," said El.En general manager Paolo Salvadeo.

The lasers strip dirt from everything from frescoes to statues and bronzes.

The company, which specialises in designing and manufacturing medical and industrial lasers, has donated devices capable of restoring artwork to museums around the world, including the MOMA in New York and the Vatican.



Love-struck vandals

But the laser given to the Angels in Florence is the first to be designed to strip graffiti away—and do so quickly.



Paolo Salvadeo of the Italian laser industry group El.En says it has cleaned up parts of at least 28 UNESCO world heritage sites

It is still a relatively lengthy task: restorers using the device, which has a market worth of some 70,000 euros (\$78,000), can take up to 20 minutes to clean a 10 centimetre square piece of wall.



"The (common) technique of sand-blasting always removes a tiny part of the surface being treated... whereas the laser can restore monuments in a city once home to great masters like Botticelli and Michelangelo," Salvadeo said.

Pensioner Roberto Lepri, 67, is on his second day as an Angel. The former electrician, who was born just a stone's throw from the bridge, underwent special training to prepare him for his new role as a graffitieraser.

"We all need to do what we can to stop the city being degraded by spray paint. It'll take time, but I have lots of that now," he said.

The laser, which has also been tried at the Tuscan city's Galleria della Carrozze (Coaches Gallery), will be the Angels' weapon of choice wherever hooligans with pens or spray cans strike.





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An area of the bridge cleaned in January has already been re-vandalised, a situation Valentini admits is "very frustrating".

"I'd like the kids to see how long it takes them to scribble their message, and then how much time and energy it takes for us to remove them," she said.

But Salvadeo is more sympathetic to those who act foolishly because they are in love.

"People fall for someone, get a tattoo of their new love's name, or graffiti it on a wall. They then split up and their new partner wants the tattoo or message gone. That's where we come in," he said.

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