CASE STUDY

Museum of the Second World War, Gdańsk

Laser projection enhances a history lesson the world must never forget

Delivering high brightness and resolution with a sealed optical engine, new PA Series laser projectors bring long-life performance to modernise the museum's interactive exhibit using 180° projection mapping. Replacing seven NEC lamp-based projectors that had operated intensively for over eight years, the museum now benefits from improved efficiency, reduced maintenance and enhanced visual quality.

The Museum of World War II opened in 2017, in Gdańsk, near the historic Polish Post Office, the place where World War II began on September 1, 1939. The heart of the facility is the main exhibition, covering over 6,000 m^2 , making it one of the largest historical exhibitions in the world.

The museum's mission is to tell the story of the tragic experience of World War II, its origins and consequences, its victims and perpetrators, its heroes and ordinary people. It serves as a powerful reminder of a lesson from history that the world must never forget.

The museum is currently one of the most important attractions on Gdańsk's tourist map and continues to leave a lasting impression on visitors.

The Challenge

The museum's huge main exhibition is located 14 metres underground and comprises three narrative blocks: "The Road to War", "The Horror of War" and "The Long Shadow of War". In the "Horror of War" section, in 2016, even before the official opening of the Museum's new headquarters, a multimedia installation was created comprising seven NEC PA572W lamp projectors, which displayed images in a 180° arc. The natural cycle of every projector, especially one that is used intensively 6 days a week for 8 hours, is a loss of brightness over time. After more than 8 years of operation, the Museum decided to replace the existing equipment.

Since the NEC projectors had worked flawlessly over an extended period, the museum staff decided to work with the same trusted manufacturer, Sharp/NEC, for the replacement devices.

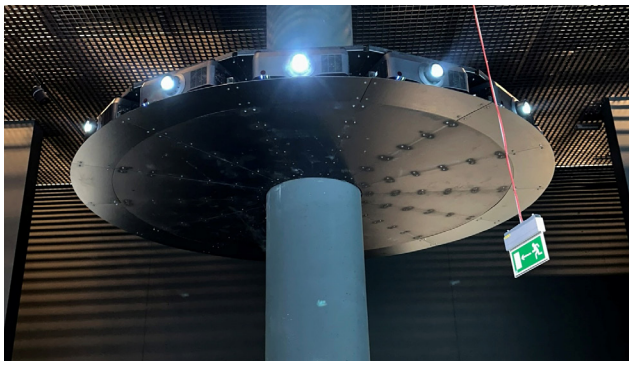
The Solution

The integrator implementing the project was AVALON Olgierd Lichociński, a long-standing business partner of Sharp/NEC with over 20 years of experience in implementing audiovisual solutions across many industries.

The upgrade of the advanced multimedia projection system in exhibition room 0 in the "Horror of War" section involved the removal of NEC PA572W projectors and the installation of seven NEC PA804UL laser projectors with NEC NP41ZL lenses. The equipment was installed on a platform at a height of 5 metres, within a hemispherical exhibition structure. The use of Edge Blending technology has enabled the creation of a uniform, panoramic image measuring 27 metres in length and 2 metres in height.

The laser light source combined with Sharp/NEC's sealed optical engine guarantees 20,000 hours of operation and eliminates the need to replace the light source or filters.

It is useful to note that both the projectors and lenses used in this refurbished installation are covered by an additional 5-year warranty, which further ensures peace of mind when operating the installation in such a demanding environment as a museum.



"We are very pleased with the smooth replacement of the projectors in this installation. The decision to continue with the trusted projector supplier proved to be the right one, and the customer received a new installation that will operate smoothly for many years to come. In facilities such as museums, where projectors are often installed in hard-to-reach places at great heights, the issues of servicing and operating these devices take on special significance. In addition to excellent image quality and extensive functionality, Sharp/NEC laser projectors are virtually maintenance-free"

– says Olgierd Lichociński from AVALON.

The Result

As a result of the modernisation of the projection system, Room 0 at the Museum of the Second World War now boasts an impressive uniform projection with a brightness of 8,200 lumens (compared to the previous brightness of 5,700 lumens), displayed across a 180° arc. The projectors were replaced with minimal disruption to the facility's operations, and the installed Sharp/NEC PA laser projectors guarantee peace of mind in the form of maintenance-free operation.

"Our museum has become a new symbol of Gdańsk. We are aware that we set high standards for historical exhibition. That is why we wanted to efficiently modernise the projection system in Room 0 with minimal disruption to the facility's operations. Choosing AVALON Olgierd Lichociński and Sharp/NEC projectors enabled us to carry out this work professionally and on time.

Finally, we obtained a renovated space with a projection offering higher brightness and resolution, as well as significantly simplified operation. Our visitors gained an engaging

display that serves as a gateway to the entire exhibition, and we gained confidence in our investment for many years to come, as well as reduced maintenance and servicing costs,"

– says Prof. Rafał Wnuk,
Director of the Museum of the Second World War in Gdańsk.

Site information

SECTOR

Museum

CUSTOMER INFORMATION

Museum of the Second World War
https://muzeum1939.pl

INSTALLATION PARTNER

AVALON Olgierd Lichociński
https://avalon-av.pl

INSTALLATION DATE

12 2024

EQUIPMENT

- 7 x NEC PA804UL with NEC NP41ZL lenses .
- Additionally, extended warranty to 5 years for projectors and lenses

Muzeum II Wojny Światowej

AVALON OLGIERD LICHOCIŃSKI

This document is © Copyright 2025 Sharp NEC Display Solutions Europe GmbH. All rights are reserved in favour of their respective owners. The document, or parts thereof, should not be copied, adapted, redistributed, or otherwise used without the prior written permission of Sharp NEC Display Solutions Europe GmbH. This document is provided "as is" without warranty of any kind whatsoever, either express or implied. Errors and omissions are excepted. Sharp NEC Display Solutions Europe GmbH may make changes, revisions or improvements in, or discontinue the supply of any product described or referenced in this document at any time without notice.
FG 17 Juli 2025 12:41 PM

Sharp NEC Display Solutions Europe GmbH
Landshuter Allee 12-14,
80637 Munich, Germany

infomail.sndse@sharp.eu
Phone: +49 (0) 89 99 699-0

www.sharpnecdisplays.eu

SHARP / NEC