



# Project Profile



## Ed Koch Queensboro Bridge Scuppers

The Ed Koch Queensboro Bridge, also known as the 59<sup>th</sup> Street Bridge, connects Queens to Manhattan over the East River and Roosevelt Island. The total bridge span is 3,725 feet and was opened for service in 1909. The upper deck of the bridge is currently being reconstructed and Neenah Foundry played an integral part in the design and manufacture of the bridge scuppers and grates for the project.

## Project Description

In 2016, Neenah Foundry began working with the bridge design firm that was completing the engineering work on the Ed Koch Queensboro Bridge. Working together with the bridge design firm and the bridge contractor, a custom bridge scupper, grate and outlet coupling were designed. To finalize the design, a full scale prototype was constructed by Neenah Foundry so the bridge contractor could verify fit within the proposed decking system. The design for this scupper is unique since it is not cast into concrete, but rather bolted to a steel deck. As such, cast ductile iron was the chosen material to provide the necessary strength required for the scupper. In addition, a custom coupler was designed since space was limited between the upper and lower portion of the bridge deck for the outlet.



*View of Ed Koch Queensboro Bridge looking towards Manhattan from Queens (Source – NYCDOT)*



*Prototype Scupper in Steel Deck*

## Project Deliverables

- (1) Full scale prototype bridge scupper
- (260) Custom bridge scuppers
- (260) Custom grates
- (260) Custom outlet couplings



*Machined Scupper*

## Results

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Manufacture of the scupper, grate and couplings began in January 2020 and shipped complete to the customer in July 2020. The bridge reconstruction is on-going and according to the New York City DOT is slated to be completed in late 2022.