Preservation of bridge decks is a topic of national importance and priority. Among various techniques and tools available for preservation of bridge decks, hydrodemolition is cost-effective and environment friendly as it creates no dust pollution, reduces noise pollution, and the water used during the process can be collected after use to minimise any risk of contamination. It is effective in removing concrete from around embedded metal elements such as reinforcing steel, expansion joints, anchorages, shear connectors, and shear studs. Robotic hydrodemolition equipment is safely used to prepare the surfaces of bridge decks for new latex modified concrete overlays. A new structural bonded concrete overlay placed on a hydrodemolition prepared surface can be performed with accelerated construction schedules, cost-effectively and to extend the service life of the bridge deck for 25 plus years. Hydrodemolition technology has evolved over the last 50 years and is the subject of this webinar. Some previous research studies will be reviewed and need for future studies identified, along with examples of successful applications.

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