In this study, pack boronizing was applied to ash-blowing nozzles manufactured from AISI 1040 steels using Ekabor II powders as the boronizing source at a temperature of 1273 K for a duration of 8 h. Erosive wear tests of boride ash-blowing nozzles were carried out in ash delivery line of thermal reactor under actual working conditions. It was observed that erosive wear resistance of borided ash-blowing nozzles were increased 3 times as a result of the boronizing process. The improved wear resistance of the borided samples can be explained by increased surface hardness and higher work hardening.