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## Overview of material choices for HL-LHC collimators

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In view of the High-Luminosity (HL-LHC) upgrade of the LHC collimation system, different materials were investigated to determine how the jaws of the new collimators could be manufactured to meet the demanding requirements of HL-LHC, such as thermomechanical robustness and stability, RF impedance, UHV, etc. During the Long-Shutdown 2 (LS2), five primary and 10 secondary low-impedance collimators were already produced using novel material. For LS3, in addition to more secondary collimators, the production and installation of other types of collimators, including tertiaries and physics debris units, is planned. This paper details the final material choices and rationale for each collimator family.

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### Footnotes

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