Highlights

- General corrosion of the surface caused recession of the Co-rich matrix, Cr-rich carbide (M\textsubscript{7}C\textsubscript{3}) and the W-rich carbide (M\textsubscript{12}C). The surface of the Co-rich matrix receded more than the surface of the Cr-rich carbide.

- Enhanced corrosion was seen at the interface between the Cr-rich carbide (M\textsubscript{7}C\textsubscript{3}-type) and the Co-rich matrix with the formation of CoCr\textsubscript{2}O\textsubscript{4} to a depth of \sim 1 \mu m; this was due to an electrochemical effect.

- This interfacial oxide occurs only at interfaces of this type, and not at the other interfaces.