4. Summary

From EXCEL spreadsheet calculations, the maximum load-carrying capacity \( (M_{\text{max}}) \) is:

\[
M_{\text{max}} = 2.0 \text{ MN-m}
\]

and, for this pipe, the expected overload \( (M_{N+SSE}) \) is:

\[
M_{N+SSE} = 2.25 \text{ MN-m.}
\]

Since, \( M_{\text{max}} < M_{N+SSE} \), the pipe will not survive during the overload condition. Hence, this pipe should not be licensed for plant operation under LBB criterion.