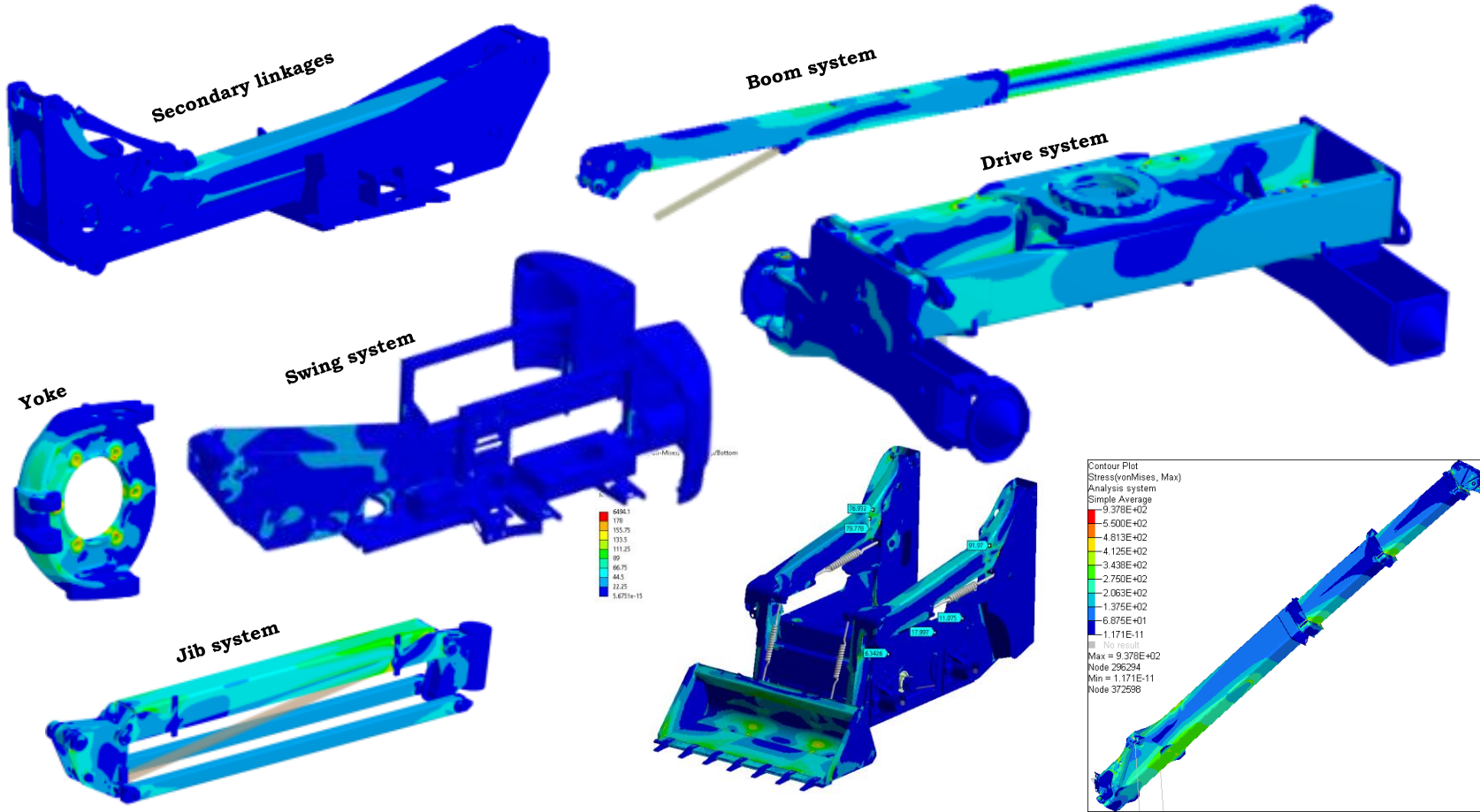


Static Linear and Non-Linear Structural Analysis



To optimize the structure to reduce the overall machine weight & material cost without compromising on the performance

- Boom, secondary linkage, Scissors and chassis concept were studied with inclusion of rope, extension cylinders, luffing cylinder & wear pad flexible contacts
- High stress regions on boom sections, rear chassis & front chassis are analyzed for all critical load cases and proper reinforcement has been added to strengthen the structures.
- Extensive study was carried out to finalize the plate thickness and material grade to optimize the structure
- Finite element analysis results were evaluated wrt. hand calculations at all reaction points and cross sections

