THE BACKGROUND
High techniques and strict requirements are involved in steel making process. CIVS developed a demonstration video showing advantage and high quality of TimkenSteel. Gear models were used to demonstrate properties of both steel from other SBQ suppliers and steel from TimkenSteel, aiming to let clients understand why TimkenSteel is worth choosing and trusted.

Fig.1. Panorama of gear box and inside gears

THE PROJECT
3D models of a general gear box and gears was created to display stress, strain, contact area, life time and surface/tooth damage animation in order to make comparison. A HD video combined with phonetic interpretation was created and uploaded to Youtube.

Fig.2. Comparing gear stresses and broken animation

Fig.3. Inclusions inside gears.

THE OUTCOME
A video was successfully created containing several parts. First an introduction of TimkenSteel was made, then panorama of gear box and inside gears were displayed. After those, surface stress was demonstrated, a graphic of actual data from TimkenSteel well explained the advantages of TimkenSteel steel. Then an animation showing stringers, contact stress and bending stress, surface and root fracture animation were created. The video was accepted and used by TimkenSteel has been successfully displayed in conference.

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This research was partially supported by U.S. Department of Energy Grant DE-NA000741 under the administration of the National Nuclear Security Administration.