Case New Holland.  
Design of the Front Support for a new agricultural tractor

ABSTRACT
This is the culmination of the team’s work with the design and analysis of the new front support for a New Holland tractor. Over the last 8 weeks the team has been performing the final stages of the engineering design and FEA of the 2WD/HD, and 4WD models.

OBJECTIVES
• To design a common front support casting so that one casting can be machined to accommodate the 4 different tractor models of the tractor.

BACKGROUND
• CNH Global NV the holding company is a multinational manufacturer of agricultural and construction equipment.
• CNH had been in Mexico since 1981.
• At CNH, our mission is to find SMARTER, better and faster ways to make technology simple, accessible and easy to use.
• This project simplifies the manufacturing processes of the front support to save time, money and offer a smart solution for the given problems.

RESULTS
• Finished the DFMEA.
• FEA results for the front support (4WD, 2WD/HD) and Trunnion (2WD/HD) are within the CNH limits.
• 2WD/HD clearance issues have been resolved.

REFERENCES
1. Loads test GPAS from CNH.