

### 'FROM CONCEPT TO PRODUCTION'

Example of typical customer work:

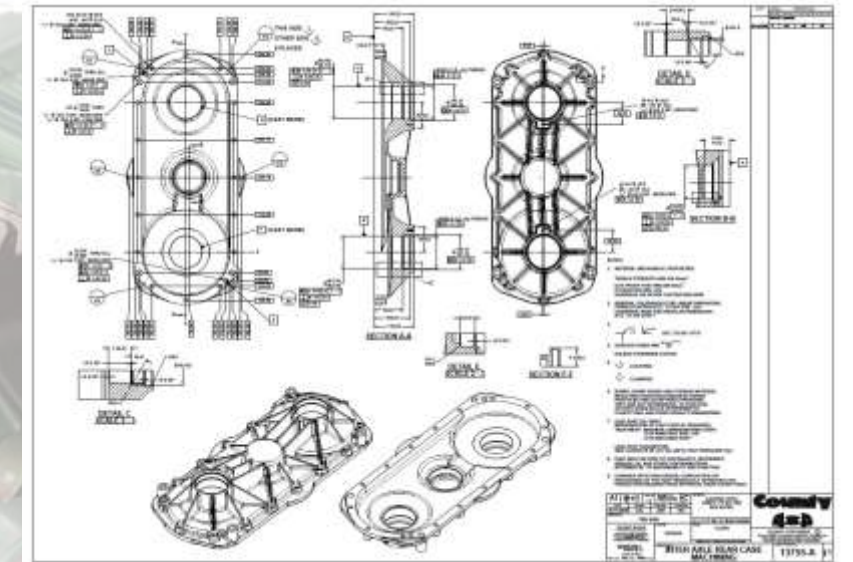
Military 6-wheel drive vehicle. Design and supply of unique driveline including 3 axle final drive units and an intermediate axle assembly (on display here)

#### Customer's vehicle specifications:

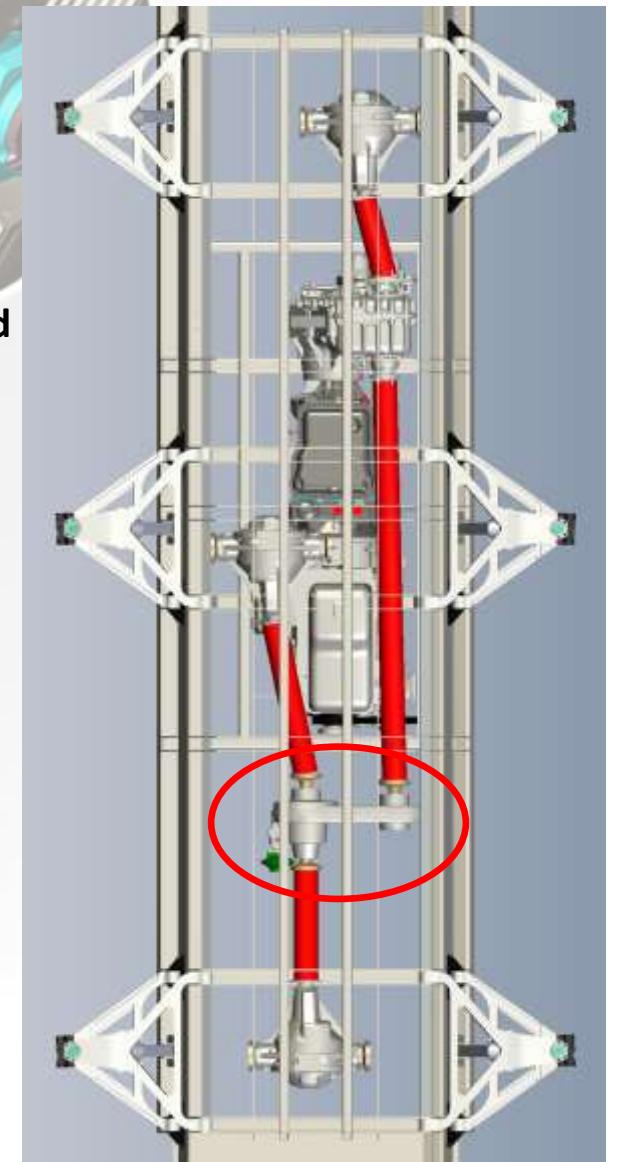
- 4.5 tonne fully laden
- 140kW/700Nm (190hp/520lbf ft) output diesel engine
- High/Low ratio transfer box driven by 6 speed automatic transmission
- Capable of speeds up to 100mph
- Final Drive Units (FDU) capable of 1,800Nm input torque and output of 4,400Nm. Ratios available from 4.10 to 5.44

#### Intermediate axle:

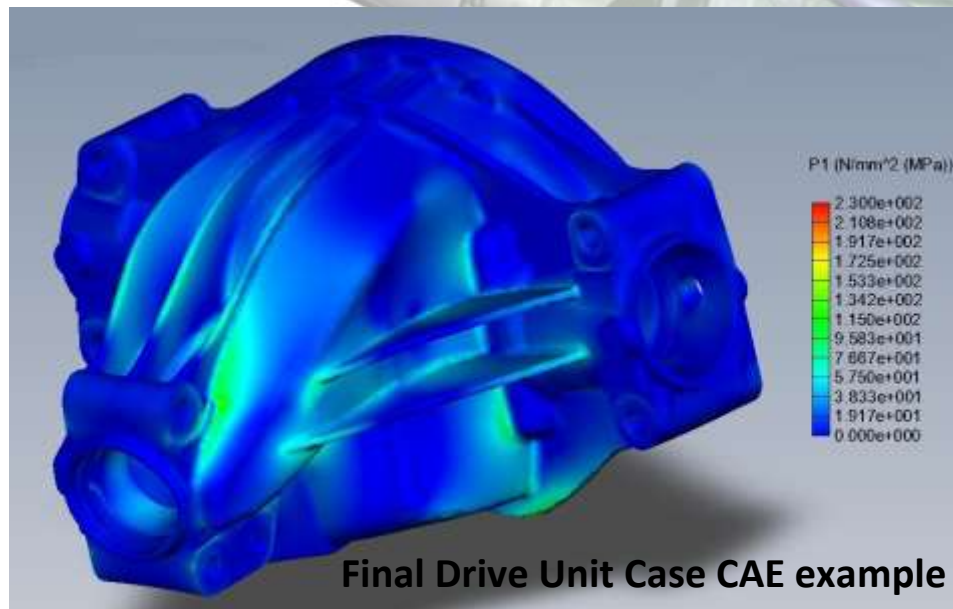
- Designed to take power from transfer gearbox and then split it between the middle and rear axle FDU's (front FDU driven direct by transfer box)
- 1:1 gear ratio
- Integrated locking (mechanical) differential (to lock drive between rear and mid axles). Pneumatic or hydraulically actuated
- Maximum input torque 3,600Nm (at 370rpm)
- Maximum input speed 4,320rpm (at 309Nm)



Case machining drawing example



6-Wheel drive vehicle drivetrain layout (underside, intermediate axle circled)



Final Drive Unit Case CAE example

#### Concept to Production at Countytrac/M.J.Allen:

- Concept, vehicle packaging, detail design, gear/bearing/case analysis
- Project timing management
- Bills of Material management
- Sub supplier sourcing and management
- Prototype tooling, manufacture and assembly
- Production tooling, sourcing and assembly