



TIMONEY
NEVER STOP MOVING

ADVANCED ENGINEERING SERVICES

INDEPENDENT EXPERTISE FOR SUPERIOR RIDE & HANDLING

Ride and handling is a fundamental requirement for defence vehicles. By optimising cross-country mobility, crew comfort and manoeuvrability, the crew arrive mission ready.

In business since 1967, Timoney partners with vehicle OEM's, assessing vehicle capabilities through advanced analysis and modelling expertise, providing solutions that dramatically improve the vehicle's ride & handling capabilities.



BENEFITS OF SUPERIOR RIDE AND HANDLING



CROSS COUNTRY MOBILITY

Never get stuck.
Get from point A to point B over any ground conditions.



CREW COMFORT

Be mission ready.
Soldiers reach the mission site with reduced fatigue.



MANOEUVRABILITY

Deploy quicker.
Take the fastest, most direct route to the mission site.

CASE STUDY

THE CHALLENGE

Our customer owned a fleet of 10 year old vehicles, producing excessive vibrations and noise, negatively affecting the crew's safety and performance. In addition, there was very poor availability of spares parts for the drive-line. Our customer wanted to extend the vehicle life by 10 years while enhancing vehicle cross country capabilities.

WHAT WE DID

We evaluated the vehicle through test driving and virtual modelling. The drive-line used in the vehicle was identified as the principal root cause of the problems.

We engineered a Timoney driveline solution, based on one of our standard products, and integrated it into the vehicle for optimal performance.

HOW IT HELPED

Improved overall vehicle performance with reduced noise and vibrations.

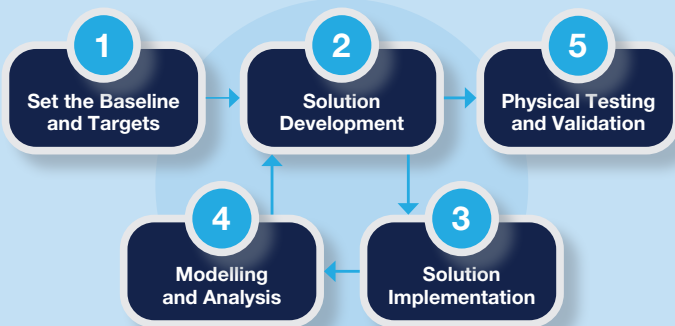
Full availability of spares parts with reduced downtime and increased operational availability.



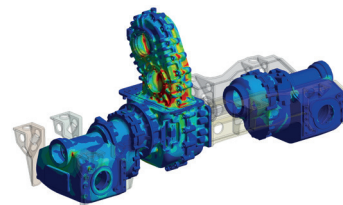
HOW WE DO IT

- It all starts by setting up a baseline and targets early in the project.
- Solutions are applied to the vehicle design and are evaluated on an iterative basis.
- Up to 80% of product development costs are determined by decisions made early in the design process. The cost to change these decisions increases significantly as the project progresses.

AN ITERATIVE PROCESS

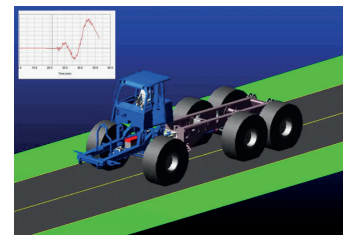


COMPETENCES



DESIGN & ANALYSIS

- Duty cycle and load case definition
- Structural analysis
- Fatigue analysis



DYNAMIC MODELLING

- Set the baseline
- Duty cycle definition
- Data analysis
- KPI measurement



INSTRUMENTATION & TEST

- Physical measurement and analysis of factors that affect performance
- Analyse and compare data to the virtual model

WHY CHOOSE TIMONEY?



EXPERTISE

Since 1967, involved in the development of over 100 different vehicles for customers in over 30 countries.



TECH TRANSFER

A unique solution to building local knowledge and expertise.

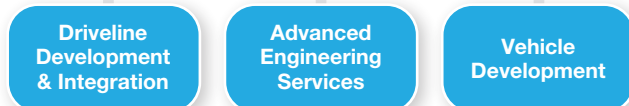


AGILITY

Our agile processes and flexible approach allow us to adapt and succeed in complex projects with demanding deadlines.



THREE DIVISIONS, ONE GROUP



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