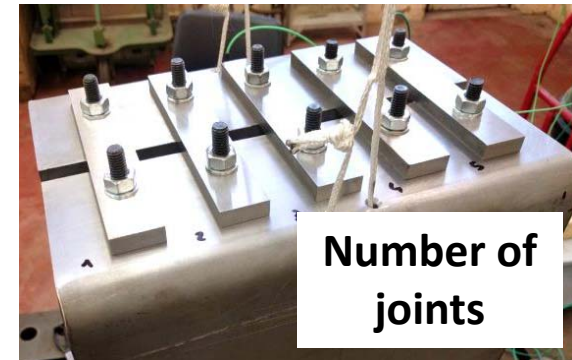


How to predict the energy dissipation of bolted joints?



Vibrations are Unpredictable!
Limit innovation, force testing.
How to improve this situation?

Bolted joints is the major source of uncertainty.
Experiments on joints will improve our understanding.



Quantify the **dominant parameters**



Create model



Theoretical Prediction

Practical rules
Design advice



Integration in
Design Software