

## • LE4 - Loads Methods (General)





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- Three type of loads analysis methods are commonly used industry wide:
  - Static analysis:
    - . Condition linked to a stabilized phenomena, the time is not a parameter.
    - . Associated to one loading case, all loads are simultaneous.
      - Ex: longitudinal steady maneuver, Gust using the "Pratt formula"
  - Dynamic analysis:
    - . The analyzed phenomena is time dependent.
    - . The associated case is represented by a set of loading cases derived at each step of time of the analysis.
    - . All maximum loads do not happen at the same time (correlated loads).
      - Ex: yawing maneuver, discrete gust.
  - Statistical analysis:
    - . The phenomena under analysis is "random" and the method used for loads derivation is obtained by applying an appropriate statistical analysis.
      - Ex: continuous turbulence.





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• Models, Methods and conditions links could be represented as follow:



