

Dredge Carbon footprint and Fuel Cost Reduction

Energy recovery and storage using Drive Controlled Pump Technology



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Purpose

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Power usage in a Dredge

Motoring vs Regening

During dredge operations, power is applied to accelerate and decelerate loads.

- The power to accelerate the load is motoring
- The power to decelerate the load is regenerating
- The vessel's generator provides motoring power
- Regenerative power is dissipated as heat since it cannot be stored rapidly and cheaply.

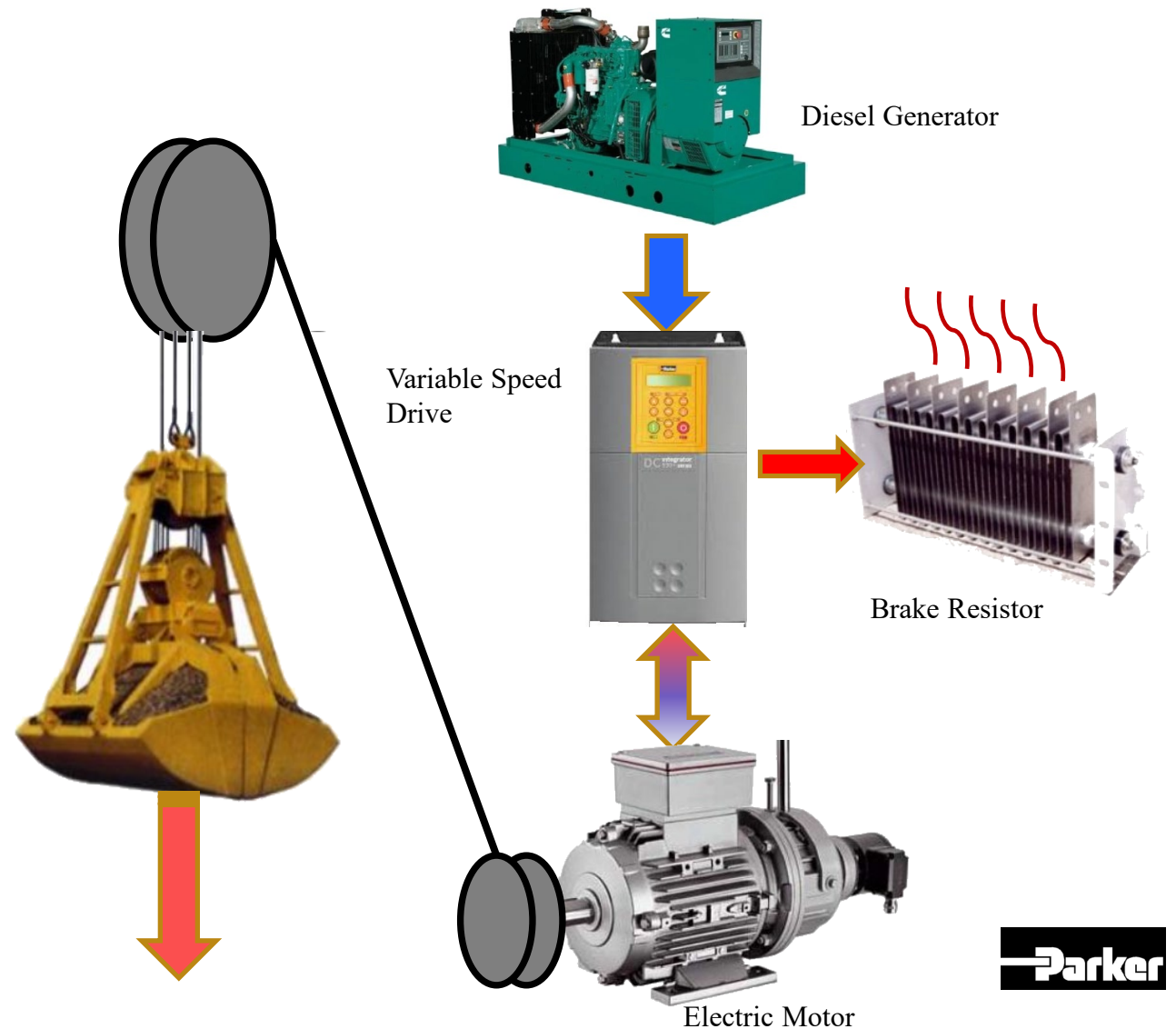


Wasting of the regeneration power

Regen power is wasted as heat

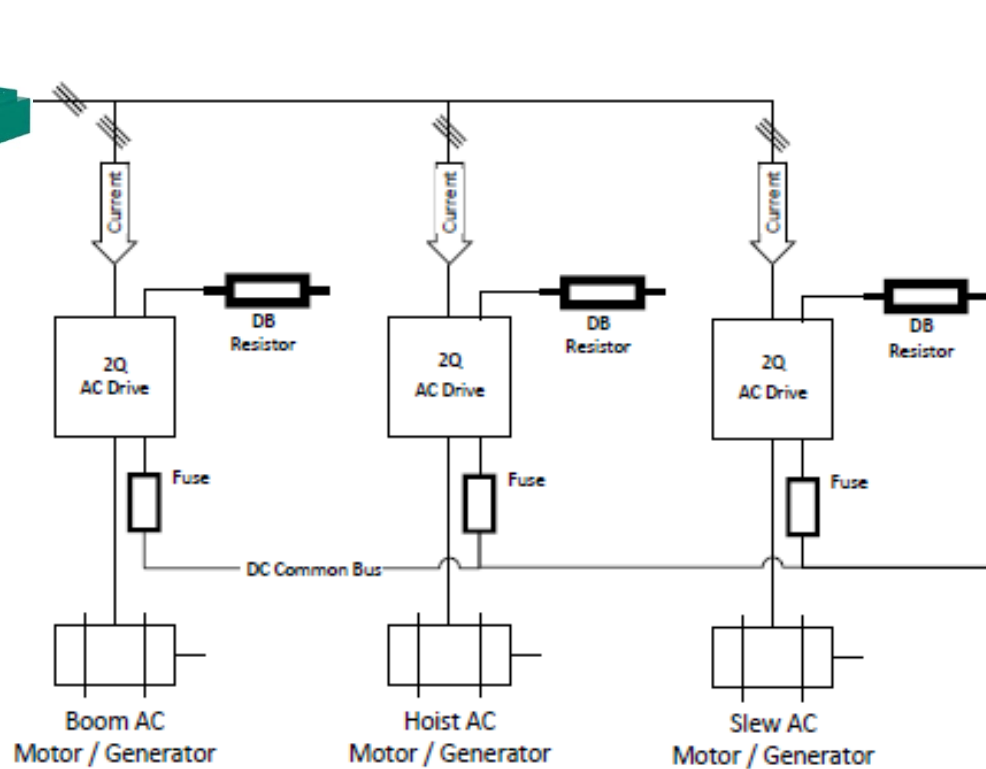
There are many ways to dissipate Electrical or Hydraulic regenerative energy.

Wasting it in the form of heat is the easiest way, but recovering and storing it in the form of reusable energy is the real challenge.



DCP energy recovery solution

Electric or Hydraulic regenerative energy recovery and storage



For ease of demonstration, the diagram is simplified

**Any Questions...
Just Ask!**



THANK
YOU

