Mechanical and Electrical Engineering Services

Liftech

STS Crane Procurement

- Needs Assessment
- Specifications
- Bid Packages
- Bid Evaluations
- Design Review
- Manufacturing Review
- Commissioning
- Testing
- Acceptance
- Warranty

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Other Container Cranes

RTG
RMG
ASC
IYC
MHC

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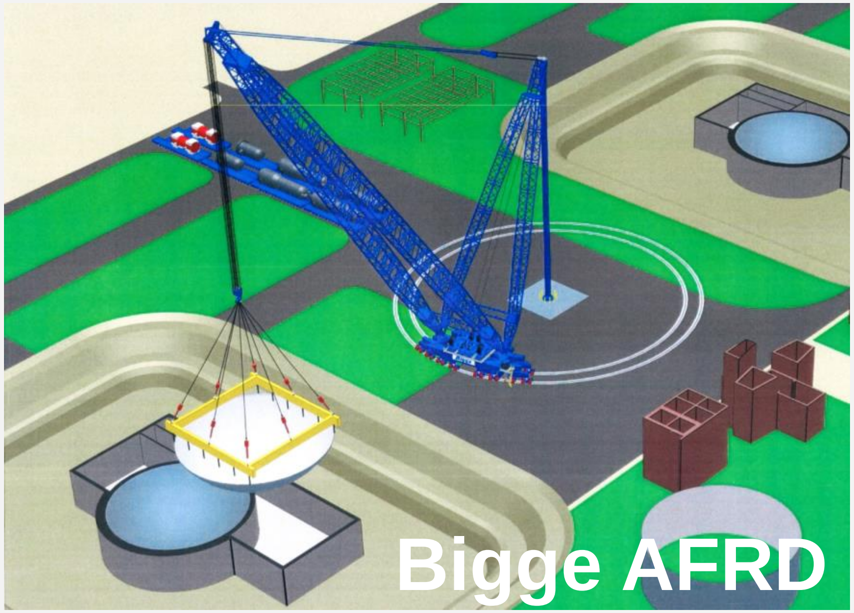
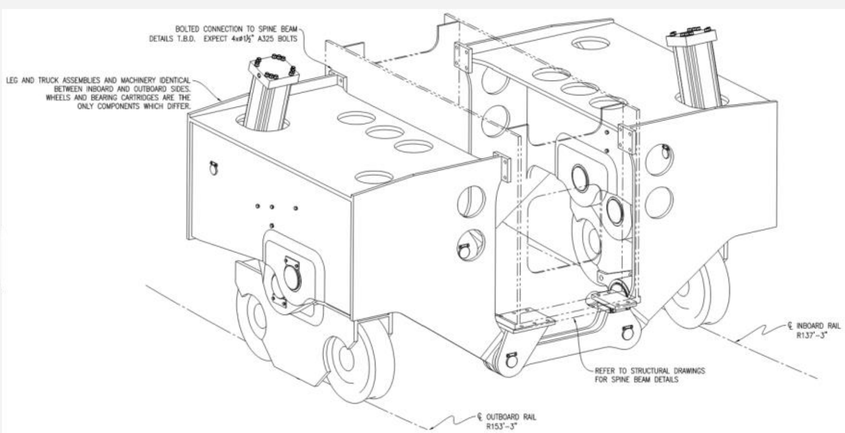
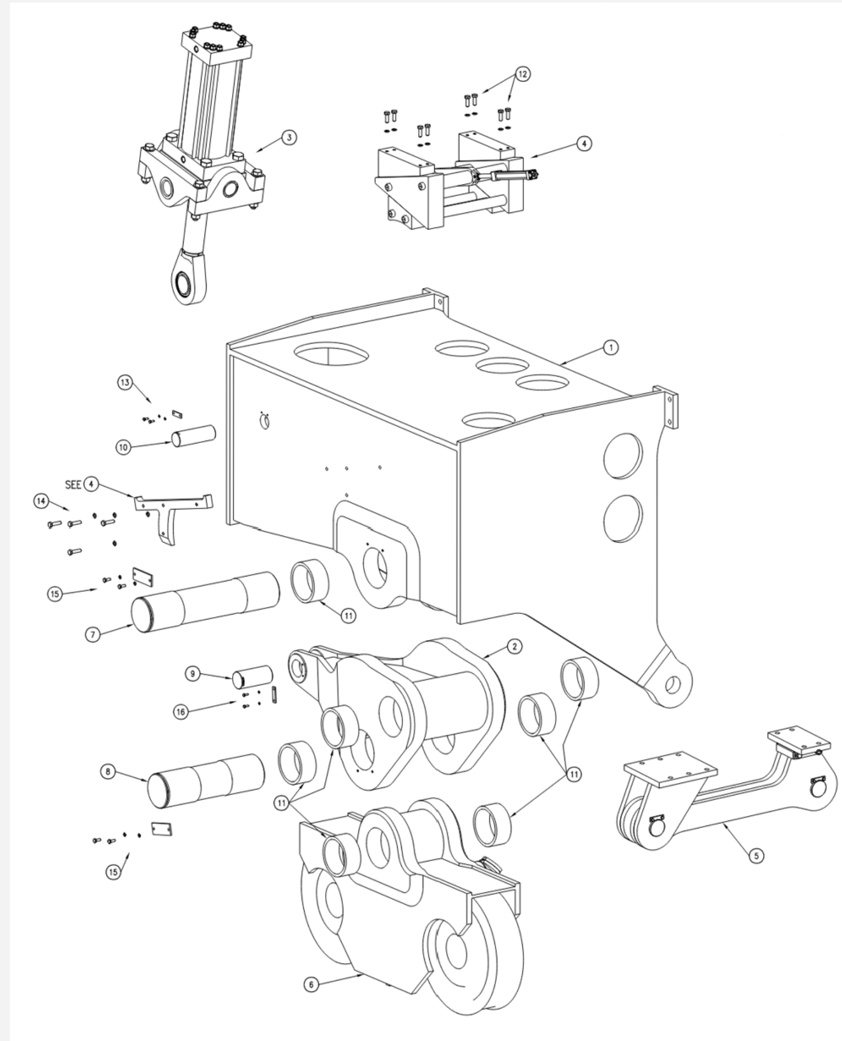
Specialty Cranes







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Floating Cranes

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Dry Bulk Handling Equipment

Grab Bucket, Loaders, Unloaders, Stacker/Reclaimers

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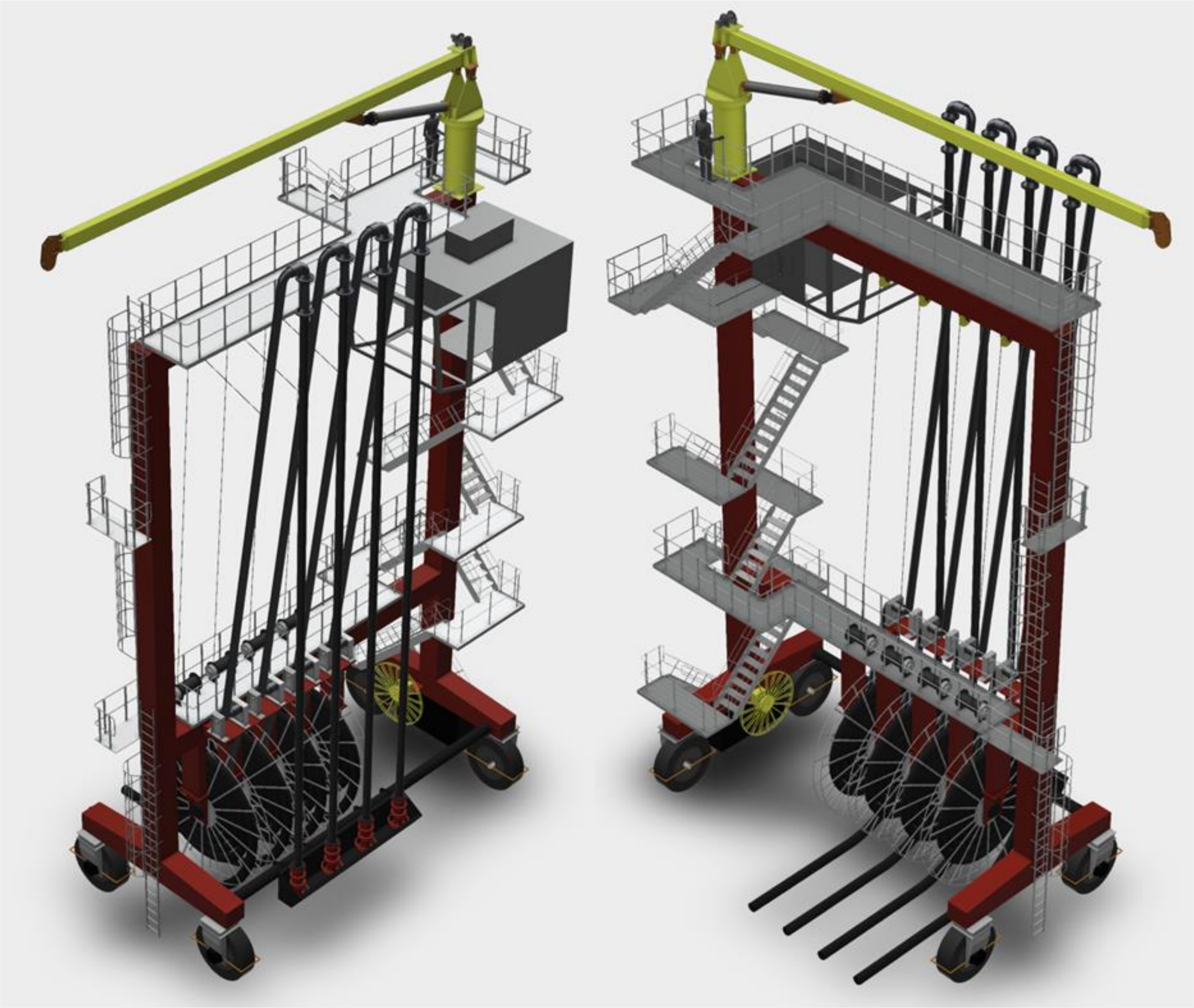
Liquid Bulk Equipment



Hose Towers

Mobile Equipment

Handling Cranes

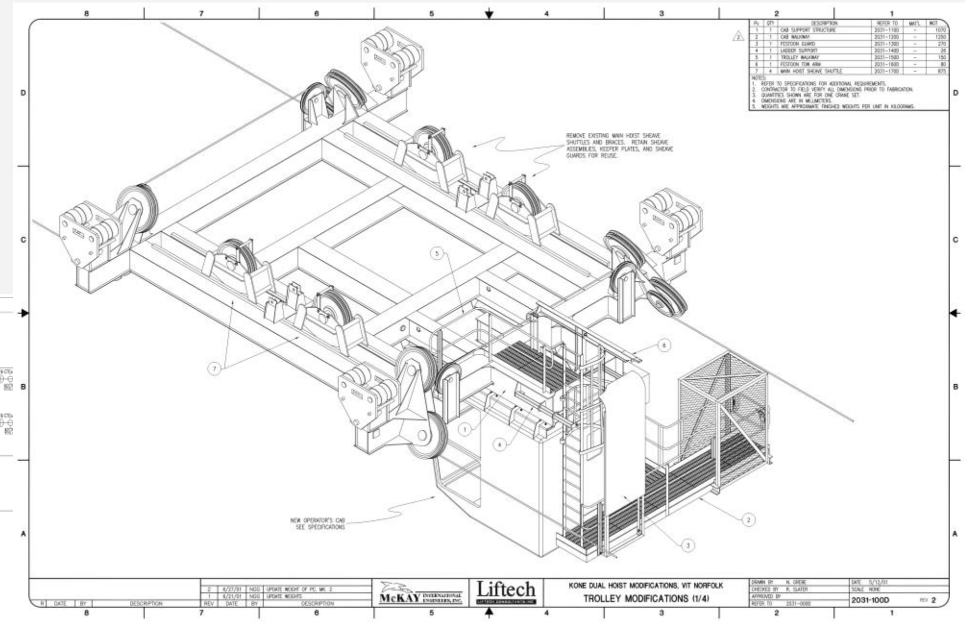
POL and MOTEMS

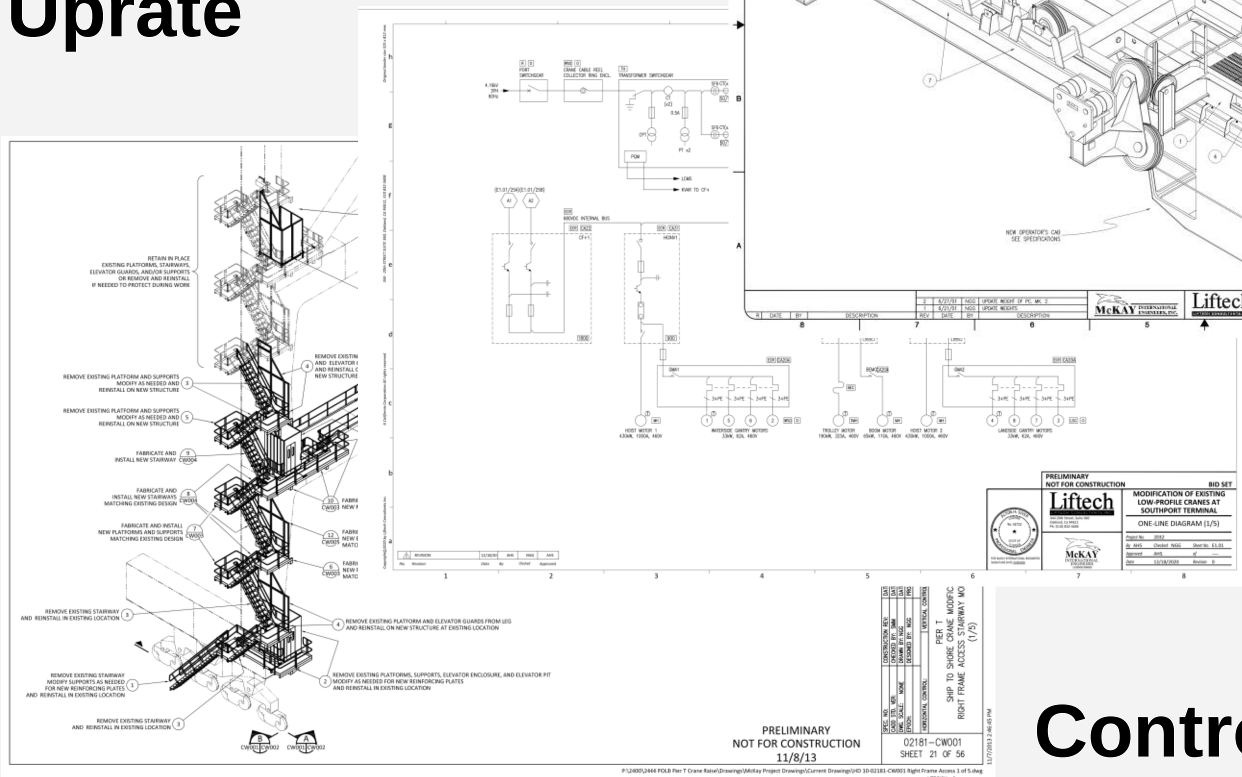
Equipment Modifications

Raise and Extend

Modernization

Uprate





DC to AC

Drive and Control Upgrades

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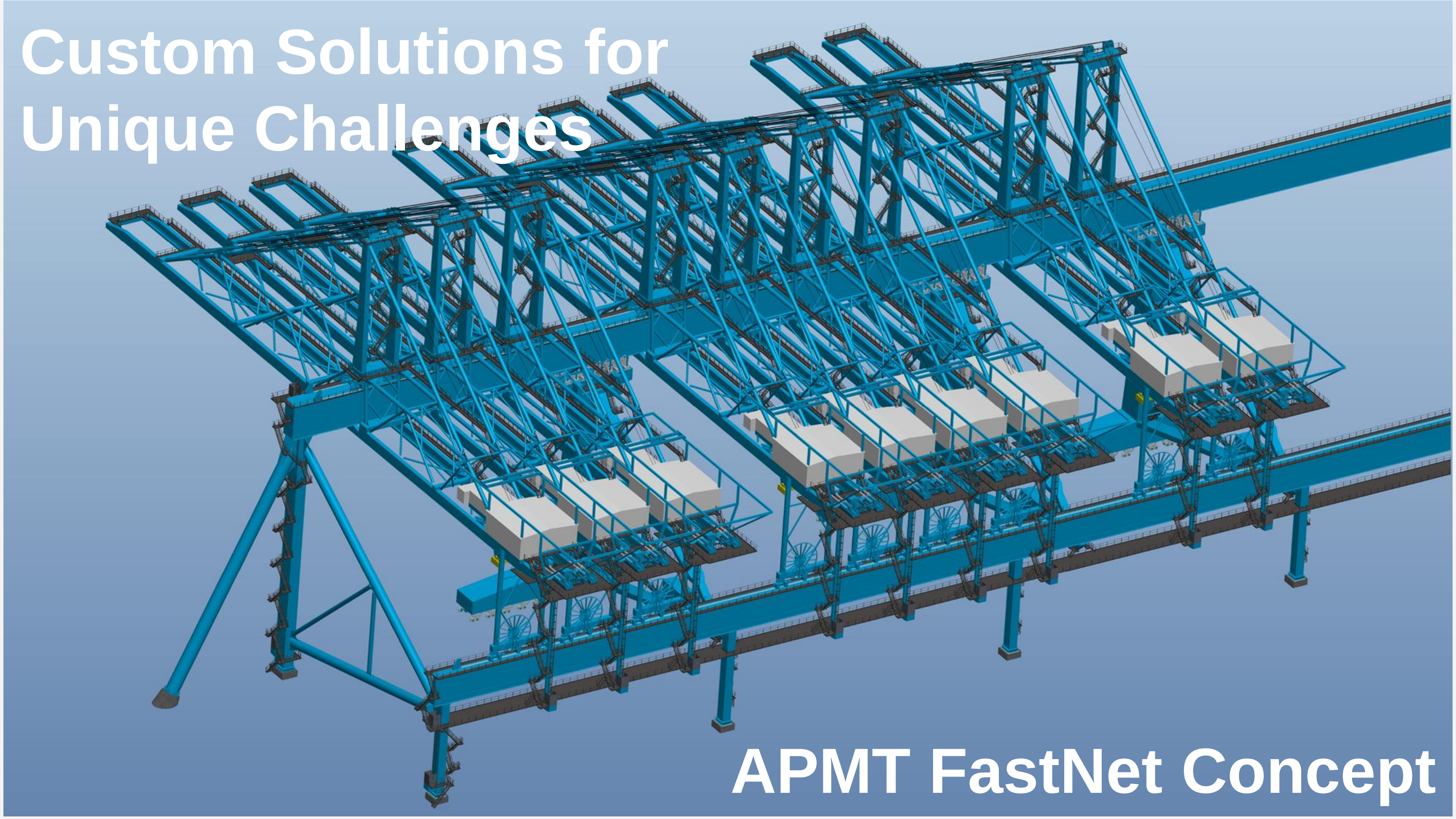
Concept Development & Design



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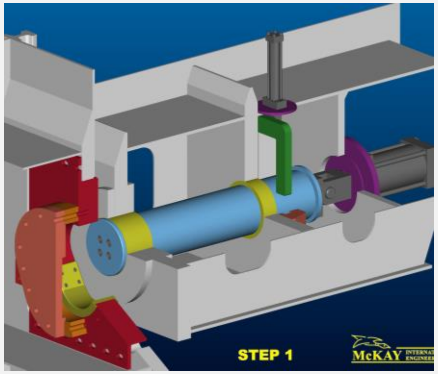
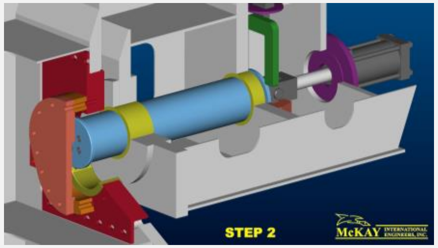
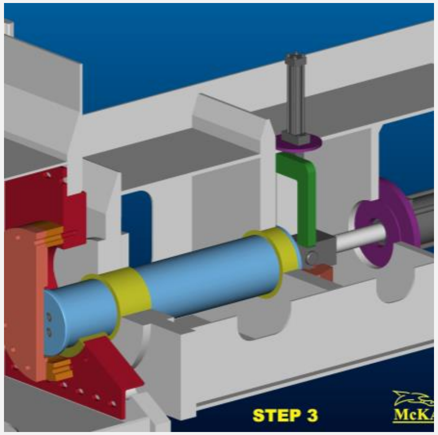
Concept Development & Design







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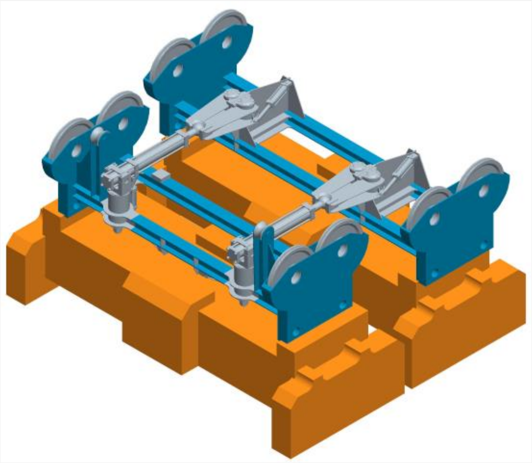
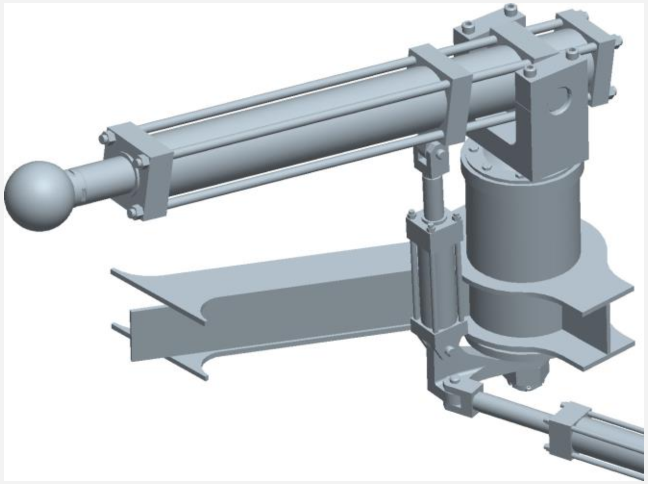
Concept Development & Design



Design Improvement

Concept Validation



YICT DHT40

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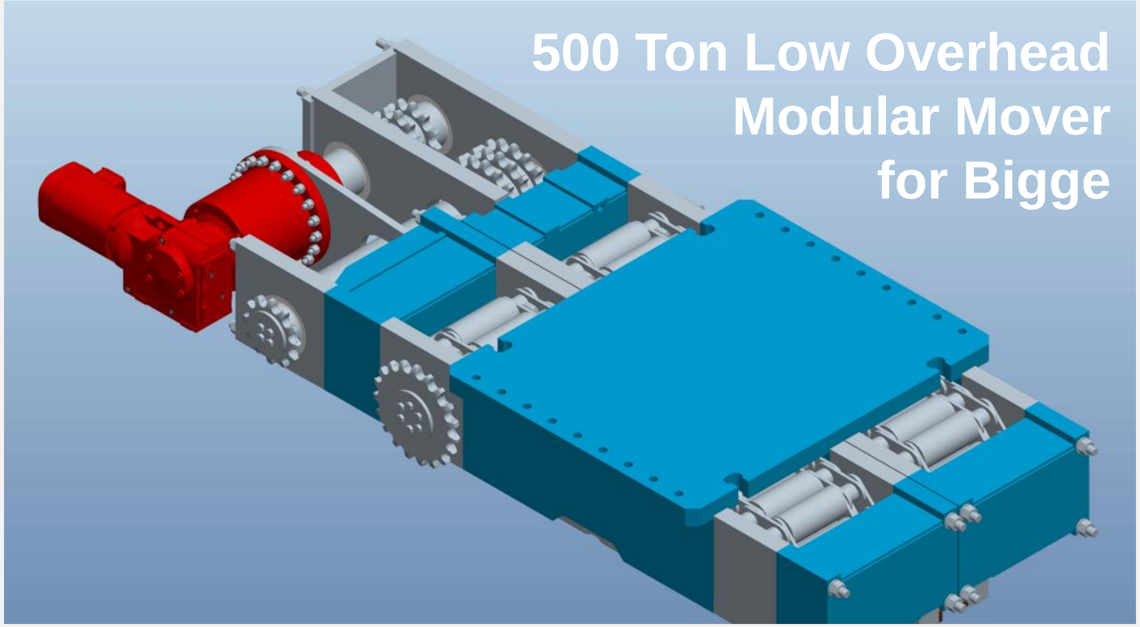
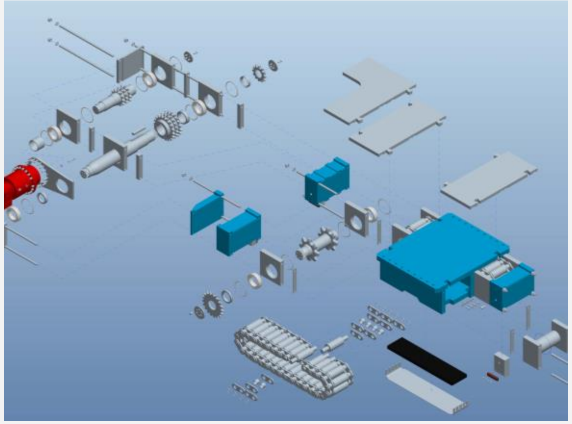
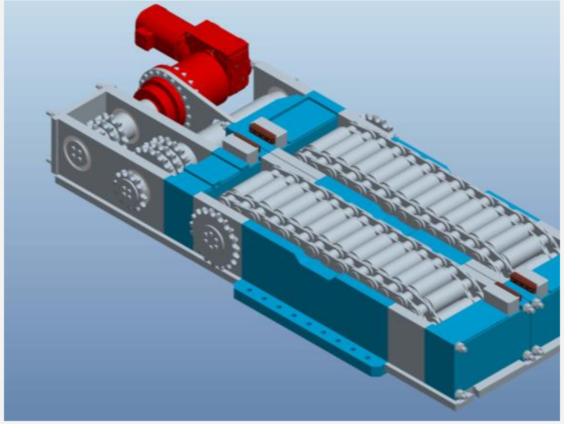
Specialty Equipment







Rugged Designs

Proven Components

3D Models

Detailed Parts

Assembly & Maintenance Instructions

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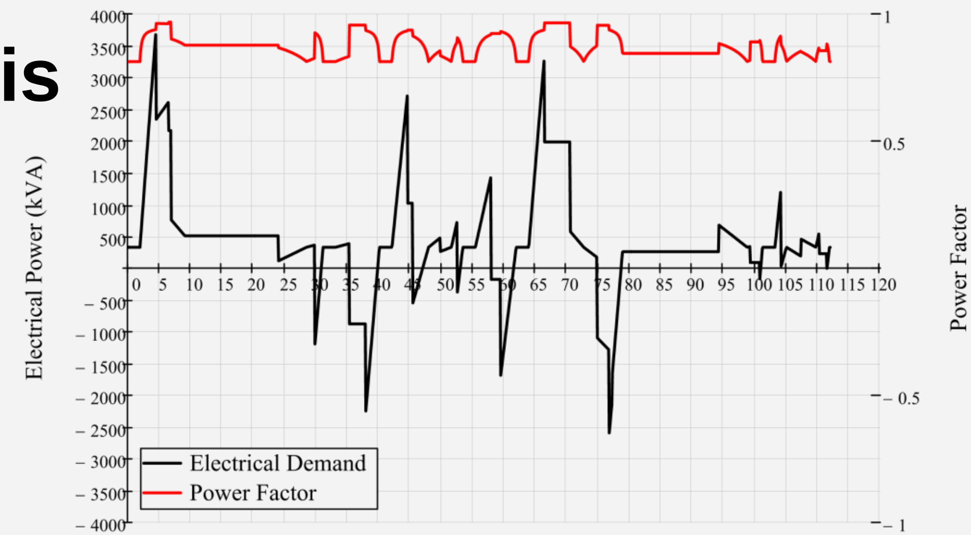
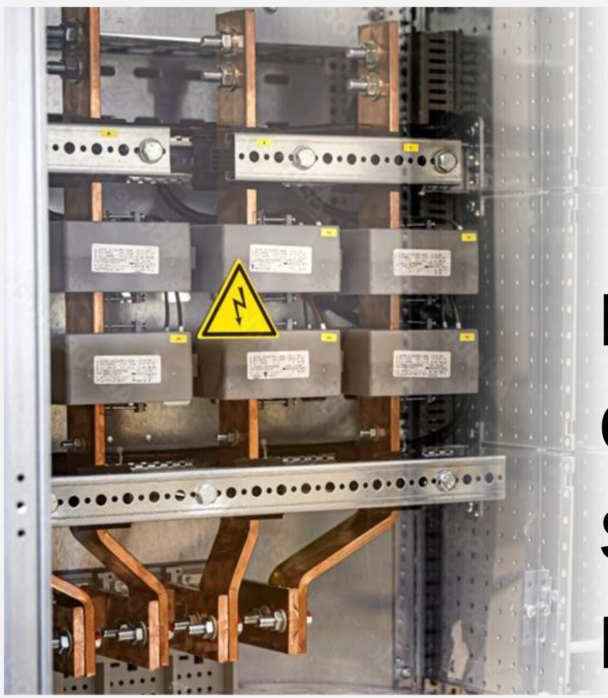
Electrical Infrastructure

Power Demand Studies

Voltage Drop Analysis

Network Analysis





Regenerative Power Handling

Circuit Protection Coordination

Switchgear and Transformers

Electrical Noise Mitigation

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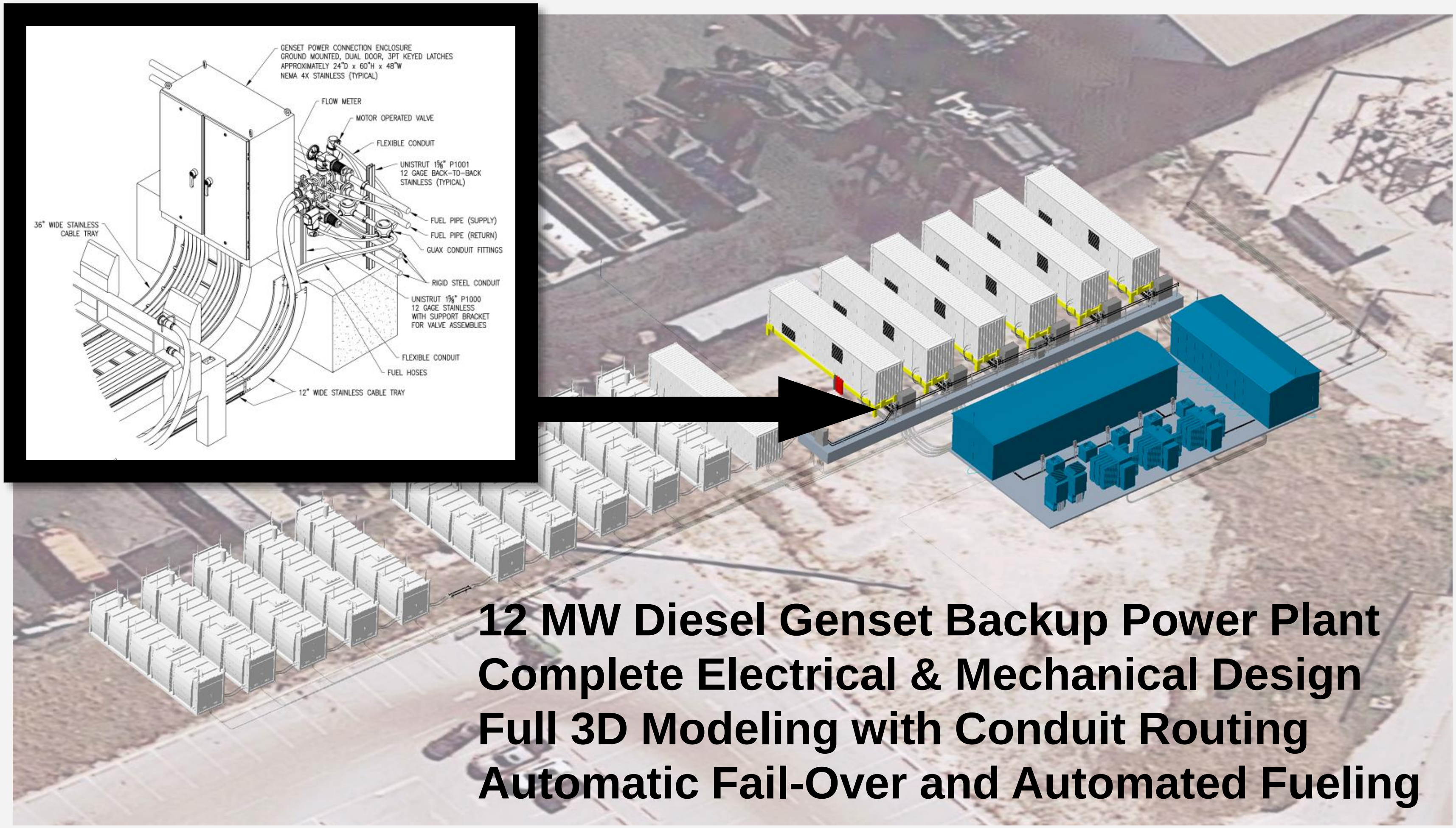
Electrical Power Systems



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Emission Reduction Conversions

Zero Emission Studies

Power Demand Modeling

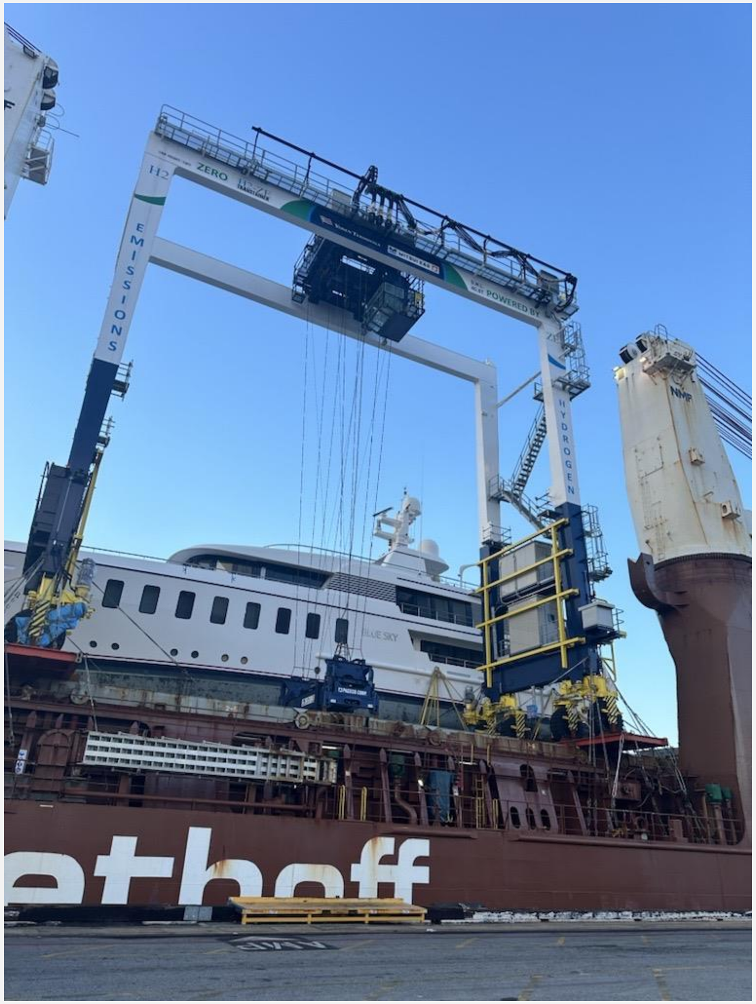
Diesel Hybrid Conversions

Battery Electric Systems

Charging Systems

H_2 Fuel Cells & Storage

Alternatives Investigation



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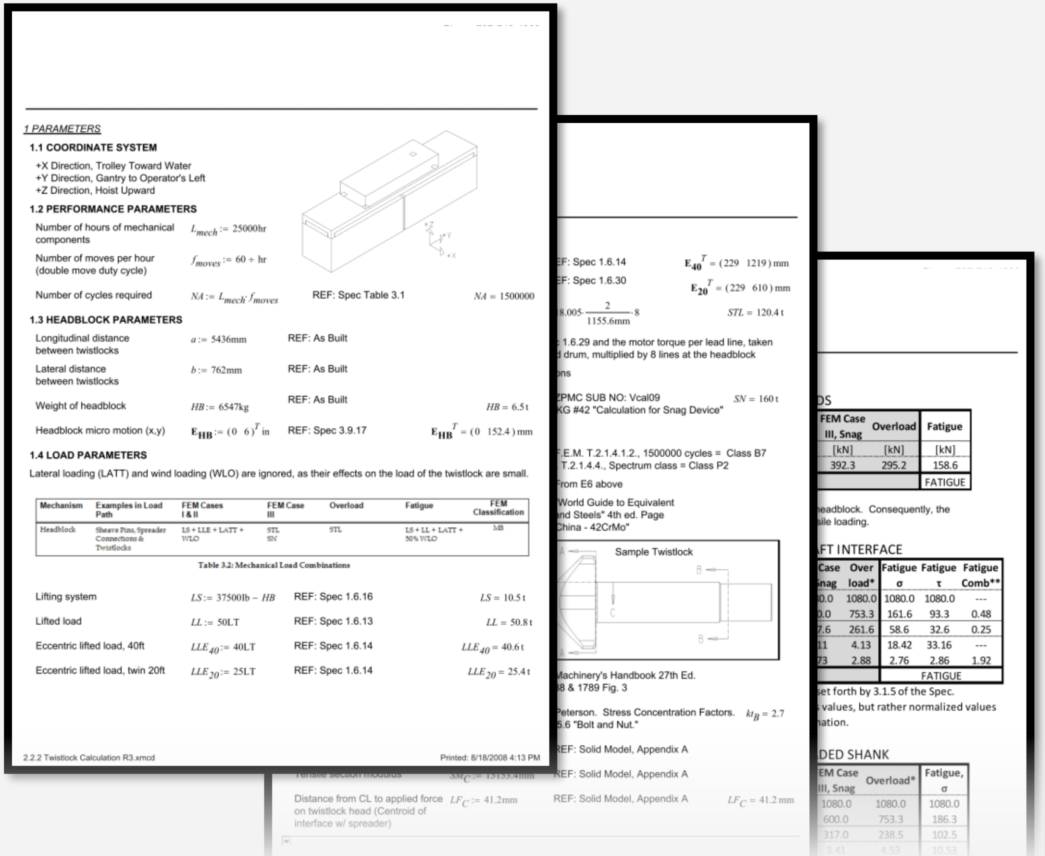
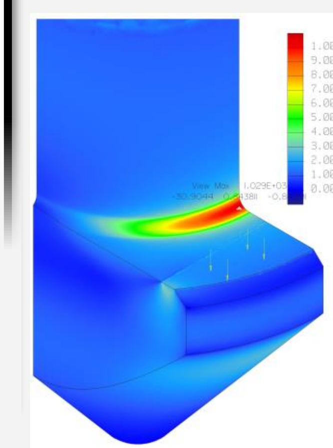
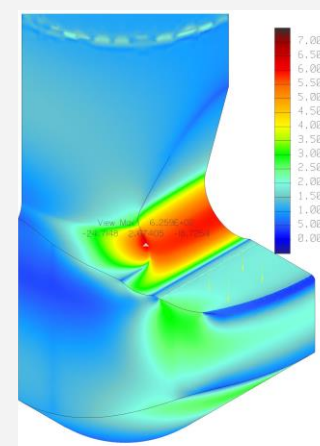
Failure Analysis



Advanced Analysis and FEA





Design Improvement

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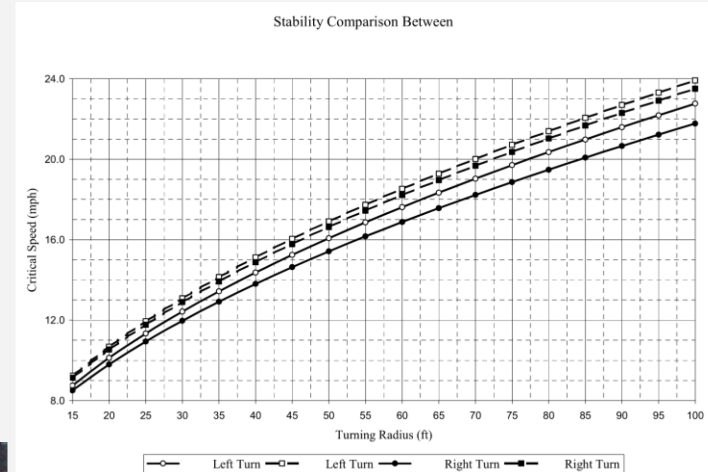
Mechanical Failure Investigation

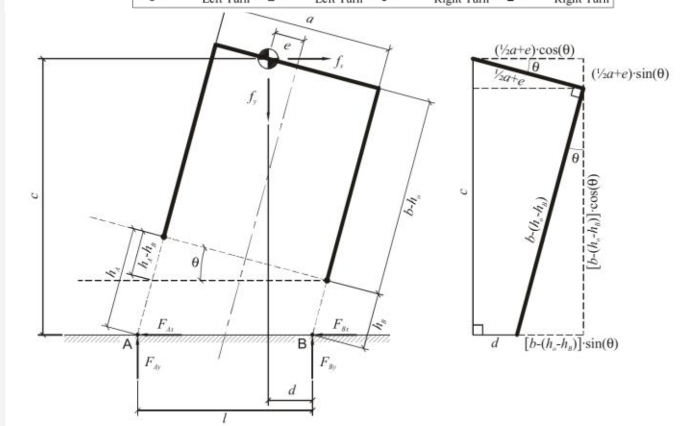
Accident Investigation

Mechanical Failure Analysis

Root Cause Identification

Expert Witness





The heights of the suspension can be expressed in deltas instead of absolute values. The deltas are defined as:

$\Delta h_A = h_A - h_o \qquad \Delta h_B = h_B - h_o$

Notice that a negative value indicates compression of the suspension system. The angle of roll can be defined as a function of these deflections:

$$\theta(\Delta h_A, \Delta h_B) := \operatorname{atan}\left(\frac{\Delta h_A - \Delta h_B}{a}\right)$$

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Electrical Failure Investigation

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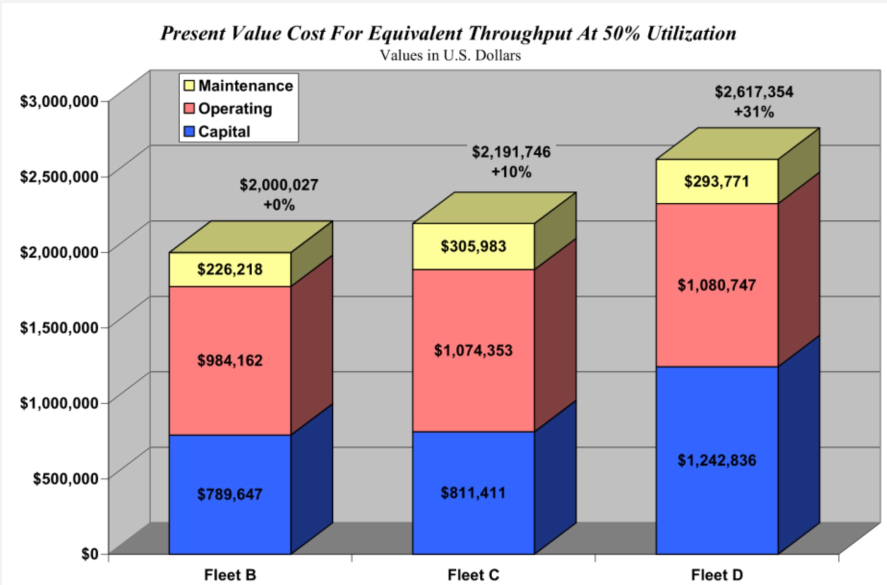
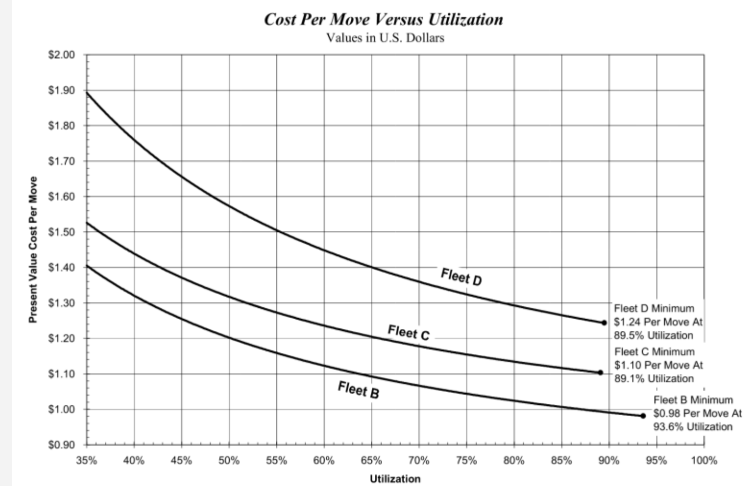
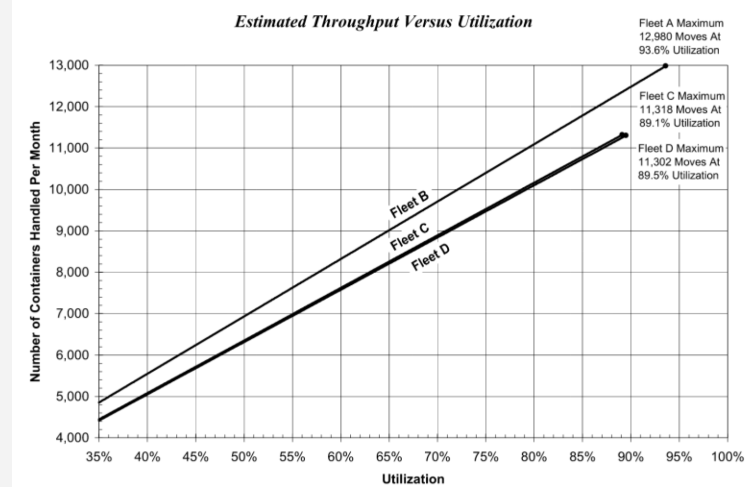
Engineering Studies







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Thank You

More information is available on our website:

www.Liftech.net