



SHIPLoadERS PORTFOLIO



MGA
Engineering
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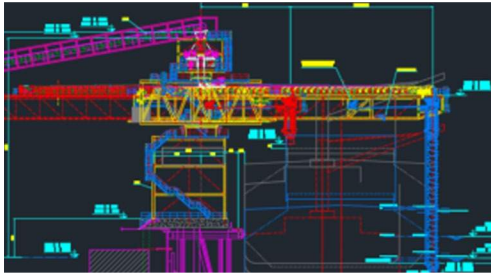
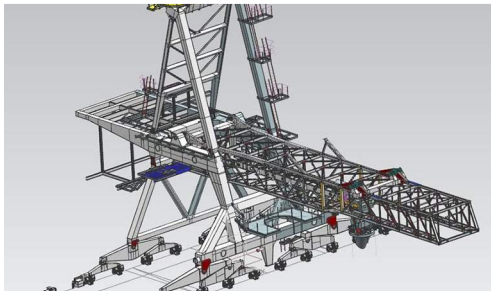
Pacific Coast Terminals Shiploader, British Columbia, Canada



LAXT Shiploader, Los Angeles, California, USA



Hamilton Lake Terminal Shiploader, Hamilton, Ontario, Canada



The Company

MGA Engineering is a master designer of structural and mechanical systems deployed across the globe in the infrastructure, building (commercial and industrial), mining, energy, and marine industries. Founded in 1996, MGA now staffs 65 highly experienced engineers, providing an exceptional level of technical expertise and innovative engineering solutions to commercial and industrial clients.

MGA is well versed in the requirements needed for designing a bulk material shiploader. Using state of the art design and computing tools, MGA completes work compliant with North American and European standards. From initial project conception via Design Basis Memoranda, through Front End Engineering and Design (FEED) studies to detailed design of the ship loader, equipment, mechanical systems, as well as any other structures needed for the port (storage buildings, silos, foundations, etc.), MGA's team meets the design needs of the industry.

A Global Footprint

MGA's head office is located in Calgary, Canada, and entails corporate, finance, project management and design functions. A large design office resides in Cairo, Egypt, and also serves as the base of operation for projects in Europe and Asia. MGA also operates several smaller satellite offices across Canada, the United States of America, and internationally (British Columbia, Quebec, Florida, New Jersey, Mexico, Brazil and Ecuador). Our footprint of past projects and active presence worldwide is can be seen on a global scale.



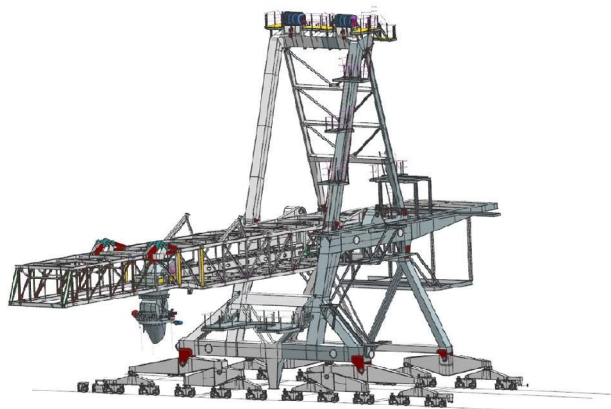


Citgo Aruba Oil Refinery, San Nicolas, Aruba

The Importance of Shiploaders

Throughout the world, shiploaders are used for continuous loading of bulk materials, such as iron ore, coal, or grain. They are essential to the global shipping industry and vital for the inter-continental exporting of bulk materials.

Efficiency, durability and reliability are words that we associate with shiploaders, and our designs are governed by those very principals. Additionally, MGA has led several research projects specifically aimed at improving shiploaders' resilience to seismic events, so that crucial trading routes and the flow of materials is not interrupted following a seismic event.



Port of Sept-Ile Pointe-Noire Quai No. 35, Sept-Iles, Quebec, Canada



Fraser Grain Terminal Shiploader



LOCATION
B.C., Canada



TIMELINE
2018 - 2020



CLIENT
FWS



MATERIAL
Grain



CAPACITY
2000 tph



SHIPLOADER TYPE
Radial quadrant

SCOPE OF WORK

- Structural and Mechanical Engineer of Record



Pacific Coast Terminals Shiploader



LOCATION
B.C., Canada



TIMELINE
2016 & 1997



CLIENT
Krupp Canada



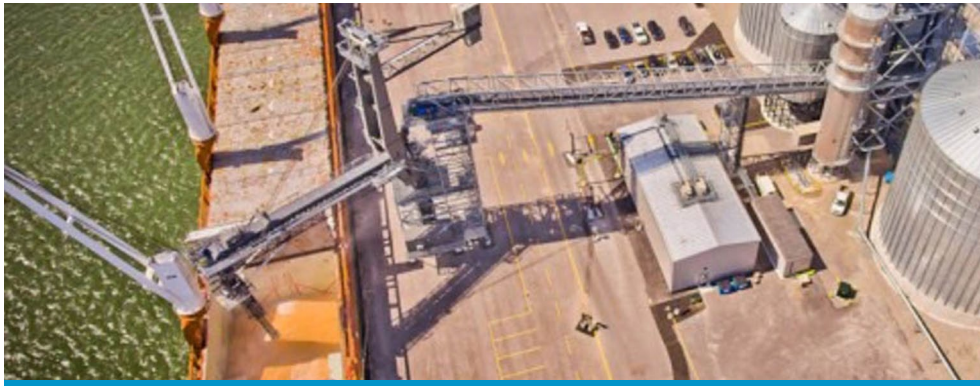
MATERIAL
Potash



SHIPLOADER TYPE
Radial quadrant

SCOPE OF WORK

- Engineer for the potash conveying system
- Design audit
- Engineer for the boom replacement



Hamilton Lake Terminal Shiploader



LOCATION
Ontario, Canada



TIMELINE
2016



CLIENT
FWS



MATERIAL
Grain



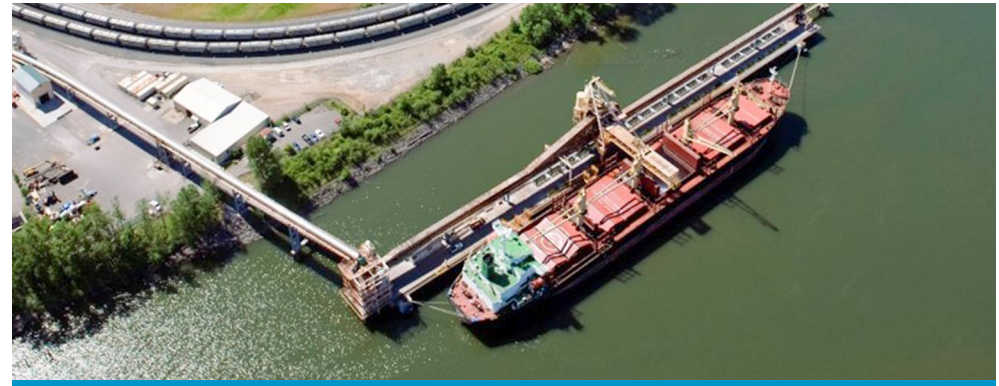
CAPACITY
1500 tph



SHIPLOADER TYPE
Fixed

SCOPE OF WORK

- Structural Engineer of Record



Canpotex Portland Shiploader



LOCATION
Oregon, USA



TIMELINE
2013 - 2014



CLIENT
Sandvik



MATERIAL
Potash



CAPACITY
6000 tph



SHIPLOADER TYPE
Rail mounted

SCOPE OF WORK

- Structural Engineer of Record










Westshore Terminals Shiploader

	LOCATION B.C., Canada		MATERIAL Bituminous coking coal and thermal coal		SCOPE OF WORK • Structural Engineer of Record
	TIMELINE 2013 - 2018		CAPACITY 8000 tph		
	CLIENT Sandvik		SHIPLOADER TYPE Rail Mounted		










Impala Burnside Terminal Shiploader

	LOCATION Louisiana, USA		MATERIAL Bituminous and Sub-Bituminous Coal		SCOPE OF WORK • Structural Engineer of Record
	TIMELINE 2011 - 2013		CAPACITY 6600 to 8300 tph		
	CLIENT Sandvik		SHIPLOADER TYPE Rail mounted		










Port of Sept-Ile Pointe-Noire Quai No. 35

	LOCATION Quebec, Canada		MATERIAL Iron Ore		SCOPE OF WORK • Structural Engineer of Record for 2 Shiploaders + trippers
	TIMELINE 2012 - 2014		CAPACITY 8000 tph		
	CLIENT Sandik		SHIPLOADER TYPE Rail mounted		



Vale Long Harbour Processing Plant Shiploader


	LOCATION Newfoundland, CAN		MATERIAL Bulk nickel concentrates and bulk limestone		SCOPE OF WORK • Design audit • Fabrication supervision • Site rehabilitation
	TIMELINE 2009				
	CLIENT Sandvik		SHIPLOADER TYPE Mobile hoppers		




Petrozuate Shiploader

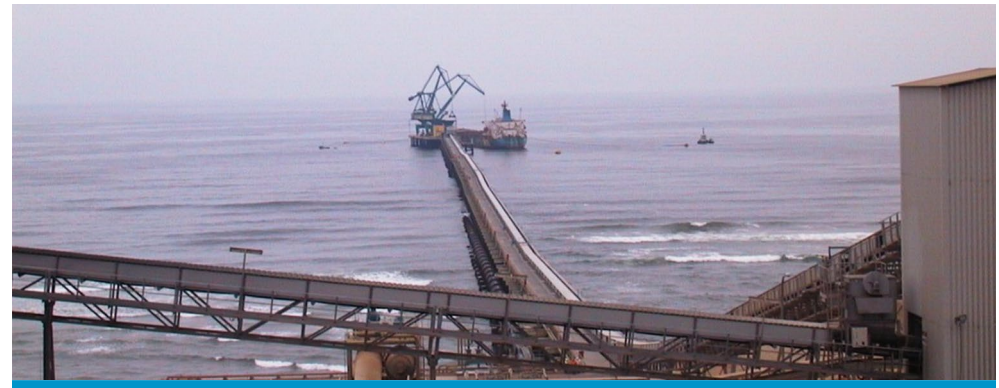
 LOCATION
Venezuela

 TIMELINE
2001


 CLIENT
Krupp Canada

 SHIPLOADER TYPE
Rail mounted

SCOPE OF WORK
• Fire damage investigation and troubleshooting




Ilo Ship-Unloader

 LOCATION
Ilo, Peru

 TIMELINE
2001

 CLIENT
Krupp Canada

 SHIP UNLOADER TYPE
Rail mounted


SCOPE OF WORK
• Structural evaluation of seismic damage
• Structural design criteria - seismic provisions




Aimcor Shiploader


 LOCATION
Texas City, USA

 TIMELINE
2001 - 2003

 CLIENT
Oxbow/Aimcor

 MATERIAL
Petroleum Coke

 CAPACITY
2500 tph

 SHIPLOADER TYPE
Radial quadrant


SCOPE OF WORK
• Repair and rehabilitation
• Redesign, detailing and fabrication, erection and commissioning supervision




Hovensa Shiploader

 LOCATION
St. Croix, U.S.V.I

 TIMELINE
1998 - 2001

 CLIENT
Krupp Canada




 MATERIAL
Petroleum coke

 SHIPLOADER TYPE
Radial quadrant

SCOPE OF WORK
• Design
• Fabrication supervision
• Erection supervision








Citgo Aruba Oil Refinery Shiploader

	LOCATION San Nicolas, Aruba		MATERIAL Crude oil	SCOPE OF WORK • Design • Fabrication supervision • Erection supervision
	TIMELINE 1997 - 2000		SHIPLOADER TYPE Fixed	
	CLIENT ThyssenKrupp Robins			




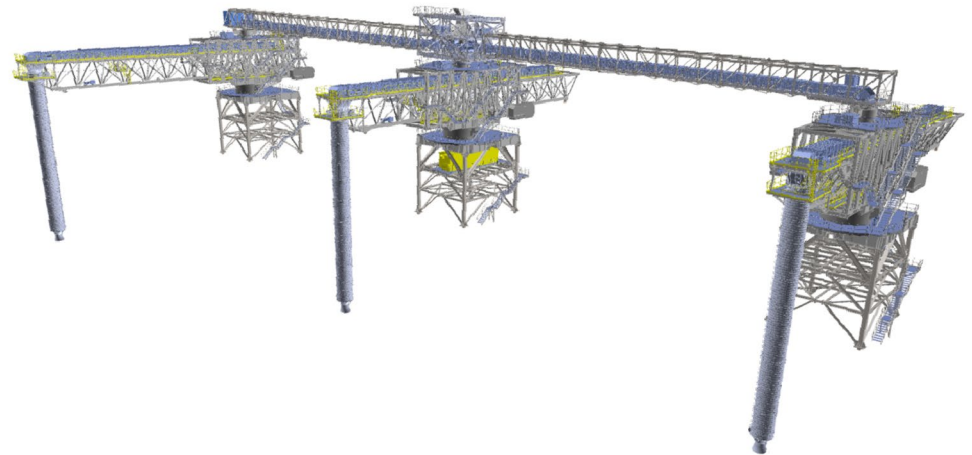
Collahuasi Shiploader

	LOCATION Iquique, Chile		MATERIAL Copper concentrates	SCOPE OF WORK • Design audit • Fabrication supervision • Site rehabilitation
	TIMELINE 1996 - 1999		SHIPLOADER TYPE Radial quadrant	
	CLIENT Krupp Canada			



LAXT Shiploader

	LOCATION California, USA		MATERIAL Coal & petroleum coke	SCOPE OF WORK • Design audit • Troubleshooting the hoisting system
	TIMELINE 1997		CAPACITY 9000 tph	
	CLIENT Krupp Canada		SHIPLOADER TYPE Rail mounted	

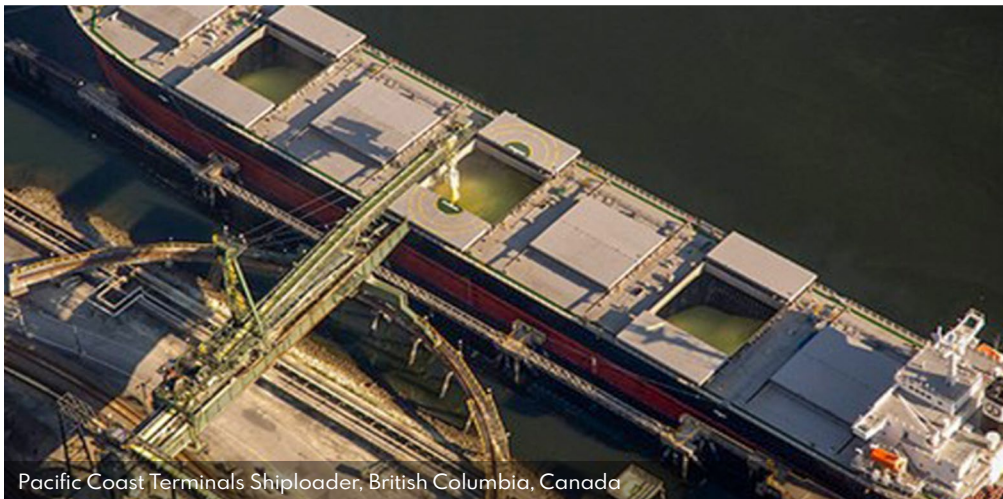




Hovensa Shiploader, St. Croix, US Virgin Islands



Impala Burnside Terminal Shiploader, Darrow, Louisiana, USA



Pacific Coast Terminals Shiploader, British Columbia, Canada

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