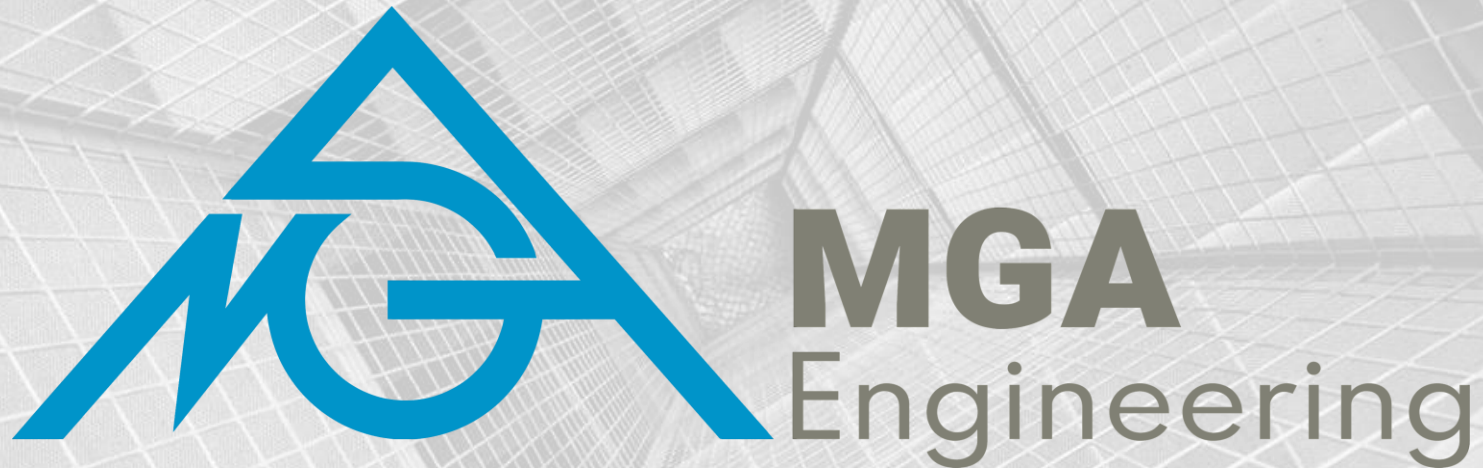


**OILSANDS
GROUP**



MGA Engineering Inc.

Suite 2800 - 817 15th Avenue SW
Calgary, Alberta, Canada T2R 0H8
<https://www.mgaeng.com/>

Contact:

Steven J. Keays, M.A.Sc., P.Eng.
Vice President
steven.keays@mga-ind.com
Cell: 1-587-433-1504
Direct: 1-587-383-6690

ABOUT MGA

MGA Engineering Inc. is a master designer of structural and mechanical systems utilized across the globe in the port, mining, infrastructure, and building sectors. Founded in 1996, the firm is headquartered in Calgary, Canada, and operates regional offices in Canada, Brazil, Ecuador, Egypt, Mexico, and the USA.

Throughout the decades, MGA has lent its expertise to asset owners & operators, and equipment manufacturers. MGA's portfolio of projects spans the globe, with a historical emphasis on the Americas, and a new focus on emerging markets in Africa, South East Asia, and Oceania.



THE COMMERCIAL DIVISIONS

Mining

Oilsands

Precious metals

Commodity metals

Potash & Sulphur

Coal

Ports

Bulk & Cargo

Terminals &
Facilities

Docks & Piers

Transport

Storage

Infrastructure

Transportation

Urban
development

Water & Sanitation

Energy & Utilities

Tanks & Storage

Buildings

Industrial

Commercial

Stations &
Terminals

Foundations

Blast-resistant

THE MINING DIVISION

21ST century mines are among the world's most demanding infrastructure projects, with Oilsands occupying a category all of their own. Modern mine operations are the primordial gateways to constructing the world, connecting people, commodities, and product across integrated networks through which transact the wealth of nations. Their design, construction, and ceaseless 24/7 operations present exacting challenges in financing, design, building, construction, operations, and returns on investments.

The **Oilsands Group** anchors the Division's technical expertise in the design, fabrication, erection, and sustainment of bulk material handling equipment, from primary extraction to crushing, separation, slurry preparation, and feed to the oil processing proper.

PROJECT HISTORY

Date	Client	Equipment	Date	Client	Equipment	Date	Client	Equipment
2017	Imperial Oil	Crushing plant and surge bin feed conveyor system	2007	Encana	Packaged modules	2007	Syncrude	Crushing plant
2016	CNRL	Crushing plant	2007	Others	Packaged modules	2006	Shell Canada	Pump box
2011	Syncrude	Truck loading bin	2008	Petro Canada	Conveyor system	2006	TransAlta	Flue gas ducting
2011	CNRL	Primary separation cell	2008	Confidential	Packaged modules	2006	Suncor	Slurry preparation plant
2009	Imperial Oil	Crushing plant hopper	2008	Confidential	Packaged modules	2006	CNRL	Foundation
2009	Imperial Oil	Process & utility piping	2008	Confidential	Packaged modules	2006	CNRL	Sulphur pouring towers
2009	CNRL	Process piping	2008	Confidential	Packaged modules	2006	Suncor	Foundation
2009	Suncor	Ore processing system	2008	Confidential	Packaged modules	2005	CNRL	Ore preparation plant
2009	Imperial Oil	Flotation tails and Froth pump boxes	2008	Confidential	Packaged modules	2005	Suncor	Conveyor system
2007	CNRL	Buildings	2007-2008	Suncor	Structures	2003	Syncrude	Crushing plant and surge bin feed conveyor system
2007	Imperial Oil	Buildings	2007-2008	CNRL	Primary separation cell	1998	Shell Canada	Rotary breaker
2007	Suncor	Buildings	2008-2009	Syncrude	Slurry preparation plant	1996	Syncrude	Crushing plant
2007	Suncor	Packaged modules	2008	Suncor	Crushing plant	1996	Syncrude	Double roll crusher
2007	Shell Canada	Packaged modules	2008	Syncrude	Apron feeder			



BULK MATERIAL HANDLING

BULK MATERIAL HANDLING

MGA's core expertise is anchored at BHM installations typically found in the mining, marine ports, and oilsands industries. MGA expertise is available in CAPEX and OPEX:

CAPEX: New equipment

(needs analysis, planning, design, design-build, erect, commission)

OPEX-A: Equipment in operation

(repairs, troubleshooting, modifications, alterations, senescence)

OPEX-B: Inspection, Testing & Certification

(maximization of economic life of operating assets)

BULK TRANSFER

- Single-boom spreaders
- Mobile stacking bridges
- Transport crawlers
- Stacker and reclaimers (single & combined)
- Bucket wheel reclaimer (boom & bridge)
- Scraper, drum, and portal reclaimers
- Portal and bridge-type scraper reclaimers
- Ship loaders & unloaders
- Grab type ship unloader
- Circular storage with stacker/bridge reclaimer

BULK TREATMENT

- Crushing plants
- Breakers and high-pressure grinding rolls
- Roll crushers and double roll crushers
- Belt linear screens
- Hard rock sizers
- Slurries plant and tailings
- Primary separation cells and flotation cells
- Granulators
- Vacuum belt filters for dewatering

EXCAVATORS

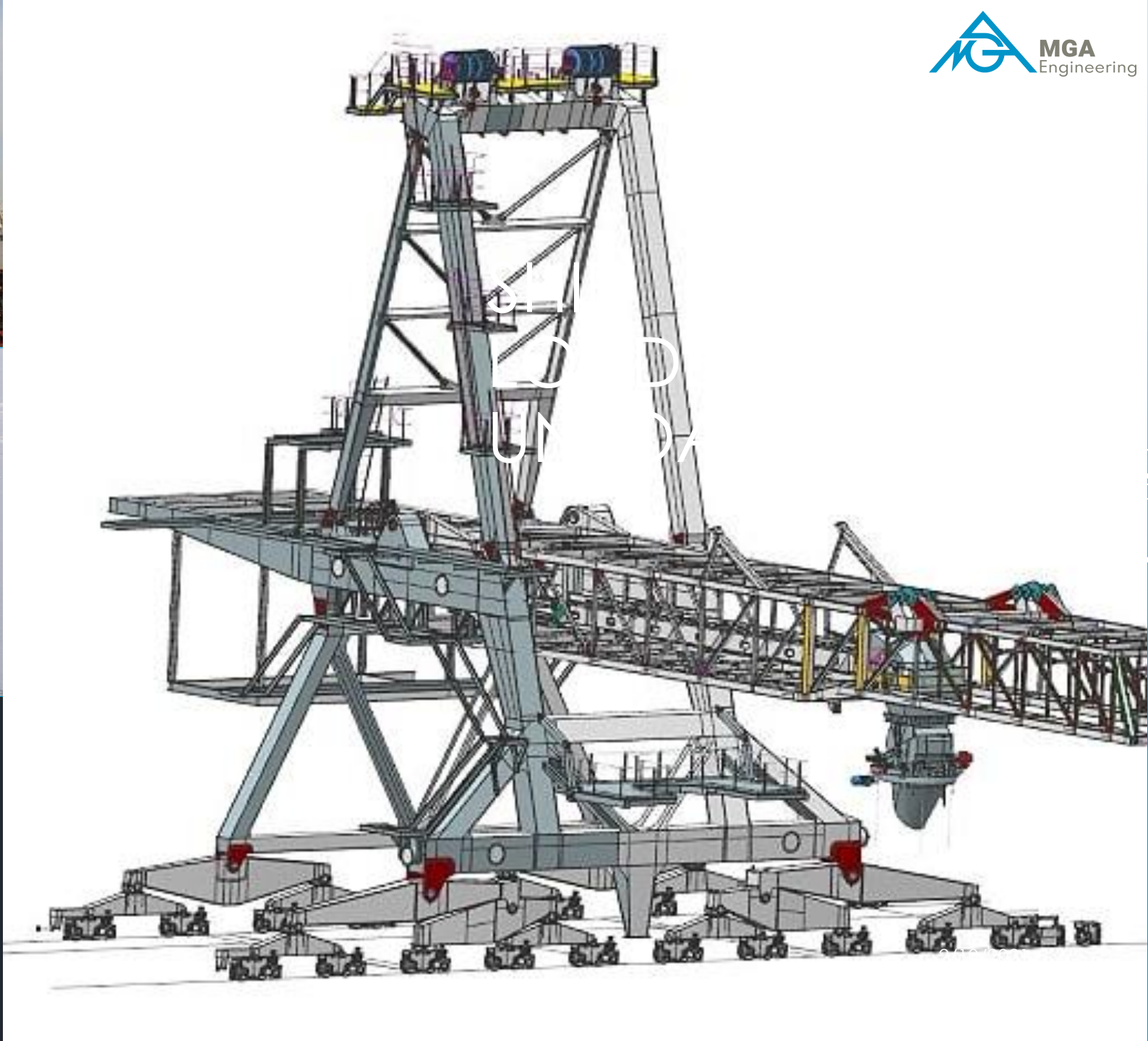
- Bucket chain excavators
- Bucket wheel excavators

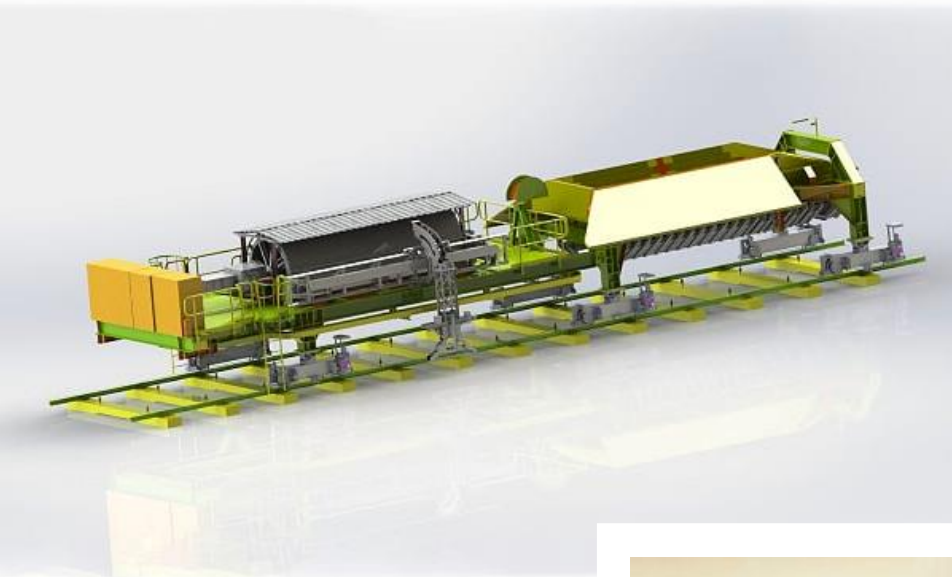
TRANSPORT

- Apron feeders
- Belt conveyors
- Belt feeders
- Mobile conveyor bridges
- Mobile transfer conveyors
- Tube conveyor
- In-plant conveyor systems
- Pipe conveyor systems
- Steel belt conveyors

FACILITIES & Buildings

- Wagon / truck loading
- Wagon unloading / tripper
- Rapid train load-out station
- Storage pits
- Tanks and reservoirs
- Pressure vessels and bullets
- Process piping
- Pipe racks
- Steel structures

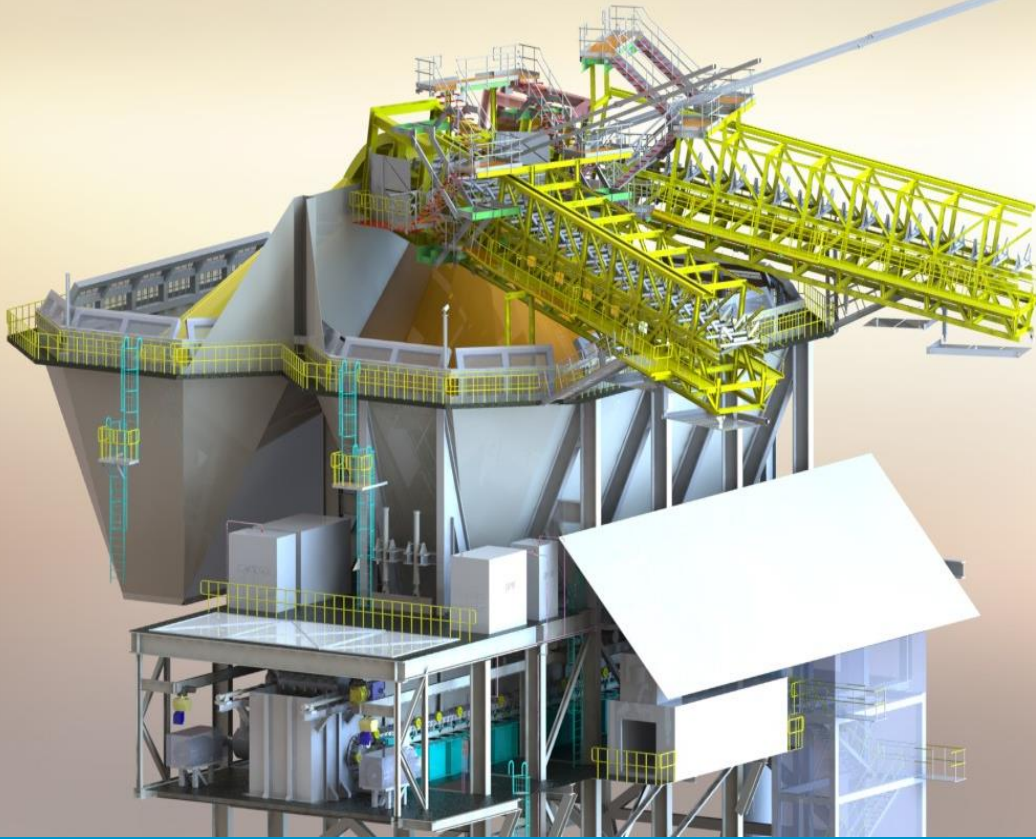
[illegible]



CONVEYORS



PRIMARY CRUSHING SYSTEMS



SURGE FACILITIES



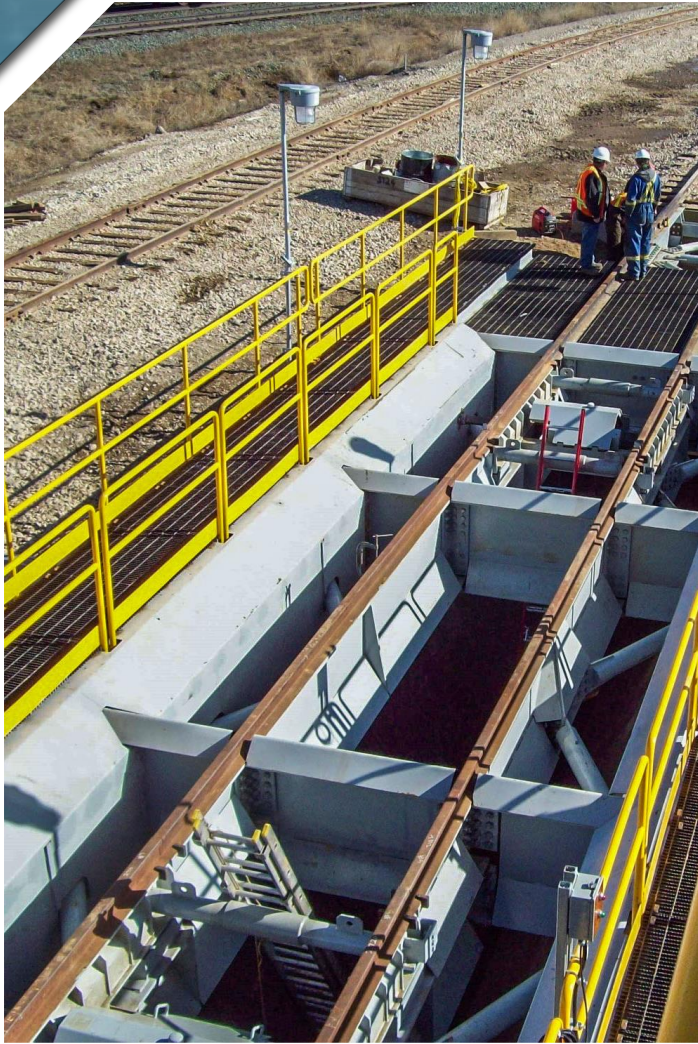
SLURRY PREPARATION PLANTS



PRIMARY SEPARATION CELLS

SPECIAL STRUCTURES AND EQUIPMENT





RAIL

Canada**Head Office**

Suite 2800, 817 – 15th Avenue SW
Calgary, Alberta T2R 0H8

2828 Boulevard Laurier,
Suite 734, Tour 1 Norton-Rose
Québec City, Quebec G1V 0B9

USA

MGA USA ENGINEERS LLC
970 Lake Carillon Drive, Suite 300
St. Petersburg, Florida, USA 33716

MGA USA ENGINEERS LLC
1 American Dream Way
East Rutherford, New Jersey 07073

Egypt

MGA Technology
30 Samir Mokhtar St.
9th & 10th Floor Ard El Golf
Heliopolis, Cairo

Mexico

Calle Jacarandas #8, Balcones De Loma Linda
Mazatlán, Sinaloa, CP 82000

Ecuador

The Scot Group (MGA Agent)
Ave. Pedro Menendez Gilbert,
Puerto Santa Ana , Edificio
The Point, Piso 26, .Ofc. 2611
Guayaquil

Brazil

JJ Infraestrutura e Engenharia Ltda (MGA Agent)
Avenida Mato Grosso 676, Anápoli
Goiás, Zip Code 75.113-170

Contacts

Steven J. Keays, M.A.Sc., P.Eng.
Vice President
steven.keays@mga-ind.com

Michael J. Pankowski, B.Com.
Commercial Strategist
michael.pankowski@mga-ind.com

