

RAHCO **International®**



EFFICIENCY THROUGH INNOVATION



Senior Management Team

Everywhere you read how quickly technology is changing the world. For over 50 years we've embraced technological innovation and the efficiencies that come with it. But one thing hasn't changed at RAHCO – our commitment to our customers, our employees and our vendor partners.

We've always believed that good business is about relationships, relationships based on honesty, integrity and trust. The world has changed, it has become a smaller place, and in this smaller world our relationships have necessarily become broader and more diverse. We've learned to forge strategic alliances with respected manufacturers and contractors around the world to serve you better. By building on one another's strengths, we can offer better, more cost effective solutions to meet your equipment needs.

Everyone on the RAHCO team shares in these guiding principles and we're justly proud of the relationships we've built both with our customers and with our partners. As we move forward, we'll continue to innovate, to integrate, and most importantly, to design systems that work every time.

Sincerely,

Richard W. Hanson
President



You have a unique equipment challenge. RAHCO International has a solution, not just any solution, but a cost effective, efficient and innovative solution.

Efficiency Through Innovation

For over fifty years RAHCO International of Spokane, Washington has provided solutions to the world's most complex machine needs. Every year, every project, we learn new and better ways to meet our clients' operational challenges through the design of sophisticated machinery and equipment systems.

This experience coupled with on-going research and development in system design allows us to offer the most advanced technological and cost effective solutions to a wide range of unique equipment problems in Construction, Canal Building, Custom Harvesting, Bulk Materials Handling and Environmental Remediation. We call it Efficiency through Innovation.

Your Requirements, Not Our Machines

We design our machines to fit your needs, not the other way around. Every project begins with your operation, your site conditions, your needs. Our engineering team studies your site, consults with your personnel and collects project data so that we can design the most efficient, cost effective system to meet your operational requirements.

At RAHCO our project teams include professional engineers from a variety of disciplines: structural, mechanical, electrical, conceptual, hydraulics and applications. Our teams draw on years of collective experience in design and operations to develop systems that combine proven technology with fresh ideas. Since we aren't saddled with pre-conceived designs or specific machines, we can offer the best solution. Not a compromise.

The Best Solution for Your Project

On occasion we encounter a challenge that goes beyond our in-house expertise. In cases like these, we've learned to seek out and enlist the support of other experts. We forge strategic alliances with trusted partners, forming an integrated project team that interacts on design and fabrication, so the system you receive is the best, most cost effective solution for your project.

Custom Systems Anywhere in the World

RAHCO can provide the right system for your project, no matter the location. Whether your site is in South America, Asia, the Middle East or Europe we're ready to help. We've built our reputation delivering reliable, custom equipment and machine systems to sites in some of the world's most remote locations. Once delivered we follow our machines from start-up to end of life, with some equipment still in operation after twenty years.



CANAL EQUIPMENT

If you're planning a water system, consult RAHCO for your construction equipment needs. We've excavated, trimmed and lined canals from California to Kuwait, in more than 40 countries worldwide.

RAHCO designs and fabricates a complete range of automated, mobile, self-guiding systems to meet any specifications. Plus we build them with flexibility and versatility in mind. For larger waterways use RAHCO half-section machinery to complete the slopes, then install a flat conversion attachment and finish the bottom.

For smaller canals (though small is a relative term) RAHCO has full-section systems, which complete both slopes and the bottom in a single pass, including trimming, lining, finishing, jointing and curing. Since not all canals require a concrete lining, we have also developed an automated membrane lining system.

We design each system to meet your specification, not the other way around, so the possibilities and options are limitless. Still, we always keep operating costs in mind. Each system is automated to reduce project costs. Send us a fax or email, or better yet give us a call and our canal construction specialists will suggest the right system for you.

Half Section Canal Paver



Full Section Canal System



Trimmer, Paver, & Workman's Jumbo





SH-12W Wet Salt Harvester, USA



Shown here is a selection of RAHCO's salt harvesters/excavators. Whether your site conditions are wet or dry, we have an efficient *and* reliable solution for you.

Our dry harvesters have crawler tracks and are equipped so the operator can vary cutting speed and depth "on the fly". Depending on the unit, these systems cut up to 760 mm in a single pass, with a cutting speed of 0-4.5 meters per minute. They'll travel overland at speeds up to 20 meters per minute with the cutter head disengaged.

As with all RAHCO equipment we build our wet harvesters to meet your specification. One of our customers in the Middle East needed a unit that would harvest a solar evaporation pond without damaging the

SALT HARVESTERS



SE-380 Dry Salt Harvester



SE-210 Dry Salt Harvester

fragile bottom. We designed a system that floats in as little as 1 m of brine, yet weighs a substantial 318 metric tonnes.

We manage to keep operating costs down as well. Since each system is fully automated, a single operator monitors the system once harvesting has begun, making minor alignment adjustments as required. Numerous custom operator interfaces are available including Global Positioning Systems (GPS) to ensure precise harvesting, touch screens, keyboards, keypads, switches and enunciators.

Don't settle for a compromise, let RAHCO design a system that meets your specific need.

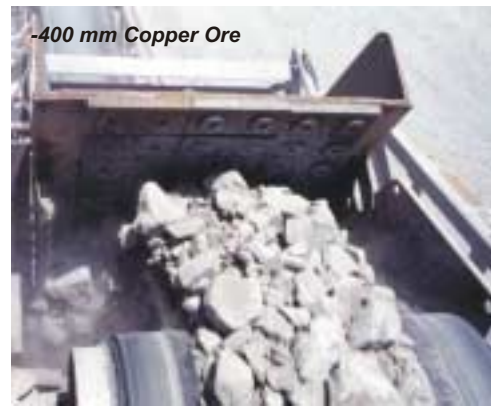


SE-380 Dry Salt Harvester

Mobile Stacker, Mexico



-400 mm Copper Ore



Portable Conveyor, Chile



RAHCO

MATERIAL HANDLING

RAHCO is known for designing and fabricating some of the world's most innovative Material Handling Systems. We produce mobile and fixed conveyors, bridge conveyors, mobile and radial stackers, continuous excavating machines...the list is endless. If you need to move material, whether 200 tph or 10,000+ tph, RAHCO can provide the equipment. The more difficult the challenge, the more we like it.

And we do it at a reasonable operating cost. Our customers have learned that an initial upfront investment more than pays for itself in the long haul. Some of our systems have sustained operating costs of as little as \$0.01/tonne USD, significantly less than alternative operations, *and* with far less impact on the environment.

We help you keep labor costs down, too. Most of our systems include computer programmed control systems so they require only a single operator. The operator monitors the equipment, with full manual override control of course. Our material handling systems are versatile as well. They're designed and engineered to adapt to changing site conditions without sacrificing productivity.

A recent customer needed to convert a permanent multi-lift leach pad to a dynamic on/off pad system. RAHCO, in cooperation with several other well-respected manufacturers, designed an equipment system to meet the customer's need. The system included a bucket wheel, mobile reclaim conveyor, an overland hopper, a series of fixed conveyors and a spent ore mobile stacking conveyor. The result was a system that removed material faster than it is stacked, transforming a fixed pad into a reusable one without significant downtime.

Single systems, complex, fully-integrated systems, conversions or upgrades, RAHCO has the expertise and experience you and your project require.



CME-12 Continuous Excavator, USA



Mobile Stacker, El Abra



Radial Stacker, Chile



Site Installation Services

RAHCO sends a site supervisor to assist in the erection and installation of our equipment. Most of our customers prefer using their own crews for installation for cost savings reasons, however outsourcing this phase of a project is becoming more and more popular and RAHCO can and does handle turn-key projects, no matter the location. We arrange subcontracts with local labor for this purpose. Recently we erected and performance tested systems on site in Arizona and Chile. RAHCO can also handle transport and all of the logistics necessary to get the equipment to your site on time. Another service of RAHCO International.

Research and Design Services

Have an idea, or a concept? RAHCO's in-house R & D team of engineers, planners and designers can help you in the initial planning and development stages. Our engineering department includes



a staff of Professional Engineers in a variety of disciplines as well as nearly 20 designers, all equipped with powerful, custom-built PENTIUM III workstations. Team members have many years of design experience and have completed over 30 studies for clients around the world. We'll address the feasibility of your idea from an equipment and site perspective, and most importantly, from a financial one as well. See **Efficiency through Innovation** in action.

Aftermarket Support Services

With every project and system we supply a complete set of manuals, drawings and in many cases a stockpile of spare parts. We don't end our services there, however. RAHCO offers sourcing for future parts requirements, maintenance services and upgrades to existing systems. We've just added parts ordering to our website for your convenience. We retain a **complete** library of manuals and drawings for past projects so should you require additional material, we always have it at hand. RAHCO also has the capability of providing these materials in foreign languages and CD format.



2000 Ton Gantry Crane, USA



MX DUB, USA



MX Silo, USA



Launch Arm, USA



BR-200, USA



MX Horizontal Shelter, USA

Over the years we have developed and produced many systems beyond those shown here. Even in 1946 when RAHCO began operation, we lived by the design philosophy **Efficiency through Innovation**. The first concept we developed was the Automatic Leveler System which reduced harvesting from a three to a one man operation. Later we modernized this concept and developed Hillside Combine mechanisms which we continue to provide to John Deere today.

RAHCO International's innovations haven't been limited to the private sector. We designed Cast-In-Place slipforms for the US Air Force MX Ballistic Missile System which allowed Air Force contractors to construct stable underground tunnels ensuring worker safety and project longevity.

At Grand Coulee Dam we developed and produced a computer controlled, hydraulic gantry crane with 2000 ton capacity. On the environmental front we have an on-going contract with the DOE to develop a revolutionary waste containment system which promises to alleviate many of the issues involving waste storage, removal and transport.

RAHCO's latest equipment development is a variety of systems for underground and surface mining. We saw a need for a fresh approach to coal mine haulage equipment. These innovative designs include continuous haulage systems, highwall mining systems and flexible tramming conveyors for open pits. Visit our website at www.rahco.com for details.

No matter your location or your need RAHCO has the design, engineering, project management and manufacturing experience to fill your requirement. For over 50 years we've improved on existing methods and created new ones, and looking forward into the 21st century we'll carry on as we have combining new technologies *and* new ideas to make even more reliable, efficient and cost effective systems for our customers.

Efficiency Through Innovation

SPECIAL PROJECTS



Central Arizona, USA



Big Belt, USA



Gravel Cleaner, California Aqueduct USA



SGTV, Waste Retrieval Vehicle, USA



Gold Dredge, New Zealand



Hillside Combine, USA



Project Management



Traffic



Spare Parts



Track Assembly



Engineering



Marketing



Welding



RAHCO Plant



Burn Table



Manuals



Quality Control

Machine Shop



Purchasing

RAHCO

RECENT CLIENT LIST

INTERNATIONAL PROJECTS

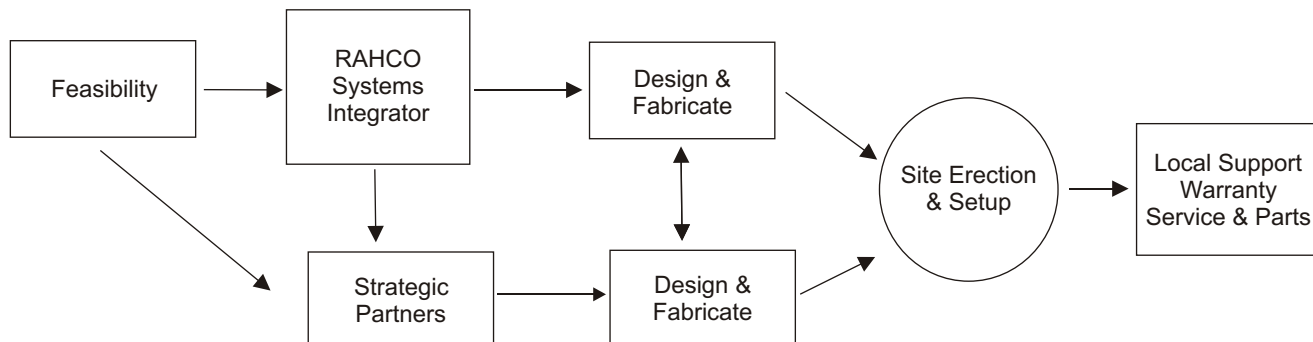
- | | | |
|---|---|--|
| <p><i>Argentina</i>
Belinsky y Gutierrez</p> <p><i>Australia</i>
Material Handling Resources</p> <p><i>Brazil</i>
SAMARCO</p> <p><i>Chile</i>
El Abra
MINSAL
Mantos De Oro
CMZ
Placer Dome
Codelco Chile
Radomiro Tomic</p> <p><i>China</i>
CNTIC
Raytheon Ebasco</p> | <p><i>Egypt</i>
ACLR
Egyptian Akaria Co.
GCLR
High Dam Co.
EGC
EPL
Societe Anonyme de Behera S.A.</p> <p><i>Germany</i>
Philipp Holzman AG
INCOM</p> <p><i>Indonesia</i>
P.T. Freeport
Arab Potash Co.</p> <p><i>Israel</i>
Mekorath Water Co.</p> <p><i>Mexico</i>
Mexicana de Canañea</p> | <p><i>New Zealand</i>
Grey River Gold</p> <p><i>Pakistan</i>
SMAD Baluch</p> <p><i>Peru</i>
Energoproject (Yugoslavia)</p> <p><i>Philippines</i>
Fisher Engineering (USA)</p> <p><i>Syria</i>
GCLR
GOLD</p> <p><i>Taiwan</i>
BES Engineering and Construction Co.</p> <p><i>Turkey</i>
KISKA Construction Company</p> <p><i>Former USSR</i>
Ministry of Land Reclamation</p> |
|---|---|--|

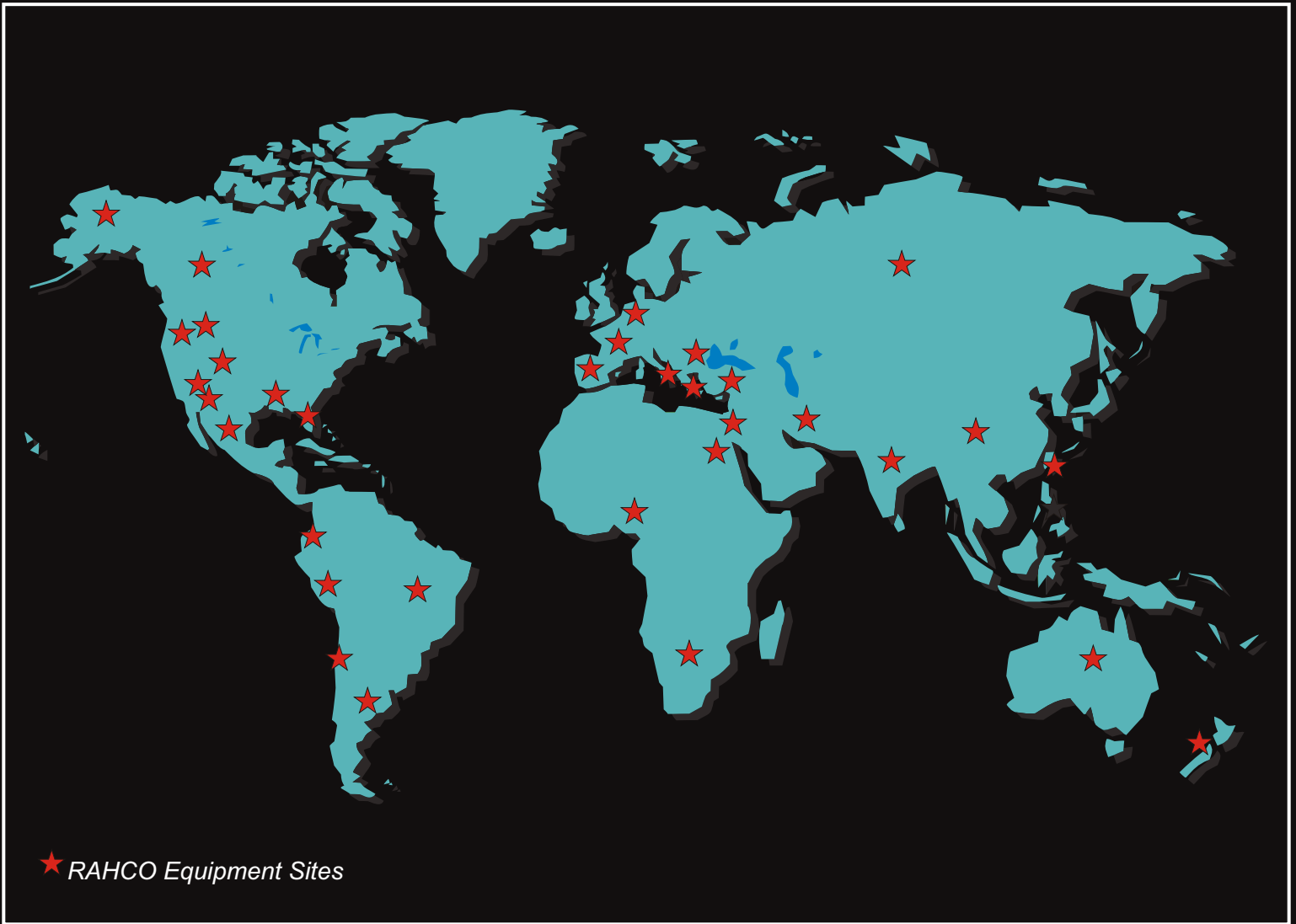
UNITED STATES PROJECTS

- | | | |
|---|--|--|
| <p><i>Apollo Gold</i>
Mobile conveyor system (Florida Canyon)</p> <p><i>BDM</i>
Rail garrison</p> <p><i>Bechtel</i>
Backfilling machines for Aleyeska pipeline
Mobile conveying machine</p> <p><i>Boeing/Goodyear</i>
Hardened mobile launcher R&D</p> <p><i>Cominco American</i>
Mineral jig system</p> <p><i>FMC Wyoming Corp.</i>
Salt excavator</p> <p><i>Hecla Mining Co.</i>
Bin reclaimer</p> <p><i>H.K. Ferguson Co.</i>
Specialized machine for defense R&D</p> <p><i>INEL</i>
Dust control/waste containment</p> <p><i>John Deere Co.</i>
Hillside combine modification</p> | <p><i>Kaiser Aluminum</i>
Dike construction system
Plant modification</p> <p><i>Kellogg, Brown & Root</i>
Mobile conveying system (Morenci)</p> <p><i>KRC Aggregates</i>
Mineral jig system</p> <p><i>Lane Construction Co./U.S. Corps of Engineers</i>
Bulkhead crane</p> <p><i>Lockheed-California</i>
Specialized research equipment</p> <p><i>Minsal</i>
Salt harvester</p> <p><i>Morrison-Knudson Co.</i>
Canal construction systems
Mobile stacking conveyor</p> <p><i>NASA</i>
Solid rocket booster lifting beam</p> <p><i>NERCO</i>
Coal excavator</p> | <p><i>NYCO Minerals</i>
Truck Dump</p> <p><i>Raytheon Engineers & Constructors</i>
Crawler spreader</p> <p><i>Sacramento Aggregates</i>
Mineral jig system</p> <p><i>U.S. Air Force Ballistic Missile Office</i>
Specialized construction systems</p> <p><i>U.S. Army Mobility Equipment Command</i>
Mobile bridges</p> <p><i>U.S. Bureau of Mines</i>
Steep angle conveyor
Mine run rock conveyor</p> <p><i>U.S. Bureau of Reclamation</i>
Gantry crane (Grand Coulee Dam)</p> <p><i>U.S. Corps of Engineers</i>
Dam bulkhead crane</p> <p><i>U.S. Department of Energy</i>
Remediation equipment</p> <p><i>Washington Water Power/AVISTA</i>
Dam gates</p> |
|---|--|--|

TYPICAL PROJECT FLOW

Marketing → Project Management → Field Support →





★ RAHCO Equipment Sites

RAHCO International, Inc.
PO Box 7400
Spokane, WA 99207 USA
Ph 509-467-0770
Fax 509-466-0212
Email rahco@rahco.com

Representative

Visit Our Website: www.rahco.com