



AMECO

AMECO



Reclaimers · Circular Stockyards · Shiploaders · Rotary Scrapers · Stackers · Parts & Services

The Power of Know-How

Serving essential industries with excellence in design, manufacturing & upkeep of bulk handling machines



Cement



Fertilizers



Mining & Metals



Power Generation

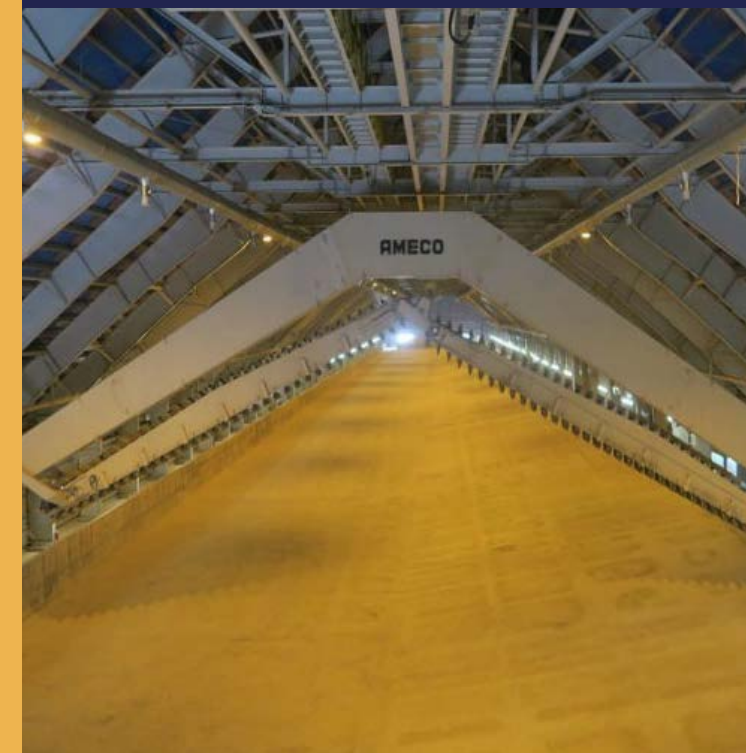


Ports



Pulp & Paper

Reliable, custom-made easy-to-operate and low-maintenance stackers, reclaimers, and shiploaders



Our goal: Offer our customers a great end-to-end experience—from design to manufacturing, delivery to after-sales support



Engineering

Mechanical Design
Electrical & Automation Design
Manufacturing



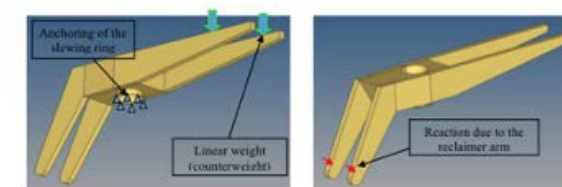
Procurement

Sourcing & Integration
Spare Parts

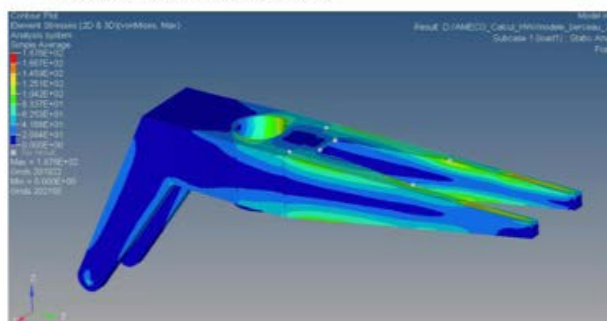


Supervision

Commissioning
Maintenance
Performance Monitoring



The results of finite elements calculations is also:



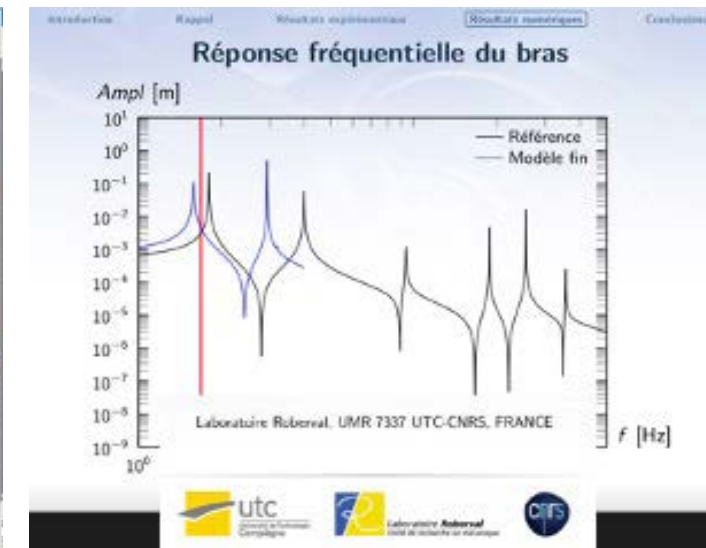
Lightweight & Robust Design

Our custom design makes our machines lighter using less high-grade steel while making them more robust and easier to transport in pieces and assemble on your site.



Safe & Connected

Our machines keep your operators out of harm's way thanks to our range of easy-to-operate control cabins and support for remote monitoring and control.



Continuous Improvement

Feedback loop from our 400 machines combined with world-class R&D in steel structure analysis provides AMECO Group with insights to help you best predict and plan revamping.

A pioneering spirit to better serve the bulk handling industry

AMECO Group was founded in 1932 to offer maintenance services to potash mines across the region where German, Swiss, and French borders meet.

Our pioneering spirit led us in the 1950s to bring innovative design and efficient manufacturing of bulk handling machines to serve new markets, such as cement and power plants and new geographies - India in the 1960s and the Americas in the 1970s.

Today, AMECO Group offers a full line of stackers, reclaimers, ship loaders, and blending systems for handling all types of bulk material. We have earned the trust of global leaders in petrochemical, mining, pulp and paper, cement, power generation, and co-generation industries with more than 400 machines delivered on 6 continents.

Our vision is to stay true to our pioneering spirit by onboarding a new generation of bulk handling talent thanks to our new Technical Academy. We are also continuing to invest in our *#powerofknowhow* capabilities by offering predictive maintenance services, while continuing to deliver high-performance, fit-for-purpose machines.



AMECO CEO Stephane Killian



AMECO Group designs & manufactures custom machines for essential industries, including:

› Cement



› Power Generation



› Mining



› Fertilizers



› Pulp & Paper



› Ports & Terminals



AMECO Group Products & Services



Reclaimers



Circular Stockyards



Shiploaders



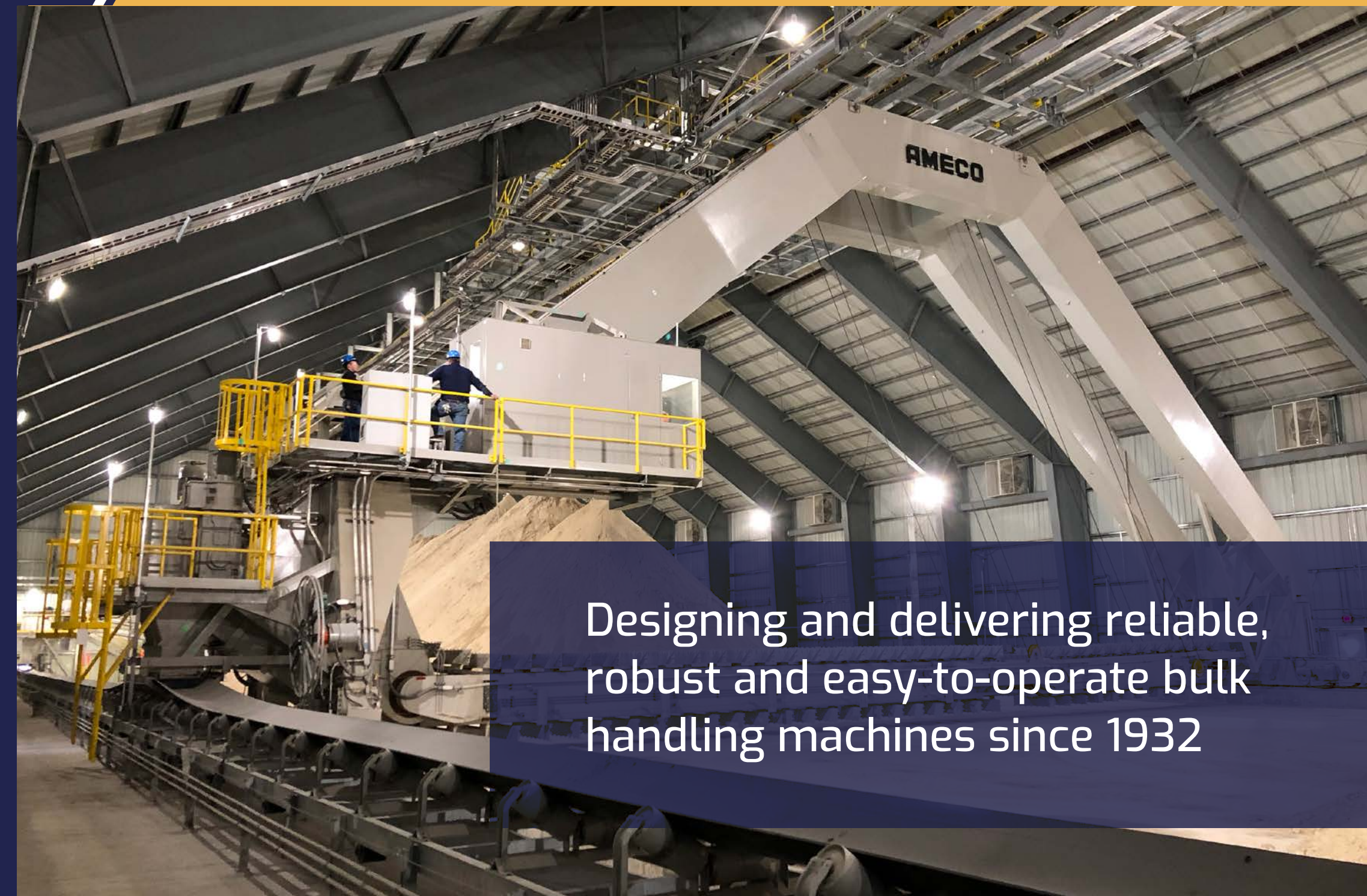
Rotary Scrapers



Stackers



Parts & Services



Designing and delivering reliable, robust and easy-to-operate bulk handling machines since 1932

When large volumes of bulk material need to be efficiently managed between individual plant process steps, AMECO Group stacker reclaimers are your perfect solution.

Outstanding productivity to keep the material flowing

Unlike dozers and other handling vehicles requiring constant, human intervention, AMECO Group reclaimers help maximize the productivity of your stockyards when managing the inflow and outflow of materials autonomously and remotely, 24/7/365.

Our team of experts understands the characteristics of your raw material to find the custom solution that will:

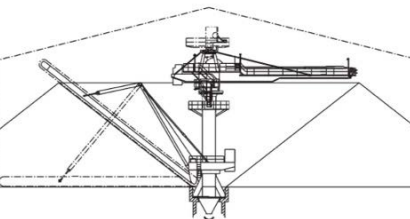
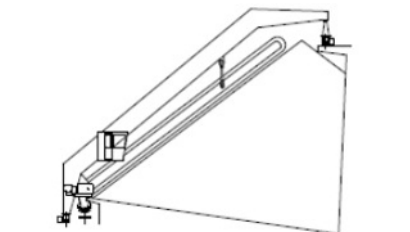
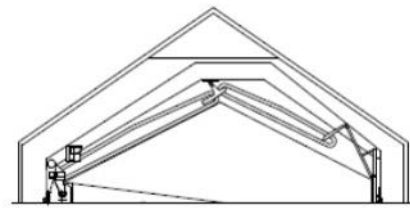
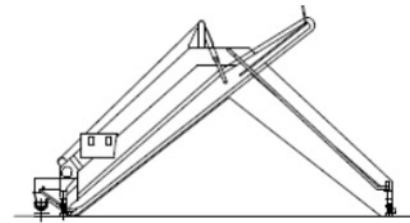
- Ensure environmental and personnel protection
- Fit into plant configuration and storage size constraints
- Handle materials of differing bulk densities and dimensions

Custom fitted for your environment

Today hundreds of satisfied operators benefit from our reclaimer design that is both lightweight – for maximum savings on steel cost - and robust – for minimizing downtime for maintenance— to give them high performance and outstanding dependability when handling materials such as woodchips, urea, ammonium nitrates, coal, gypsum, and iron ores .

Our Reclaimer Solutions

- **Single-boom Portal Reclaimers (PS1)** – ideal for materials than sit outside and where space is not limited with the single scraper arm long enough to reach across the pile.



Types of AMECO Reclaimers

- **Double-boom Portal Reclaimers (PS2)** – A more compact design better suited for indoor installations.
- **Semi-Portal Scraper (SPS)** – An even more compact design best suited for materials like limestone, coal and gypsum. 2 different materials can even be handled inside the same building by combining two SPSes on the opposite sides of the same wall.
- **Side Scraper (SS) or Traveling Reclaimer**– Well suited to handle cohesive materials, such as potash and its by-products.



Machine Customization & Support Services

Our line of reclaimers can be further customized by picking additional elements and add-ons that best suits your unique requirements, such as:

- Corrosive, abrasive, or very sticky materials
- Specific blades for dry materials and buckets for sticky materials
- Operator cabin with remote access & control

The 5 questions to answer when picking a reclaimer solution

1. **What type of environment** will the machine be located in – open or contained, supplied voltage, operating temperature for motors?
2. **What is the detailed composition of the raw materials** – bulk density, particle size, moisture content, angle of repose, and average handling temperature?
3. **What are the pile details** – total storage required, overall length and width, and height from rail level?
4. **What is the floor type** – slips, bathtub, custom shape?
5. **What add-ons do you need** – railing, cabin with protection, and environmental features?

Managing a pile of bulk materials is easier and safer with AMECO Group's range of traveling and luffing stackers for longitudinal piles

Stacked with features to get the job done

- **End-to-end integration:** AMECO Group designs and builds all the critical components of the machine – **from the tripper car attached to the traveling carriage to the stacker boom, cabin and electrical controls**
- **Enclosed gears for main drives** to eliminate the need for secondary gearing for more robust and low-maintenance design
- **2 Stacker boom solutions:**
 1. **Hydraulic luffing system** widely used for coal handling
 2. **Winding drums luffing system** for large machines when counterweighing of the boom is not feasible.
- **Fully equipped AMECO Tripper car to maximize uptime** that includes idle wheels, rail cleaners, and rail obstruction detectors.

Adapted to your pile of requirements

Full 3D movement:

1. **Horizontal traveling** to store stack on one side of the rail
2. **Vertical luffing** - raising or lowering the boom to pile material on both sides of a yard conveyor; ideal when needing different stacking methods
3. **Slewing** - vertical axis rotation (CSS only)
4. **All major stacking methods supported** - chevron, windrow, axial, conal (CSS only) – can be selected by the operator using the terminal



Designed with operators and machine safety in mind

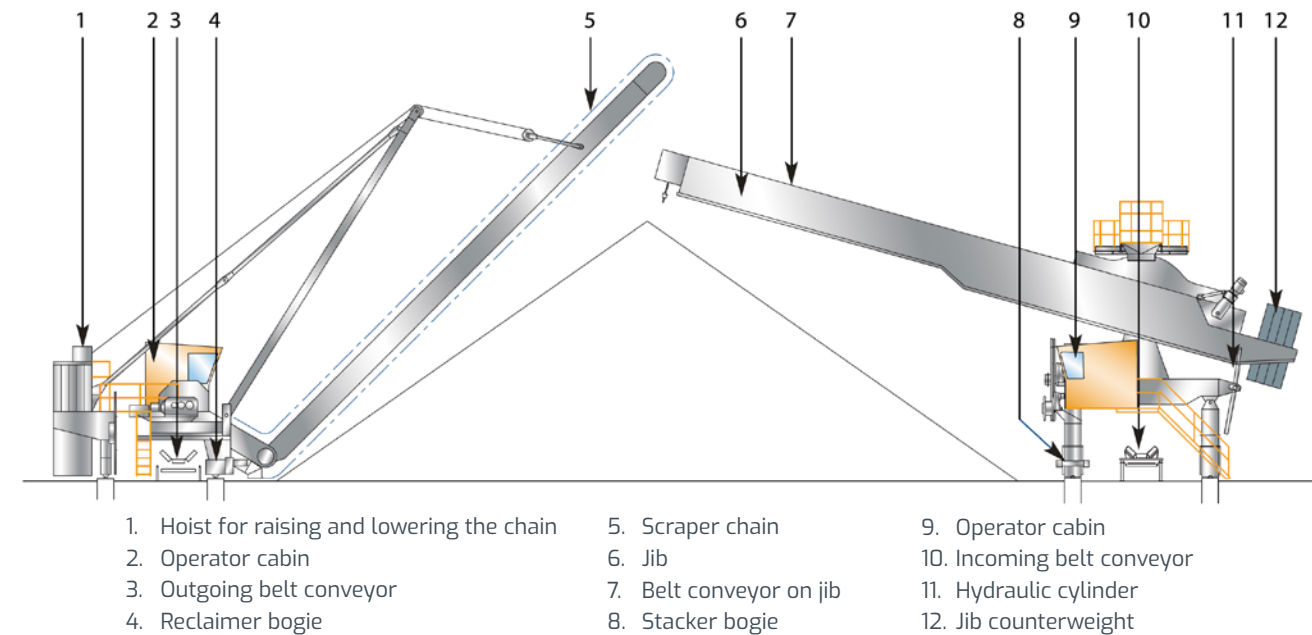
- **Aerodynamic stacker booms** using our own tubing box girder design that significantly reduces wind effect on the structure
- **Cable safety factor always six to one or greater** for hoisting machinery and cables designed
- **Easy and safe access to any area requiring maintenance** with stairways and platforms generously located throughout our machines, i.e., for the stacker boom structure, can be done on both sides, allowing maintenance access for the conveyor its components.

Stay in control at all time

- **Quick and intuitive self-diagnostic tools** thanks to programmable controller and touchscreen terminal
- **Fully remotely operable**
- **Complete set of backup switches for all movements**
- **4 Preset stacking modes** – chevron, windrow, axial, and cone shell.

Best of Both Worlds: The Stacker/Reclaimer Combination

AMECO stackers **pile material onto a stockpile for later reclamation and use. This is why our stackers can seamlessly operate** with an AMECO Reclaimer, creating a full storage system where the stacker uses slewing, luffing, and traveling movements to create piles with **minimal dust emission.**



When you need to optimize space and cost while keeping material homogenous, AMECO Group’s range of circular bulk handling solutions is here to meet precisely your needs.

Circular Stockyard Stackers – ideal for tight outdoor space and budget

Our Circular Stockyard Stackers (CSS) is well suited to the Pulp and Paper and Power Generation industries since it optimizes the storage volume on a low surface stockyard. The boom length for a Circular Storage System can go up to 55m, allowing for 150,000 m3 of bulk material storage.



Circular Portal and Semi Portal Stacker Reclaimers – ideal for delivering maximum performance indoors

AMECO Group Circular Portal Scraper (CPS), aka Slewing Reclaimer, is best suited for **indoor applications where the reclaim conveyor is underground**.

Thanks to AMECO custom design for the articulation between the reclaiming arms, our CPS can handle **high capacity needs and low building heights** for bulk material such as fertilizers, coal, or sulfur.

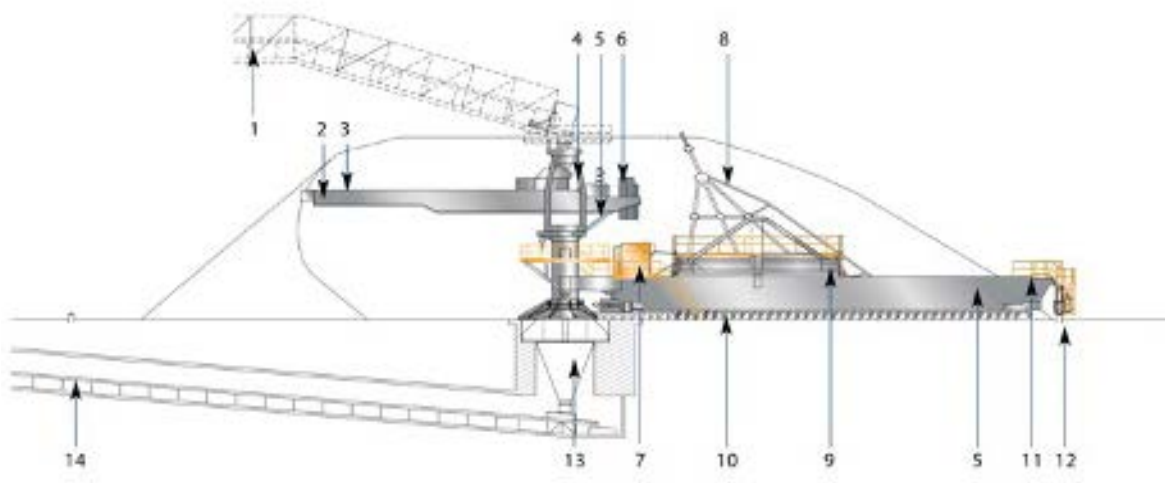


Circular Homogenizing Stacker Reclaimer System for high continuous homogenizing effect

The Circular Homogenizing Stacker Reclaimer System (CHO) **stacks bulk material in one ring-shaped pile**. The stacker is located on the center column, allowing rotation and luffing motion, building the material in a chevron or cone-shaped shell. Its height above the top of the pile is kept at a minimum distance to **reduce dust emission** from woodchips, limestone, or coal. Fan-shaped sprinkling action in an arc determined by the type of material being processed ensures appropriate homogenization.

The 5 questions to answer when picking a circular stockyard solution

1. What type of homogenizing effect is required?
2. Will the material be located indoors or outdoors?
3. What will be the raw materials’ detailed **characteristics** – bulk density, particle size, moisture content, angle of repose, and average handling temperature?
4. What are the **reclaiming and stacking capacities needed** (TPH, m3/h, or cuFt/h)?
5. What are the **pile details** – length and width, and height from rail level?



1. Incoming belt conveyor
2. Boom
3. Conveyor belt, jib
4. Central column
5. Luffing unit
6. Boom Counterweight
7. Operator cabin
8. Raking harrow
9. Raking car
10. Scraper chain
11. Hydraulic chain tension unit
12. Bogle
13. Outlet hopper
14. Outgoing belt conveyor



Reclaiming Bulk Material takes place from the pile’s face by a harrow traveling on the Bridge Reclaimer that also rotates around the central column. The harrow’s sweeping movements homogenizes the bulk material and allows it to slide on the pile base. The reclaiming arm located below the bridge structure then handles the material.

When fertilizer plants produce prills, they can rely on AMECO line of custom rotary scrapers for careful scraping and reclaiming

Rotary Scrapers for Prilling Towers - An AMECO Group Innovation for the Fertilizer Industry

To automatically reclaim 100% of the prills with close or no degradation of the product, AMECO Group has developed a unique reclaimer design with precise rotation movement, allowing to concentrate the granulated urea spread over the circular surface of the base.

- The reclaimer is composed of a triangular-shaped boom that rotates at the bottom of the prilling tower
- The reclaimer rotates at the bottom of the tower with adjustable and replaceable scraping blades to load the prills onto a belt conveyor located below a trough
- The prills then go into a discharge point leading to the downstream conveyor.



An AMECO Conical Scraper

AMECO rotary scrapers can fit two types of floor shape of the prilling tower

Flat Prilling Tower Reclaimers

When the base of the prilling tower is flat, the reclaimer Boom is laid horizontally.

Conical Prilling Tower Reclaimers

The discharge point to the downstream conveyor is located at the center of the Prilling Tower base. The reclaimer boom adjusts to the tower floor by adopting the same angle enabling the urea prills to be conducted to this central point, discharging them to a downstream conveyor through a chute.



“We are very pleased with the performance and reliability of AMECO’s equipment. The AMECO team proved to possess strong capabilities in both the design and the manufacturing of its equipment. We recommend their line of equipment to other parties looking for a qualified bulk handling supplier.”
—Petrobras

Port operators worldwide rely on AMECO Group's proven ship loading solutions to handle the growing demand for larger loading capacity and higher handling rates.

Outstanding Cost-Effectiveness, Reliability & Performance

Our shiploader solutions deliver business continuity for loading into ships coal, grains, woodchips, urea, and potash, among others, to help port operators achieve:

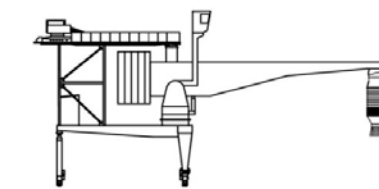
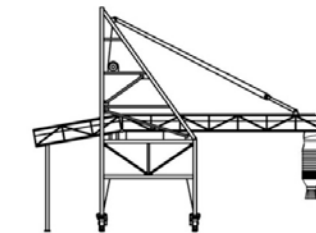
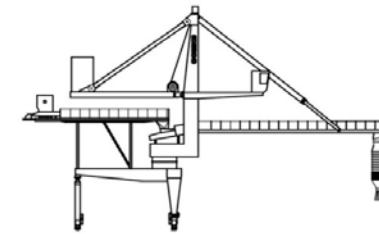
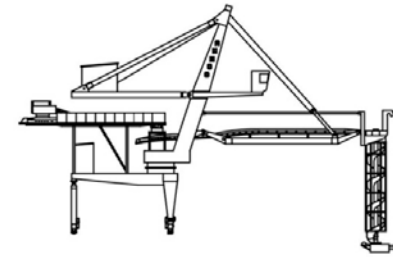
- **Cost optimization for legacy and PANAMAX ship loading thanks to AMECO Group classic shiploader design offering** – includes erection and commissioning, supervision services, and maintenance plan for marine environments.
- **Lasting and outstanding performance for post-PANAMAX ship loading using our #powerofknowhow solution** – a custom shiploader design to fit loading rate, water elevation, pier requirements coupled with predictive maintenance and custom revamping services.

Designed for You and the Environment

Whether you require a long traveling shiploader with a luffing boom, need to load bag and bulk products with different characteristics, or need a shiploader/stacker, AMECO Group will design a robust, custom-made shiploader solution integrating and refining proven technologies into one easy-to-maintain machine:

Major Shiploading Technologies

- **Traveling Shiploaders** - on rails; ideal for reaching the ship's hatches' full loading area, offsetting shorter quay length, and avoiding unnecessary ship position adjustments.
- **Stationary Shiploaders** – fixed; recommended when loading environmentally hazardous material thanks to its feed route's premium encapsulation.



AMECO's traveling, slewing and/or huffing shiploader designs for bulk and/or bags.

Versatile Conveying Technology

- **Belt conveyors** are best suited for sticky or granular bulk material such as grains, urea, coal, and ships up to 120'000 DWT.

Advanced Dust Suppression & Anti-Leakage Systems

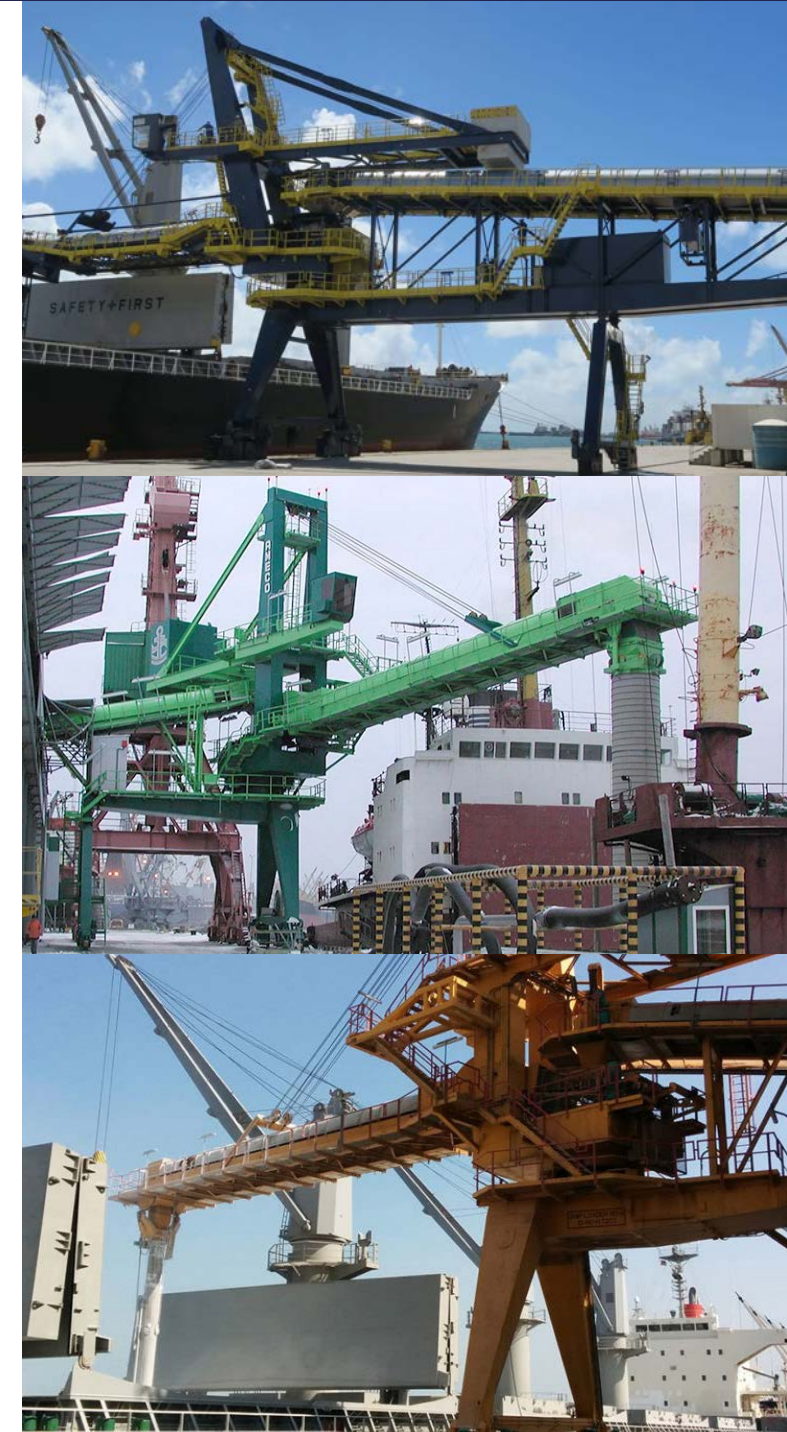
- **Custom spiral chutes** with telescopic pipe to control safe delivery of track bags
- **Fully covered chute & telescopic pipe** with rotary banana chute/ belt slinger / kick-in kick-out mechanism to load the material without spillage into the hatches.
- **High-precision, covered booms** for full rotational and vertical control to precisely hold and adjust according to water elevation, ship's size, and draught during loading.

Full Operator Control & Protection

- **Operator cabin with the specific marine environment and protective features** with touchscreen for operational controls and PLC-based safety controls
- **Remote monitoring of bag loading operation**

All AMECO Group machines come with the following #powerofknowhow features

- **Turnkey delivery** – shiploader machine pre-commissioned before delivery and assembling done quickly by your existing operation teams under AMECO supervision
- **Custom maintenance plan based on product handled and marine environments**
- **Supply of AMECO high-quality spare parts**
- **AMECO Academy** – develop your team's skillset and productivity through continuous training with our experts and knowledge sharing with our network of customers





“Our AMECO reclaimer has made our maintenance team look great thanks to its smart design, robustness and easy-to-follow procedures. Our plant management is very happy as well - Its uptime performance has been outstanding for 25 years running!”

— Larry Legros, Senior Maintenance Manager,
Seward Power

Our cabins—where safety & control connect.



Our control cabins provide the right environment to control our range of bulk handling machines by a compact, flexible and customized solution.

Using our mechanical engineering expertise, we design the cabin to handle both static and dynamic situations ensuring maximum longevity.

Highly Customizable for Your Protection

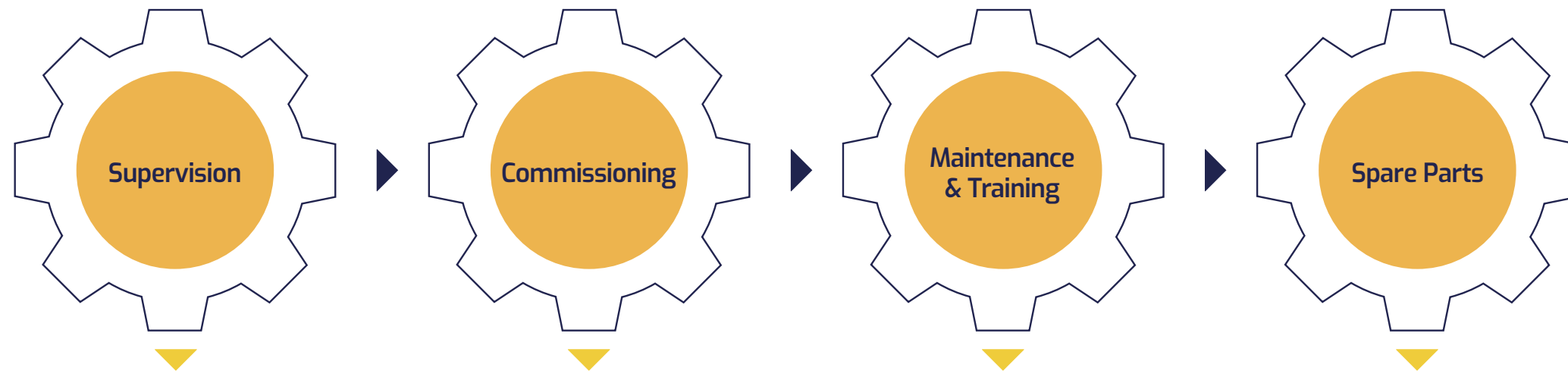
Our cabins can be customized to provide the right level of protection, comfort and control to keep your team safe & productive when operating the machine – from ensuring physical safety from heat and smoke to providing precise touchscreen controls.

Ready to Install & Use

Our cabins are easy to install as they are built applying insulated panels to a self-supporting welded steel structure. The cabins come fully pre-cabled and ready to be easily transported using standard pallets.



Our service. Your peace of mind.



At your request, AMECO Group can dispatch an **on-site supervisor** to oversee, organize and coordinate the erection, commissioning, and start-up of AMECO Group-supplied.

Our **supervision engineers** are trained in all mechanical aspects. Moreover, they understand electrical matters, control systems, and instrumentation.

Over the years, AMECO Group's **qualified technical team** has built up an abundance of knowledge and experience, across the globe.

To help perform the commissioning, if required, third party specialists can be brought on-site to ensure the optimal performance of the machine

Our **multilingual team of inspectors and engineers** are here to perform the following maintenance services on your machine: Inspections, Refurbishments, Preventative maintenance, Repairs

We advise **yearly inspections** to ensure the **safety and longevity of our machines**, and reduce your OPEX.

AMECO Academy – develop your team's skillset and productivity through continuous training with our experts and knowledge sharing with our network of customers.

We can supply **all the critical parts for your machine** - from blades to bearings, motors to chains.

Our focus is on ensuring you have continuous access to the right, **high quality spare parts** to keep your machine running and minimize maintenance downtimes.

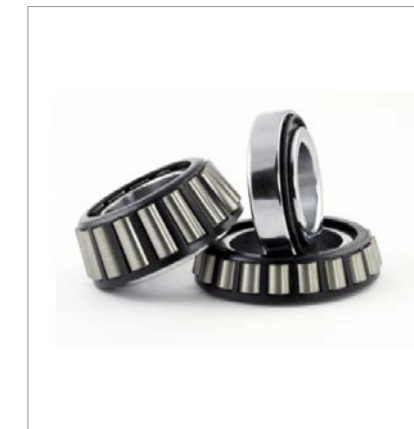
Our spare parts work harder for you.

When the time comes to replenish your spare parts kit, sourcing parts directly from AMECO Group offers maintenance teams several advantages:

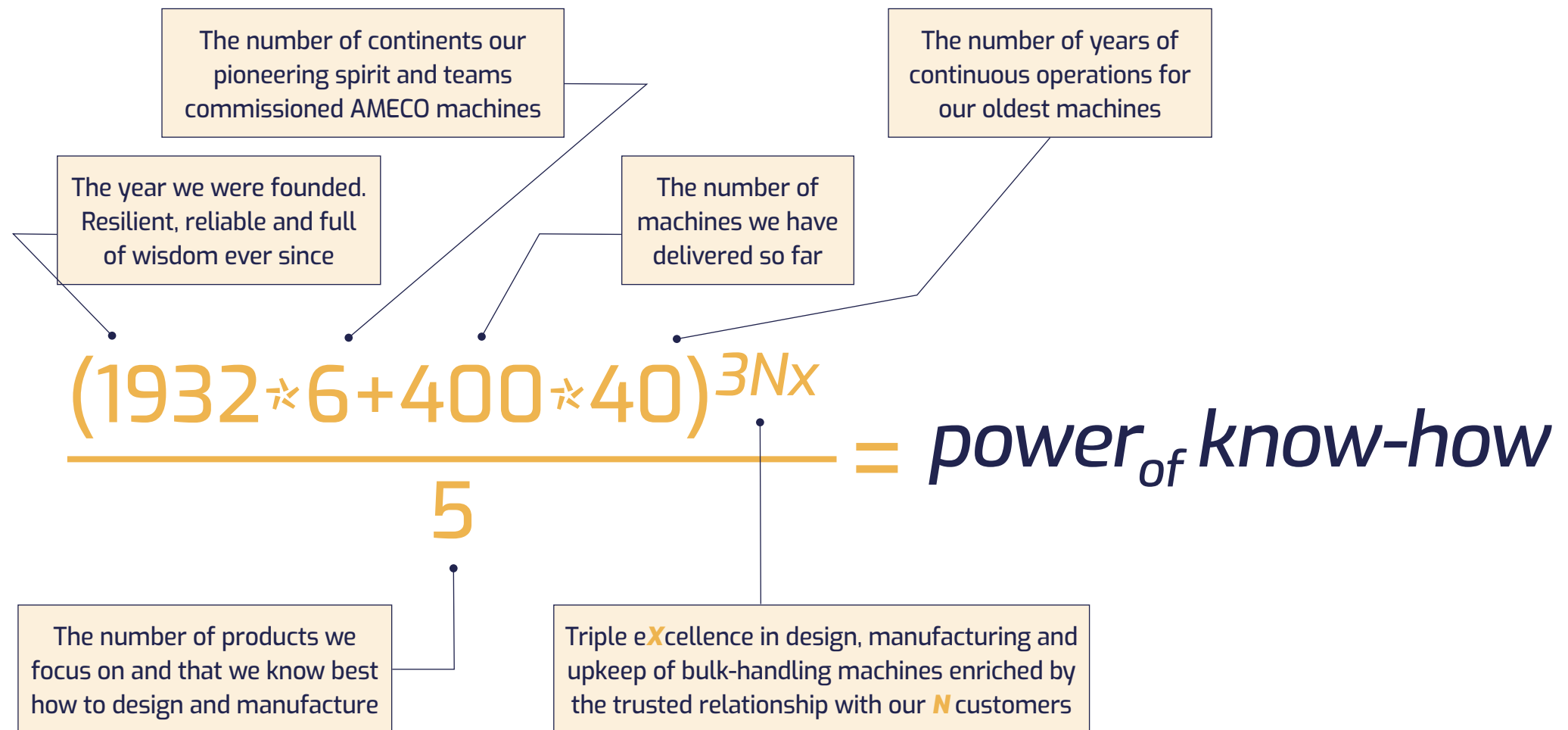
1. **Genuine parts**, specifically designed and built using a special high-quality steel, to ensure optimal performance of your AMECO Group machines.

2. **Competitive pricing**, thanks to AMECO Group's purchasing power.

3. **Continuous innovation**. Each of our customers benefits from the feedback from all AMECO Group customers, as our engineering team gathers and incorporates to further improve the design and performance of our products.



AMECO Group— Our formula for your success



These companies trust **AMECO Group**:



Focus



At AMECO Group we focus on designing and manufacturing the 5 types of machines we know best how to manufacture so that they work best for you for the next 40+ years.

Long-term Value



Dedicated, 24/7/365 support to maximize your uptime.

Free first general inspection to residual life assessment, and revamping for lifespan extension.

Safe & Connected



Easy-to-operate control cabins with support for automation and remote monitoring to keep operators out of harm's way.

AMECO Academy



Knowledge sharing from our network of experts and customers to boost your team's skills and productivity thanks to online and onsite training, workshops and installations visits.

Peace of Mind



Common components in our machines sourced exclusively from top-tier suppliers.

Custom components are made by hand-picked partners and built under our experts' supervision.

Continuous Improvement



Recurring collection of operator feedback combined with world-class steel structure R&D allow us to refine our best practices, better plan proactive revamping, and solve new challenges for our customers.



AMECO





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