

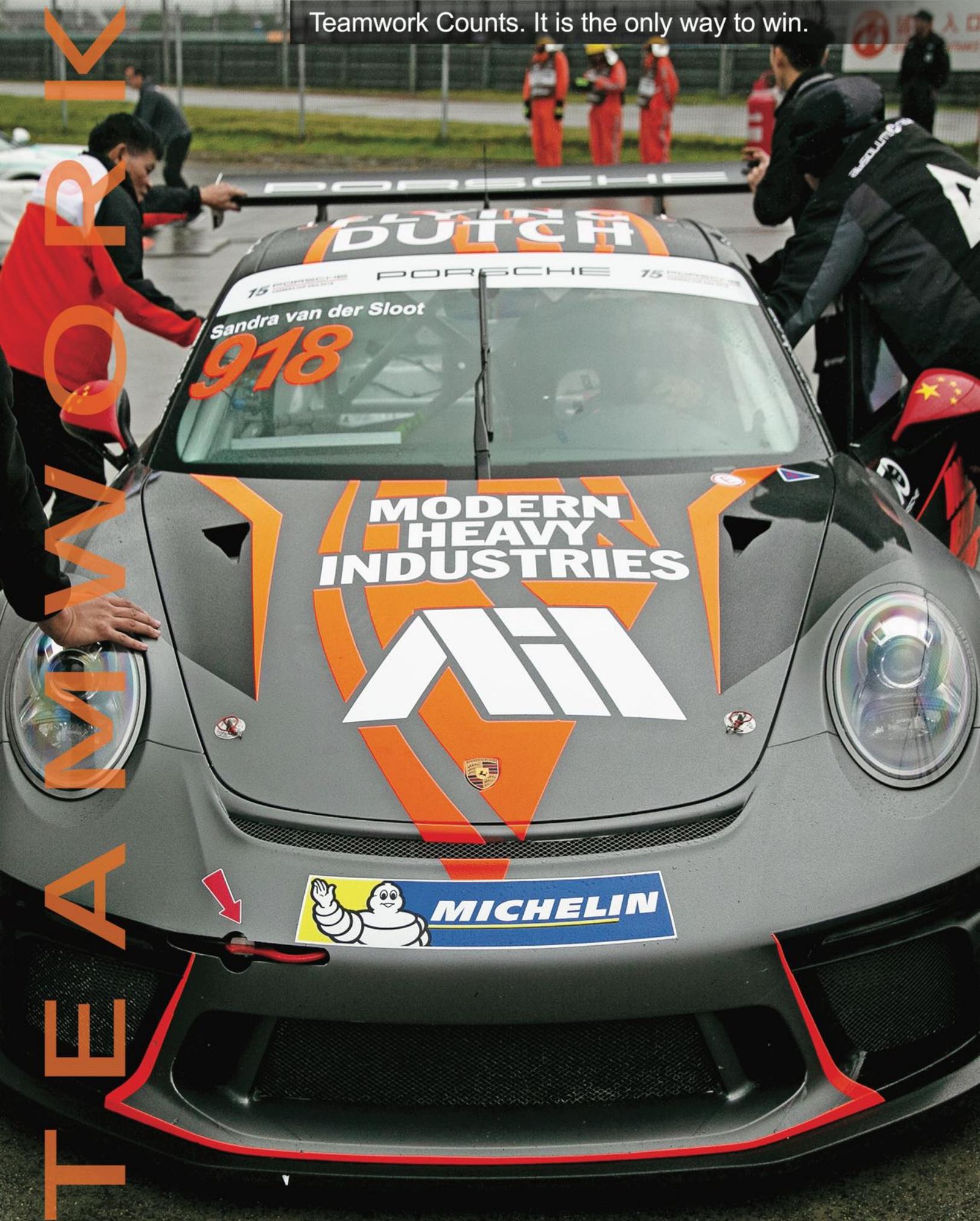


POWER BUILDINGS MODULAR PROCESS MINING

MODERN HEAVY INDUSTRIES (TAICANG) CO., LTD.
MODERN MODULAR ENGINEERING & CONSTRUCTION CO., LTD.



Teamwork Counts. It is the only way to win.



Modern Heavy Industries. Team Sponsor and Winner of 2018 Porsche Carrera Cup Shanghai

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BENI SUEF CCPP
EGYPT MEGAPROJECT

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MODERN GROUP 1

MESSAGE



George Jo

A stylized, handwritten signature in blue ink that reads "George Jo".

Chairman & CEO
Modern Group Companies

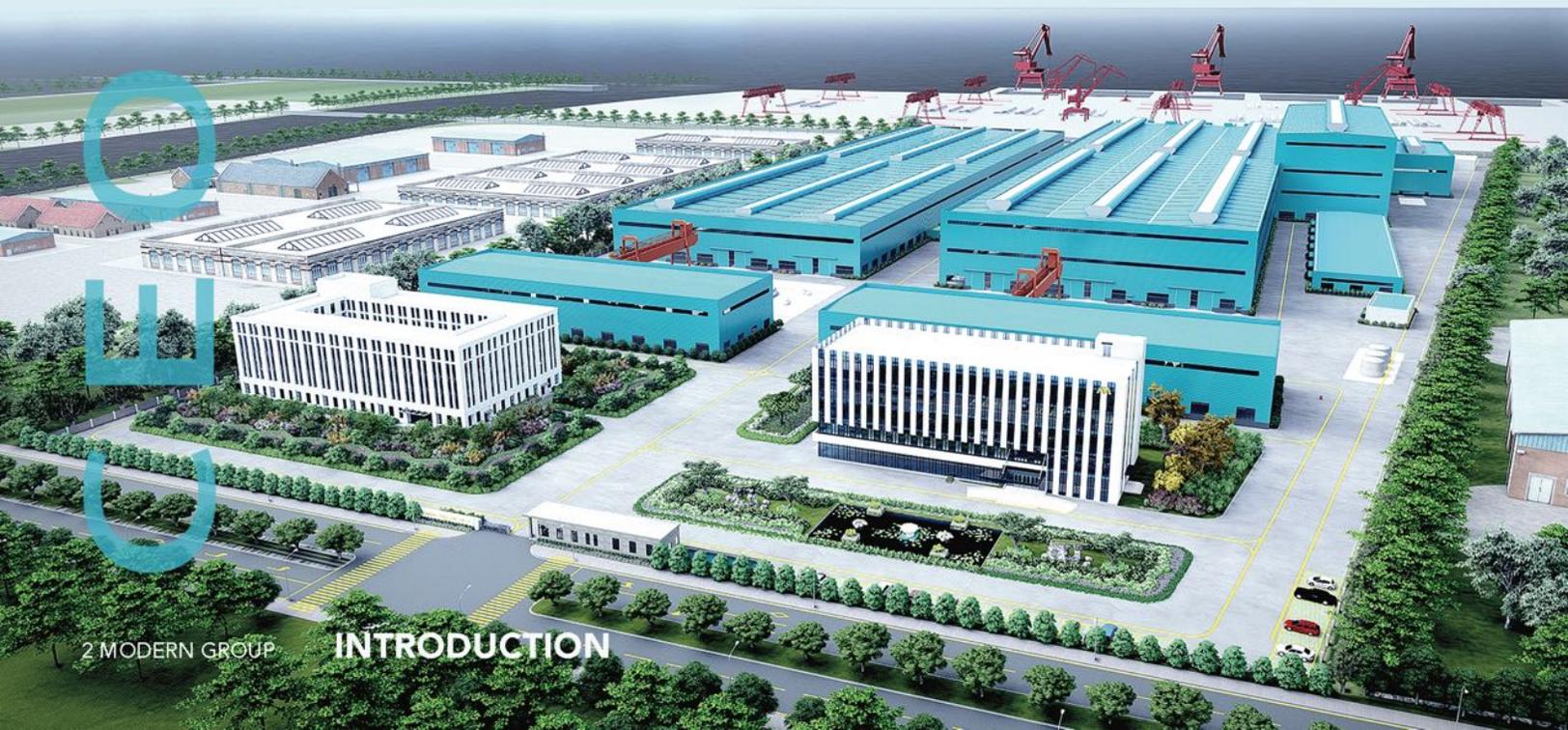
It is a pleasure as a private owner to dream big and work hard to develop a successful engineering enterprise that can continue to serve our clients into the future. 2021 is an important year for many reasons. We must seize new opportunities globally, even though a worldwide pandemic limits our physical ability to participate. Despite the challenges, we must rekindle our relationships, reach out to stakeholders, and see when and how we can help things moving in the right direction.

Modern Heavy Industries and Modern Modular Engineering & Construction company continue to emerge into new markets. Our new division, Modern Modular Engineering & Construction completion (MMEC), is nearing construction completion. Our management team is working diligently to expand operations and increase overall capabilities.

Modern Group enjoys a team of stable leaders who set achievable goals for themselves and the workforce that follows them. As a team, we seek to reduce outsourcing risk for our customers and their clients. We continue to deliver on our strategy to be a leading supplier of complex steel structures and modular construction projects.

Modern Group offers excellent communication & services, business transparency, high-quality and flexible solutions that set us apart from competitors. We understand the importance of international standards. Our quality engineers continue to increase our compliance level and the best practices anticipated in today's sourcing environment.

Integrity is a big part of earning trust. We take strides every day that demonstrate our commitment to being the best cooperative supplier. Our job is to make sure that our customers can relax and focus on other things. In this way, our customers can believe in what we do and trust that the result is correct.



ABOUT MODERN



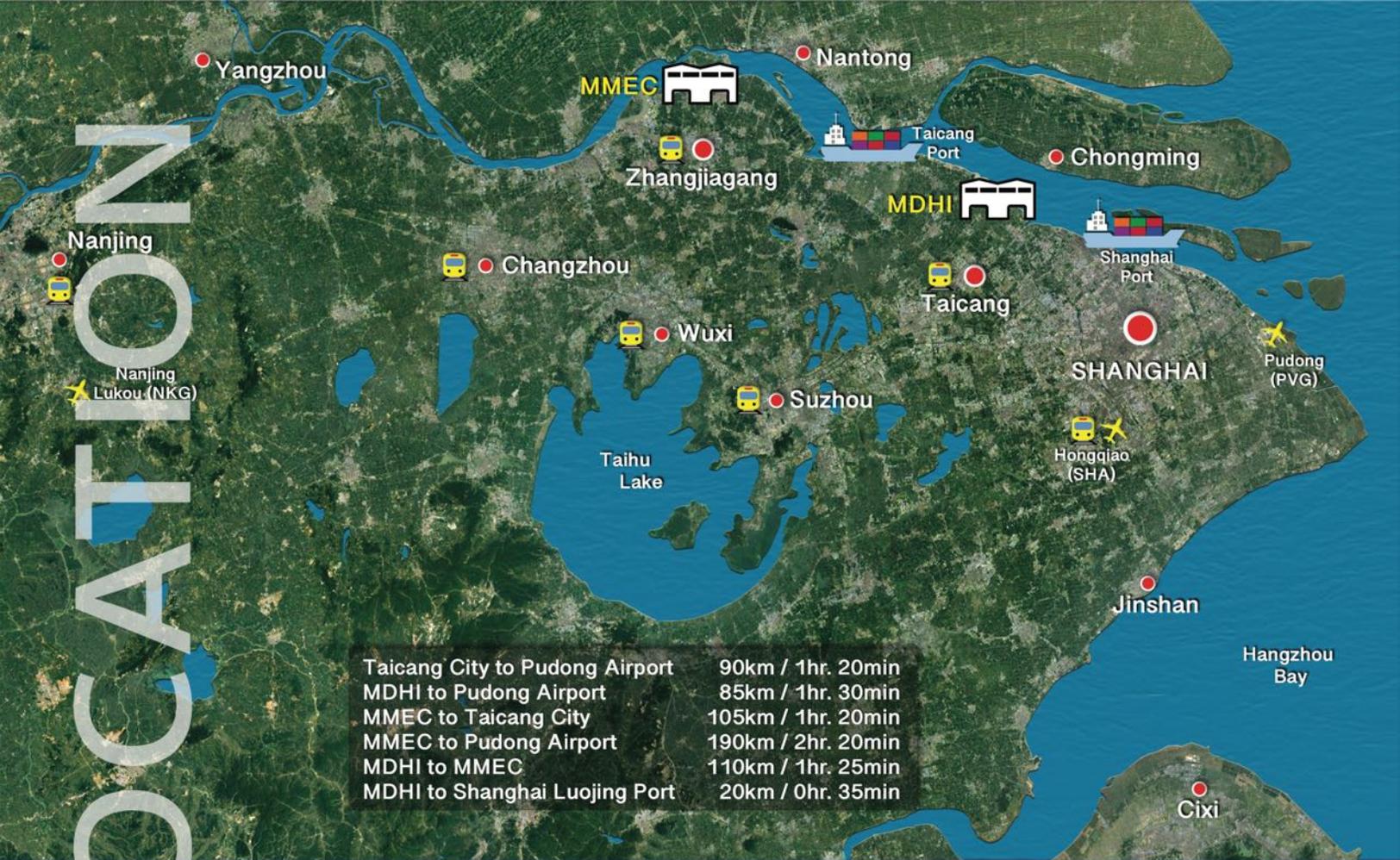
Jiangsu Modern Group includes Modern Heavy Industries (Taicang) Co., Ltd. (MDHI), and Modern Modular Engineering & Construction Co., Ltd., (MMEC). Based in Jiangsu Province near Shanghai, the companies are engaged in manufacturing heavy steel structures and related management activities. MMEC supplies modularized construction products at its' riverfront facility. Together, the two companies employ over 1000 staff, including a progressive management team that includes several foreign executives. The Modern Group management team is bilingual and adept in international management. There are over 300 specialist fitters & welders among the workforce totaling over 1,200.

MDHI & MMEC focus on power, heat recovery, building, mining, modular, and the oil & gas industry. Products and services include detailing, procurement, outsourcing, fabrication of column & beam structures, complex structures, jumbo steel sections, mechanical plate-work, conveyors, process modules, skids, coatings, assembly, and logistics. MDHI & MMEC combined yard areas exceed 285,000m², with 127,000m² of covered workshops. Zhangjiagang City Port is the home of MMEC's modular construction yard, a 540,000m² construction area, and direct vessel load-out capability. Annually, the two shops can produce over 80,000mt of heavy steel structures or 50,000 tons of mixed-weight steel structures.

Since 2010 our workforce has delivered over 300 excellent projects in more than 50 countries. Modern Group is considered a preferred supplier by many international engineering clients, and our repeat business is a testament to our success. We adjust our capabilities to give our customers what they are looking for and trust they will remember us for that. As a growing company, our leadership embraces an unyielding belief that transparency, hard work, and the correct amount of responsibility can transform a good company into a great one. Modern Company executives strive to build long-term value for our customers, employees, and partners.



MODERN LOCATION



Taicang City to Pudong Airport	90km / 1hr. 20min
MDHI to Pudong Airport	85km / 1hr. 30min
MMEC to Taicang City	105km / 1hr. 20min
MMEC to Pudong Airport	190km / 2hr. 20min
MDHI to MMEC	110km / 1hr. 25min
MDHI to Shanghai Luojing Port	20km / 0hr. 35min

Modern Group facilities enjoy two great locations near Shanghai in Jiangsu Province, China. Modern Heavy Industries' main offices and workshop are located in Taicang City, less than one hour from Shanghai and 9 kilometers from Taicang International Port. Modern Modular E&C yard is adjacent to the marine terminal of Zhangjiagang Port, with direct vessel load-out capabilities and an integrated export office onsite. Both locations offer logistical advantages for worldwide freight dispatching.



Taicang Port is part of Shanghai's international port system. It is the largest foreign trade port on the Yangtze River and ranks 31st among the world's top 100 container ports. Taicang Port is a deep-water port and boasts over 200 container routes.

POWER GALLERY



PLTU Jawa No. 7
2 x 1050 (MW)
Coal Fired Power Plant
Structural Steel

Kushiro 112 (MW) CFB
Ofunato 75 (MW)
Buzen 75 (MW) CFB
Biomass Power Plant
Structural Steel



Kwinana 36 (MW)
Waste To Energy Plant
Structural Steel, Ducts,
Silos, Secondary Steel



Dingin 1,336 (MW)
Mariveles 668 (MW)
Coal Fired Power Plant
Structural Steel



Mông Dương - II
2 x 660 (MW)
Coal Fired Power Plant
Structural Steel

Power plant boiler structural steel represents 28% of the company's output and is a preferred choice of commodity for the energy sector.

Hofor Amagerværket Heat & Power Plant
Flue Gas System Steel Structures



HRSG GALLERY



Beni Suef, New Capital,
& Burullus
Egypt Megaproject
4,800x3 (MW), 24 HRSG
Structures, Casing,
Stacks, Secondary Steel



Al Laggah, U.A.E.
1,026 (MW)
2 HRSG NPP
Main Steel, Duct &
Casing, Secondary Steel



Towantic Energy Center
USA
805 (MW) x 2 HRSG
Main Steel, Ducts &
Casing, Secondary Steel

Lackawanna Energy
Center, PA, USA
1,480 (MW) x 3 HRSG
Modular Casing, Main



Modern Group is a world-class supplier of Heat Recovery Steam Generators (HRSG). HRSGs are used in Combined Cycle Power Plants (CCPP/GTCC) to capture gas turbine exhaust heat. This heat converts water to steam, to electricity. Modern Group has manufactured components for over 100 HRSG projects and is a preferred global supplier for this commodity.

Caithness Moxie Freedom 1,050 (MW)
2 x HRSG Modular Casing

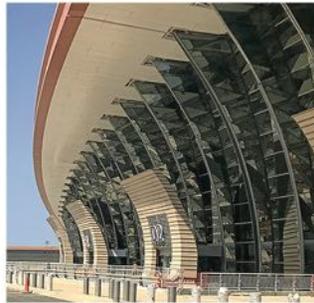


BUILDINGS GALLERY

New York University
Langone Medical Center
Kimmel Pavilion
Main Structural Steel



Shanghai Plaza 66
Office Building and
Commercial Complex
Tower Structural Steel
& Roof Superstructure



King Abdulaziz
International Airport
Terminal 1
Structural Steel

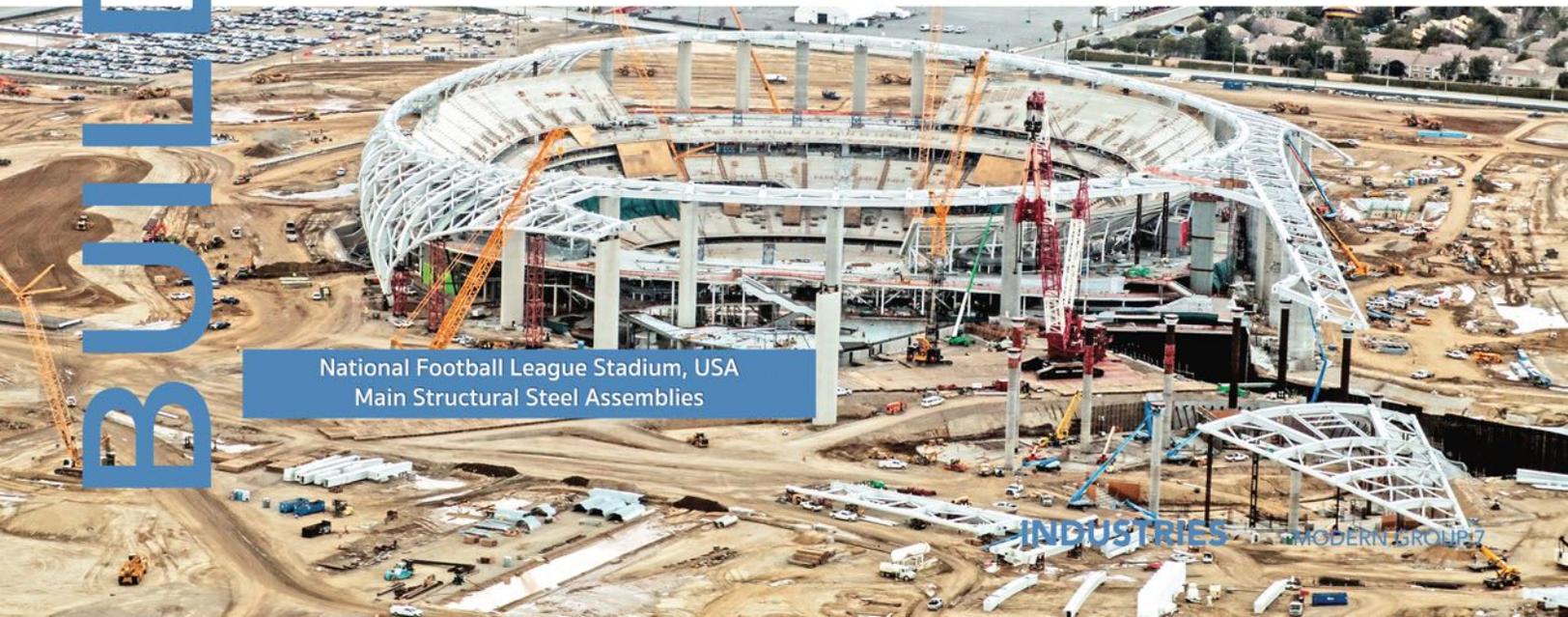


American Dream USA
Water Park & Mall
Curved Trusses & Box
Girder Structural Steel

Shenzhen Bay Sports
Center, China
Steel Structures
& Erection Services
13,000-Seat Stadium



National Football League Stadium, USA
Main Structural Steel Assemblies



MINING GALLERY



Kamoa Kakula Mining Project SMPP (structural, mechanical, piping and platework)



Roy Hill Iron Mine Overland Conveyor Modules & Support Structural Steel

Yamama Cement Plant Saudi Arabia Structural Steel, Silo, Coveyors, Trusses, Support Steel



OYU Tolgoi, Mongolia Gold & Copper Mine Underground Steel Structures, Conveyors Tranfer Stations, Bridge Cranes, Platework



Baffinland Mary River Iron Mine Conveyor Modules & Support Structural Steel



OIL & GAS GALLERY



Fluor / Invista China
Adiponitrile Nylon 6,6
Chemical Plant Steel
Structures, Noxidizers &
Vent Stacks



Corpus Christie, Texas
Jumbo Polymers Project
3 - Kilometer
Modular Pipe Racks
Steel Structures



Curtis Island
Queensland, Australia
APLNG, Gladstone LNG,
Air Cooled Condenser
Modules, Structures,
Support Steel



Petrofac / Kuwait Oil
(KOC) Gathering Center
Manifold Group
Trunkline (MGT)
Modules



Modularization is a significant emerging market for the oil & gas, power, and construction industries. If planned correctly, modularization can reduce site project time by 25%-50% while reducing costs up to 25%.

Gazprom Omsk Refinery
Conveyor, Tower Structure, Tripper Cars,
Hoppers, Support Steel.



WORKSHOP

MDHI



Workshop & Office Staff



Workshop QC Ratio

SHOP OUTPUT

MDHI workshop manufactures structures for buildings, power, HRSG, and mining. The main workshop's monthly capacity is 4,500 metric tons of heavy structures or 2,500 metric tons of light-medium steel and HRSG.

Goods dispatched from the main shop are exported from Taicang International port in Taicang City (East Suzhou), China. Taicang Port is the largest container and bulk cargo port on the Yangtze River, aside from Shanghai Port.



MAIN SHOP LAYOUT

1. Bay 1 – CNC Prefab, Built-Up Shapes, SAW	5,346 m ²
2. Bay 2 – Heavy Lift, CNC Milling, Fit & Weld	5,940 m ²
3. Bay 3 – CNC Drilling, Beam Fab, Fit, Weld	5,346 m ²
4. Bay 4 – CNC Angles, Shot Blasting 1 & 2	4,752 m ²
5A. Bay 5A – Painting, Inspection, Packing	4,752 m ²
5B. Bay 5B – Painting, Inspection, Packing	4,400 m ²
6. Bay 6 – Steel Structure Fit & Weld, Press	6,000 m ²
7. Bay 7 – Heavy Structures Fit & Weld	6,000 m ²
8. Bay 8 – Heavy Lift, CNC Milling, Fit & Weld	6,000 m ²
9. Bay 9 – Blast, Paint, QC, Packing	5,940 m ²
10. Bay 10 – Light Steel Preparation & Painting	5,940 m ²
11. Workers Break Area & Cafeteria	
12. North Yard Service Entrance	
13. Welding Materials & Tool Consumables	
14. Finished Products Marking & Storage	6,000 m ²
15. Main Yard Entrance, Longjiang Road	
16. Main Office Building	
17. Health & Safety Admin, Staff Cafeteria	
18. Raw Material Receiving & Storage Area	6,000 m ²
19. Trial Assembly & Stack Erection Area	4,000 m ²
20. Flammable Material Storage Warehouse	



Gangxin Heavy Equipment Port

MODULAR YARD



- MODERN MODULAR ENGINEERING & CONSTRUCTION Co., Ltd (MMEC)**
- Sub-Assembly Shotblasting Bay 8 ~ 1,800m²
 - Modular Assembly Workshop Bay 7 ~ 6,000m²
Crane Height 29m, Lift 300 tons ++
 - Consumables Warehouse & Storage 3,000m²
 - Fabrication & Welding Workshop Bays 4-6 ~ 28,350m²
Crane Height 18m, Lift 100 tons ++
 - Prefabrication Workshop Bays 1-3 ~ 28,350m²
Crane Height 10m, Lift 64 tons ++
 - Carbon Steel Piping Shop 3,000m²
 - Headquarter Office Building
 - Stainless Steel Piping Shop 2,700m²
 - Staff Dormitory

Modern Modular Engineering & Construction Co., Ltd. (MMEC)

MMEC was founded in April 2017 to serve the emerging modular construction market. Modularized products reduce site erection time and cost, making projects more efficient and easier to control. MMEC provides detailed engineering and procurement services, steel fabrication, piping, instrumentation, modular construction services, and transport logistics. Construction of the new modular workshops along the Yangtze River at Zhangjiagang will be completed mid-2021.

The port yard is equipped with 2 x 36m RO-RO load-out piers at the quay as well as conventional load-out. The port assembly area is 100,000m² plus added warehouse space. The vessel pier is 1353 meters, and the water depth is 12 meters. The total port area is 540,000m².

Modular Yard Area - 165,845m²
Covered Workshops - 76,486m²
Staffing - 800 Total

Capacity:
Steel Structures 2,500 mt/mo.
Modular Structures 20,000 mt/annual
Piping: 200,000 Dia/Inch/annual

Products:
Detailed Engineering Services,
Pre-fabrication, Steel Structures,
Piping Works, Module E&I,





Prequalification & Audits

Modern Group participates in various prequalification processes for our international clients. Modern management and staff welcome operational assessments to demonstrate our ability to execute, manage, and deliver any projects undertaken by our group. This process provides buyers with the confidence to outsource with reduced risk and burden of procurement failures. The audit process includes access to documentation evidence, facility inspections, operations, written procedures, product quality, compliance to international standards, and real-time project management observation.

Estimating

Modern Group employs a team of estimators experienced in structural steel and modular construction labor, raw materials, buyout items, coatings, and handling costs. Estimating is completed by gathering proposal requirements, specifications, scheduling requirements, and other relevant information. Every package's scope and complexity are calculated based upon varying materials, supply conditions, and technical & commercial considerations.

The basis of price proposals include drawings, specifications, client-supplied or generic pricing forms, BOQs, or internal material take-offs (MTOs). Offers consisting of re-measurable unit costs or lump-sum proposals are most common. The archiving of all bids allows for future reference and comparison.



Bid & Proposals

The Bid & Proposals manager is a leading communicator and co-ordinates all estimating and bid packages having considered all products, services, special conditions, costs, and market conditions. The Bids & Proposals team works under pressure to make the most competitive offers with strict submission deadlines.

All specifications, technical & commercial considerations, business terms, bonding & bank requirements, and insurance requirements will be checked by the manager. The proposals manager will also lead the project kickoff meeting after a project is awarded.



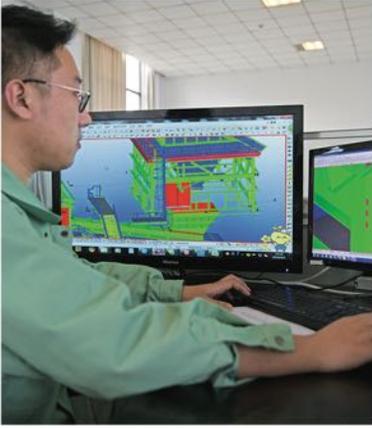
Kickoff Meeting

Kickoff meetings allow both parties to discuss the scope, specifications, materials, manufacturing, coatings, packing, and delivery requirements. Raising, addressing and closing any project queries or concerns will be completed before the project can begin.

Engineering

Modern Group offers a range of engineering services for steel structures and modular projects. When feasible, material take-offs are performed for understanding scope or estimating. 2D drawings are rendered into 3D models, or partial 3D models are imported for detail engineering and shop engineering.

MMEC engineering department provides detailed engineering services for modular packages, such as stress, surge, piping, cabling, Etc., that does not include process design. The final package or plant models will provide accurate, detailed information needed for successful product visualization and construction. MMEC software includes Aveva PDMS (Plant Design Management System), Hexagon PDS, SmartPlant, Tekla Structures, AutoCAD, Pipe2002, FastCAM, Fast NEST, FastPLOT, Peddinghaus Peddimat, Peddinst, and SinoCAM. Our team can receive and open drawing files across a wide range of output files.



Procurement

Modern Group material managers source and procure most materials required for each project. All materials and buyout items must comply with specifications and carry corresponding certificates. Raw steel materials are subject to supplemental testing, and the resulting data will include:

- Batch Numbers.
- Heat Numbers.
- Chemical and Physical Properties.
- Charpy V-notch Test Results.
- Factory Production Control (FPC) or other Manufacturing Codes

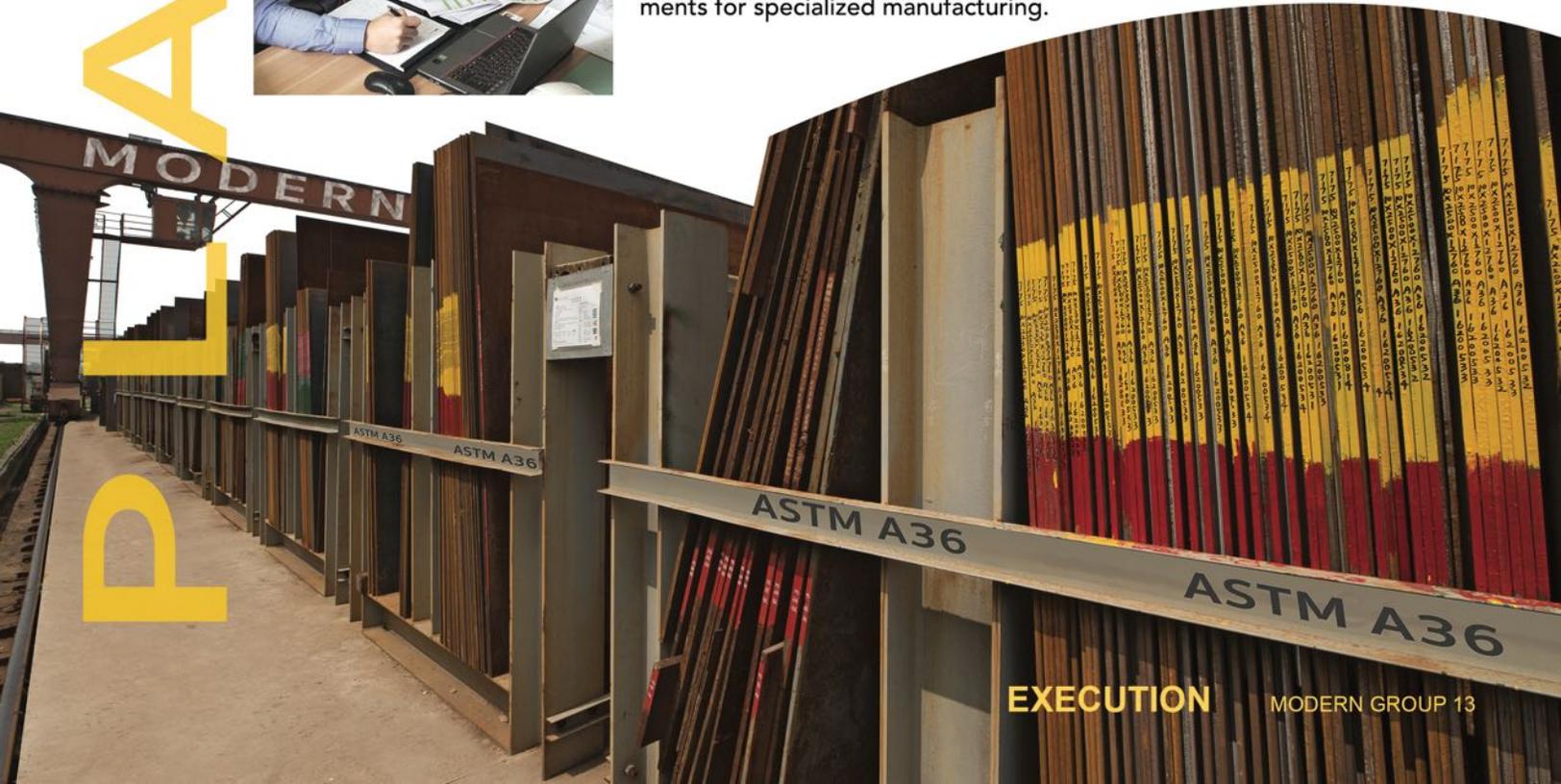
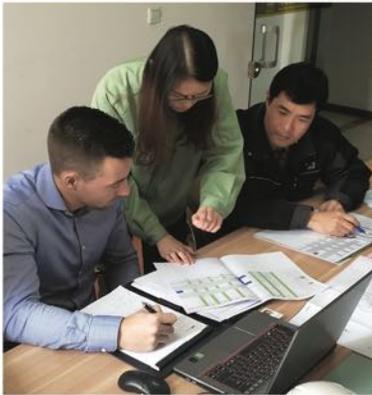
External supplemental testing is third-party tests performed as required by specifications. Arriving materials receive conformity inspections, after which the steel is color-coded, marked with project number, dimensions, steel grade, and heat number. The heat number identifies the batch of steel from the continuous-casting process from the steel mill. Keeping this data allows for traceability of all steel components in the project.



Project Management

Modern Group planners and project managers schedule manufacturing and coordinate production to accommodate each project's delivery dates. The project manager tracks all production in the workshop and is the sole point of project communication.

The PM also sends Project Status Reports (PSRs), indicating planned and actual engineering completion, ABMs, MTOs, Shop Drawings, Processing, Procurement, Fabrication, Testing, Trial Assembly, Pre-Assembly, Coatings, Packing, and Delivery. Modern's QA team prepares methodology statements for specialized manufacturing.



RAW MATERIAL

A New Day

Compliance with international material standards has long been a dual debate in China, with one part being material quality and the other manufacturing quality. But over the past 20 years, Chinese steel mills have made considerable strides in improving management ideology, staff training, product development, and corporate transparency.

Simultaneously, Chinese steel mills have continuously advanced through the years. As of 2017, the China government has launched an Urban Steel Mill Strategy to drive an agenda of monumental change in the steelmaking process. Mills now incorporate state of the art technology and energy-saving processes combined with a new attitude towards environmental protection. New equipment, innovation, process optimization, and Factory Production Controls lead China's mills to an increasingly high operation level.

Material Availability

The Chinese government no longer favors the importation of foreign materials. They cost more, are subject to long lead times, are taxed, and inflexible to changes or small quantities. But the main reason is that Chinese-produced steel quality is very high, and it is competitive with most other foreign standards.

Material Standards

The most common construction steels in China are GB/T 700 Carbon Steel (Q235) and GB/T 1591 High-Strength Low Alloy (Q355). Profile steel and plates are available in these grades. If you require foreign grade plates, such as ASTM, EN, JIS, CSA, or AU, it is best to use ASTM or EN grades. If you require foreign grades for profile steel, such as ASTM, EN, JIS, CSA, or AU, it is best to use Chinese grade profiles. It is now nearly impossible to procure foreign profiles in China. Importing them also faces difficult challenges. One option to consider is using a hybrid solution where the plates and built-up sections use the foreign steel grades, and the hot rolled profiles use the Chinese steel grades.

Fabrication Standards

The fabrication standard has nothing to do with the material standard. A project can use Chinese profiles fabricated according to AISC, or ASTM profiles manufactured according to EN. The fabrication of Chinese materials can comply with AISC, EN, JIS, AU, CSA, or GOST.

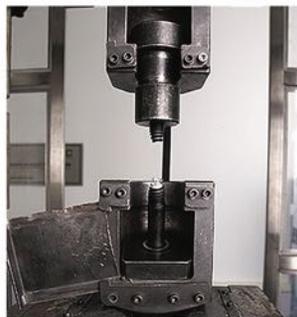
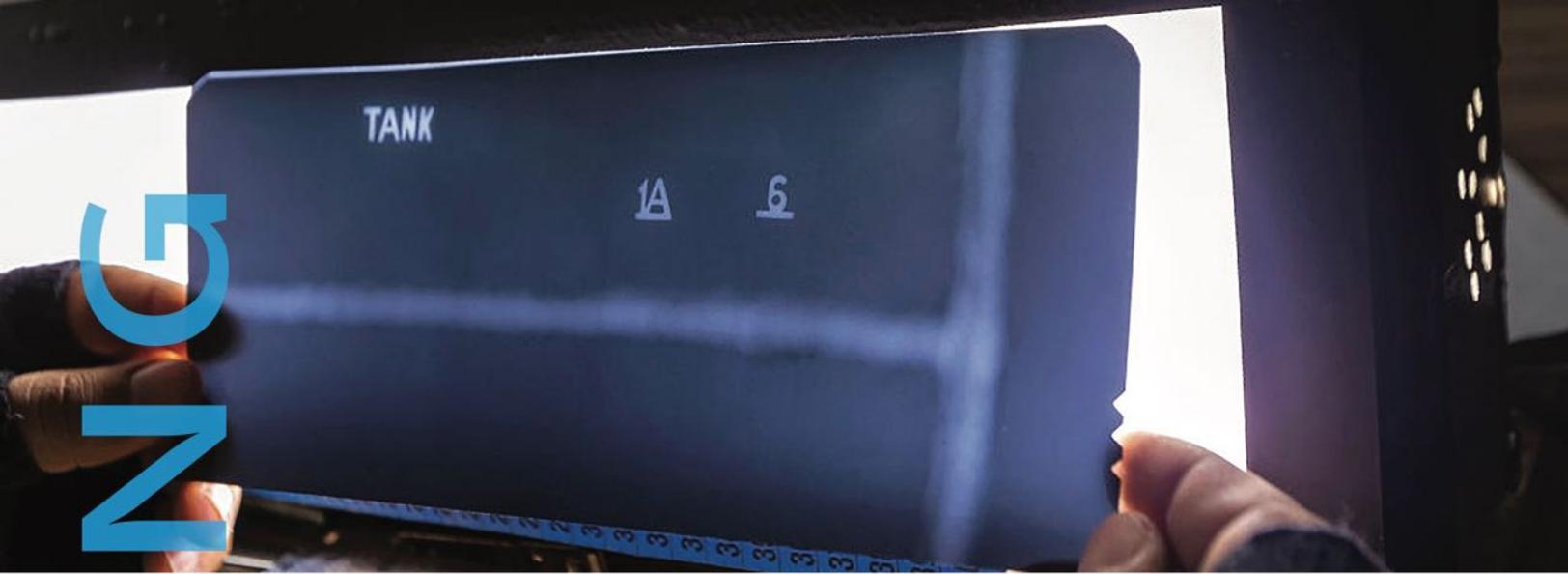
Welding Standards

The welding standard is not always corresponding to the fabrication standard. EN or GB steel may require AWS welding, and ASTM may use CSA, EN, or GB. The specifications and project ITP control these situations, and they frequently are mixed.

Testing Standards

Requirements for testing compliance often bring together different national conditions on the same project, with one superseding another. Multiple specifications and testing requirements may exist together, making testing more complicated.

LAB TESTING



Supplemental Third-Party Testing

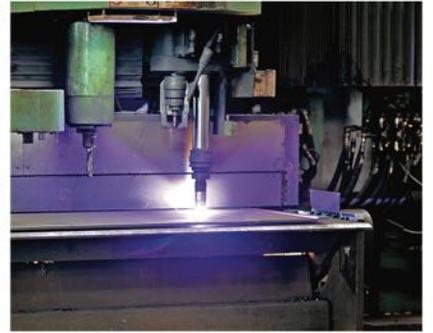
Modern Group may utilize external testing and calibration laboratories on behalf of the customer when requested or specified in the project ITP. Tests may include steel tensile, bolt destruction, proof loads, elongation, hardness, impact, torsion, material analysis, radiographic testing, coating thickness, dimensional tolerance, and third-party NDE/NDT. We can also arrange other types of testing not listed here.



FABRICATION

Tools For The Trade

Modern Group facilities are equipped CNC steel processing equipment, such as CNC laser, plasma, and flame cutters, H-beam assembly, submerged-arc welding, plate processors, plate drills, hydraulic straightening machines, H-beam production lines, milling machines, plate rollers, plate benders, hydraulic press, 5-axis pipe processors, and a grating manufacturing line.

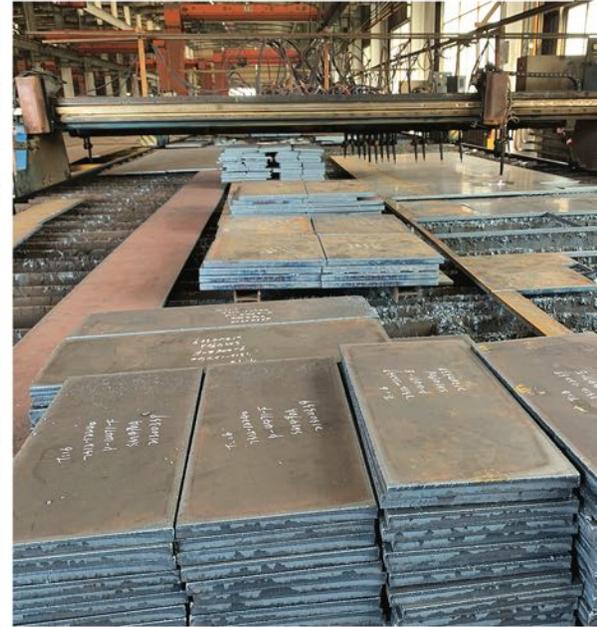
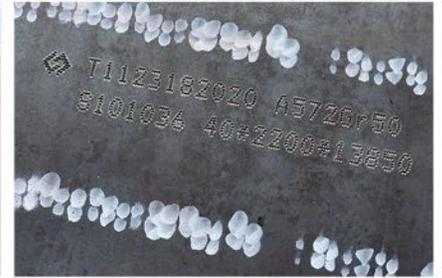


Every Single Component

All parts are cut to dimension, edge-ground to a radius, and have any drill holes rounded to remove sharp edges. Component preparation is the first real step in production and the small parts tracking begins here. The basic shop fabrication standard is AISC and all operations will be based upon that unless specified otherwise. Heat number traceability starts with the first cutting of the steel.



QUALITY CONTROL BRITISH TRACEABILITY

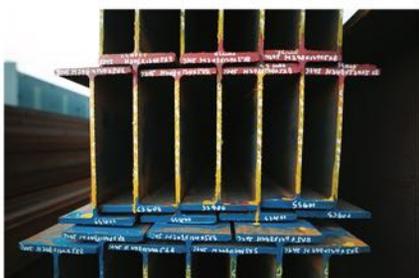


Every Single Component

Material receiving inspection and full traceability is an essential requirement for all projects. Failing to maintain traceability can result in the rejection of raw materials or finished products. The steel order is for the specific international grade, application, and service temperature. Upon delivery of materials, the Mill Test Certificates (MTCs) are compared to materials to ensure the order's correct fulfillment. The MTC identifies the manufacturing mill, steel grade, steel profile, dimensions, heat number, chemical composition, physical properties, and impact test results.

The plate and profile inspection include checking for apparent physical non-conformity, such as visible damage, deformation, dimensional tolerance, surface oxidation, or pitting. After receiving, steel is classified and color-coded according to the project number, profile, dimension, and grade. The heat numbers are transferred to all parts and components and entered into Heat Traceability Logs. These logs become part of the permanent manufacturing data book.

Any non-conforming materials will be tagged and marked as non-conforming and segregated from conforming materials until they are repaired or replaced. To prevent mixing of parts, components are separated into lots marked by project numbers in the workshop.



MILLING - MACHINING



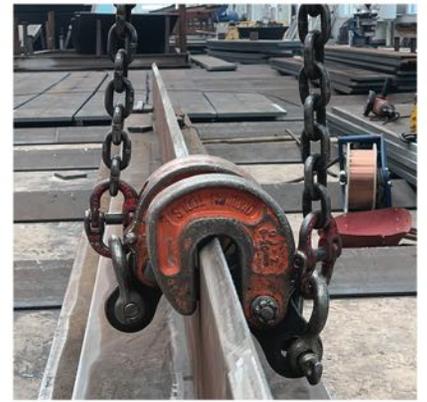
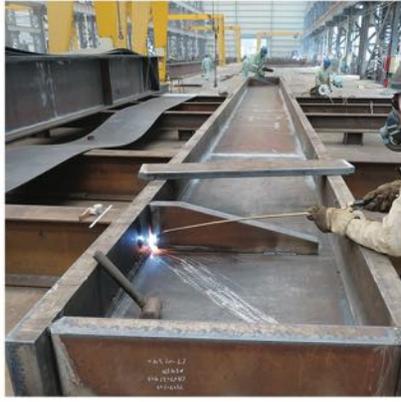
When Zero Counts

Projects that require "zero tolerance" (no gap) in the bearing surface of column base plates, end plates, slip-critical connections, equipment frames, etc., are milled to a high tolerance.

Beam copes & bevels are machined when required, and special component and parts machining is available.



UP



The Fit-Up

The fit-up process is critical to the final product, as this is where drawings become a reality. The fitters must assemble welded parts into as close contact as possible. Depending on the member profile, connection type, and weld type, the weld root tolerance may be as little as 1.5mm or up to 5mm or more with special provisions. All tack welds will be remelted and incorporated into the final weld.

DOWN



A Welder's Friend

Tight tolerance and neat fitting means that the welder can weld less, have less corrections, and can proceed with his work at a faster pace. Poor fitting may cause uneven weld contour, the need to deposit extra weld material, and poor appearance overall.



Dimensional Compliance



Dimensional Checks

Dimensional compliance is a critical check after fitting. All parts, components, assemblies, or sub-assemblies must be within the specified tolerances of length, width, height, straightness, or curve before process welding begins. Any shrinkage or distortion anticipated from welding or galvanizing will be compensated for in advance so that the finished work will be correct. Periodic calibration and in-operation dimension checks are carried out on all CNC machinery to ensure accuracy in production.



WELDING CODES

Welding Compliance

Modern Group must comply with a range of welding codes that correspond to company certifications. These include ISO, EN 1090, AWS, ASME, API 1104, CWB 47.1, AS/NZ, JIS, GOST, DIN, etc. Team members involved with creating procedures for welding activities, or those who weld or braze plate or sheet, steel profiles, tubing or piping, or Class 1 vessels, must comply with the specified codes.



Welding Process

Modern Group welds using Flux-Cored Arc Welding (FCAW), Gas Metal-Arc Welding (GMAW), Tungsten Inert Gas (TIG/GTAW), Shielded Metal-Arc Welding (SMAW), and Submerged Arc Welding (SAW).

The Welding Procedure Specifications (WPS) describes welding procedures in production and aids in quality control. The Procedure Qualification Record (PQR) helps to demonstrate the ability to produce welds possessing the correct mechanical and metallurgical properties.



UP



TEAM-



CLEAN-

Major Holding Point

After welding has been completed, a holding-point occurs where the Modern Group clean-up teams perform a meticulous dressing of the welds. All welds and adjacent areas are cleaned using specialized scrapers, rotary deburring tools, grinders, and wire brushes. This will remove any spatter or slag from the welding process. This allows the team to notice any common weld defects, such as variations in the weld's shape and size, weld cracks, pin holes, porosity, undercut, incomplete fusion, incomplete penetration, wrap around defects, etc.

The clean-up team works closely with the NDE/NDT inspection team to ensure all welds are approved in the final inspection.

WELD
WELD



NON-DESTRUCTIVE



Weld Verification

The process of checking weld quality and weld integrity in the workshop is through Non-Destructive Examination and Testing (NDE/NDT). The analysis techniques include Visual Examination Testing (VT), Magnetic Particle Test (MT), Ultrasonic Testing (UT), Liquid Dye Penetrant Testing (PT), and Radiographic Examination Testing (RT).

Modern Group inspectors hold Level 3 (III) certifications, including Level 2 and 1 (II, I) in their respective inspection fields. For added validation, a client may choose to have additional internal witnessing in the ITP or have a Third Party validation of the test results.



PROFILE

Shape Offering

Hot-Rolled structural shapes include standard and wide-flange beams, hollow sections, pipes, angles, channels, and structural tees. Cold-formed profiles may be produced or procured as required. Domestic and select international-standard profiles are available in light, mid-weight, and some heavy sections. Quantity per profile and steel grade determine availability. Large and heavy beams are offered as built-up sections from steel plate.



CNC Beam Sawing
Structural Tees



CNC Beam Drilling
Multi-Axis Pipe Processing



CNC Cope & Bevel
CNC Angle Processor

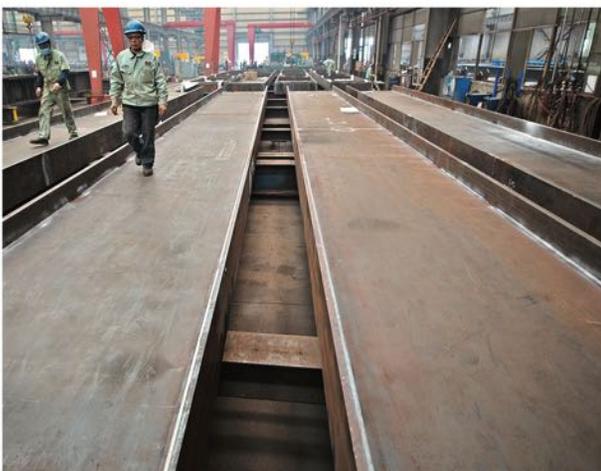


Profile Processing

Steel profiles are processed using a variety of high-accuracy, numerically controlled machinery. Multi-spindle drill lines, radial arm drills, CNC punches, beam band saws, coping & beveling machines, and angle processors make up the core equipment to produce quality assemblies in tolerance with the fabrication standard.



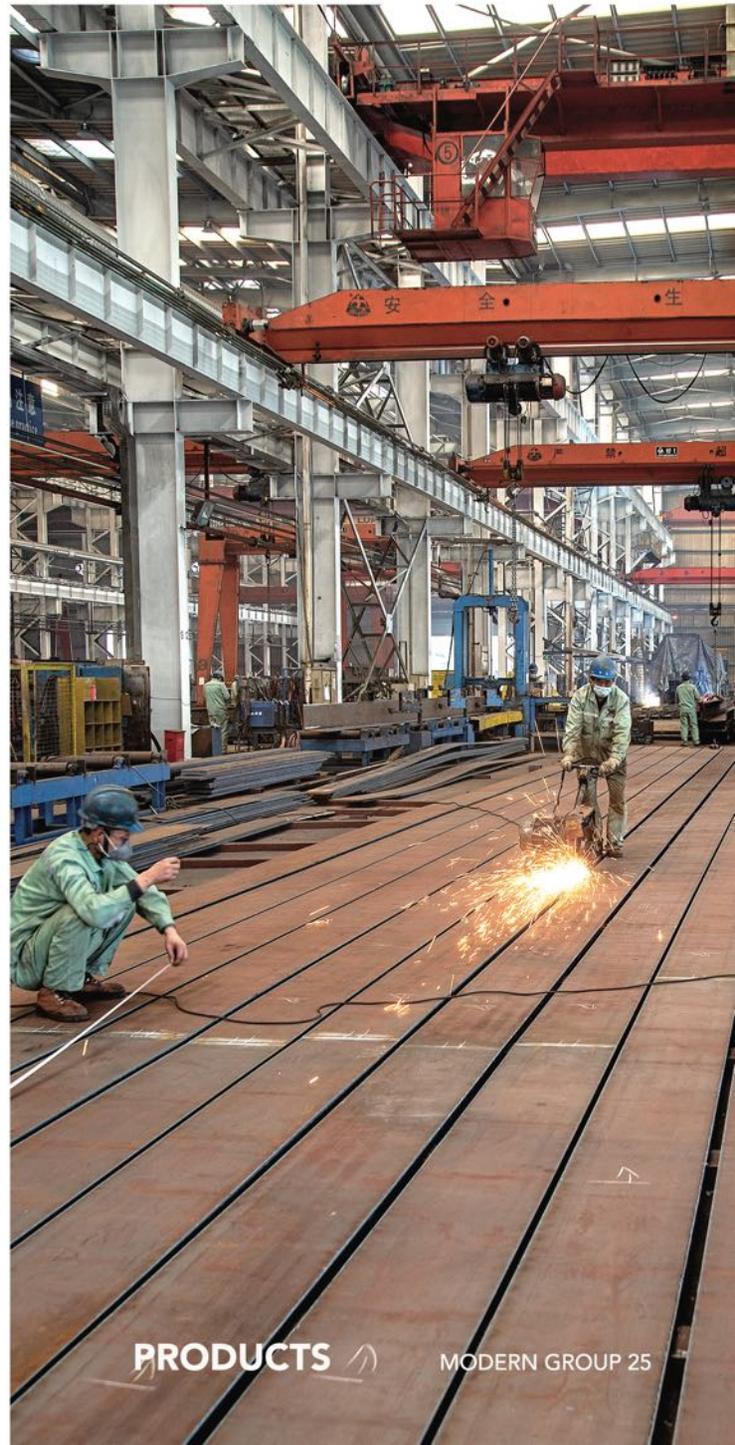
BUILT SECTIONS



Built to Spec

For many larger projects, Built-Up Sections can make up the majority of the steel assemblies. Most of the built sections are classified as Built "H" or "BH" sections. Aside from H-Beam profiles, angles and channels may be built up when required.

The steel plate is strip-cut into flange and web sections, edge-ground, and then prepared for welding. If required, the weld edges are beveled to accept partial penetration or full penetration welding. Afterward, the web and flange parts are assembled in a hydraulic assembly machine and tack-welded together under compression. The assembled beam is then submerged arc welded (SAW) and then straightened in hydraulic rolling machines. The last step is dimensional tolerance checks. If there are any deviations, heat rectification may be applied to bring the beam into perfect tolerance.



STEEL GIRDERS PLATE

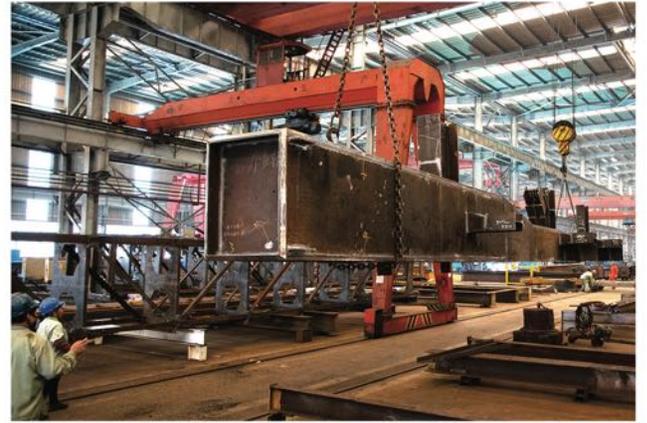


300 Ton Assemblies

Modern Heavy Industries is a certified AISC fabricator, as well as a Los Angeles Unlimited High-Strength Steel Fabricator. Heavy plate girders are a needed component for power plant top girder assemblies, boiler suspension beams, building girders, bridge or railway girders.

Girders can be fabricated in any transportable dimensions and may built with horizontal splices that are re-assembled at site. Girders may be built as straight, curved, parallel-flanged, or variable depth. The thickness of the plate components may exceed 203mm (8"), and girders may weigh 300 tons each.





What's in the Box?

Box Columns are rigid supports used in power plants and major buildings. The box columns are precisely fabricated and fit together using multiple internal diaphragm stiffeners. The welding processes are internal fillets, slot-welded ESW stiffener welds, and all-around full-pen SAW welds with backing bars. These columns are strong enough to withstand all types of cyclic loading, seismic shear, continuous vibration, and other severe service conditions.



BOX COLUMN

THIRISE STEEL



Bigger Is Better

Modern Group fabricates extra-heavy structural steel for high-rise buildings of any class. This includes skyscrapers or super-tall buildings with seismic moment-resisting frame designs.

Modern Heavy Industries is a certified AISC Buildings and Los Angeles Fabricator of Unlimited Structural Steel and High-Strength Steel. The MDHI workshop can supply all foundation steel, embedded parts, structural members, shear studs, and metal decking.

MDHI also holds the Sophisticated Paint Endorsement under AISC and galvanizes according to ASTM A-123.



COMPLEX SECTION



Major Building Blocks

Modern Group supplies complex assemblies for stadiums, auditoriums, major building structures, convention centers, bridge components, or other complicated projects which require critical accuracy.

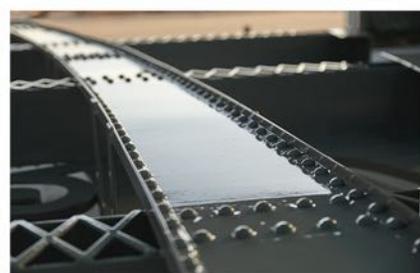
These large-class structures may measure over 30m (98') in length, weigh over 150 tons, and require hundreds of precision bolt holes across multiple connecting surfaces where tolerance must be within 1.5mm. Total Station Survey and Laser Scanning are frequently employed for exacting dimensional control.



RAIL



ARCHITECTU



The Grand Vision

Modern's skilled fabricators can supply customized architectural elements, exposed structures, steel art, and steel intricate building façades.

An iconic example of this is the Eiffel Tower half-scale replica at Parisian's Hotel in Macau. This is a stunning and magnificent structure, full of detail, complimented with almost 1 million hand-welded cosmetic rivets.

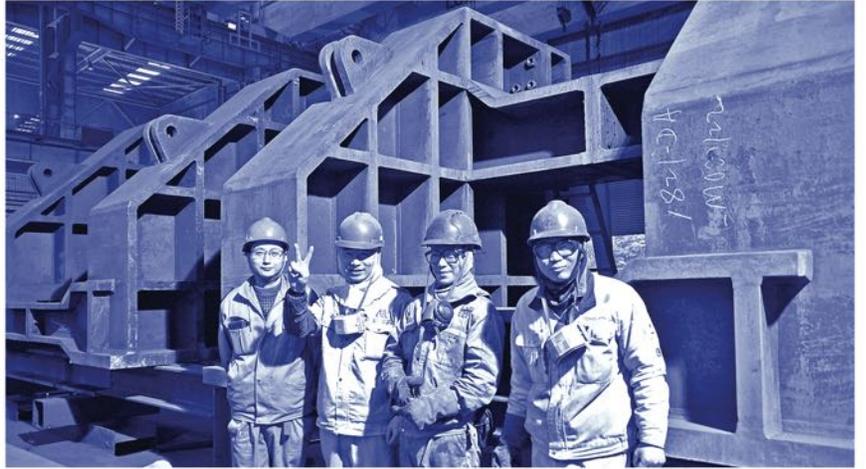


WORLDWIDE PLATEWORK



Mechanical Plate

Modern Group supplies plate fabrication for mining & agriculture. These projects require hoppers, surge bins, chutes, and transition ducts. Heavier plate applications include conveyor drive units, take-up carriages, pulley frames, buckets, booms, and other heavy equipment components.



VESSEL & TANK & PRODUCTS

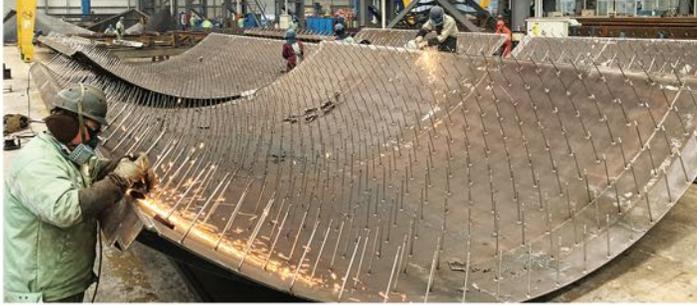


Fill It Up, Please

Modern Group fabricates many types of tanks and non-pressure vessels for a wide variety of applications, including water collection tanks, fuel storage tanks, and chemical storage tanks.



STACK - CHIMNEY

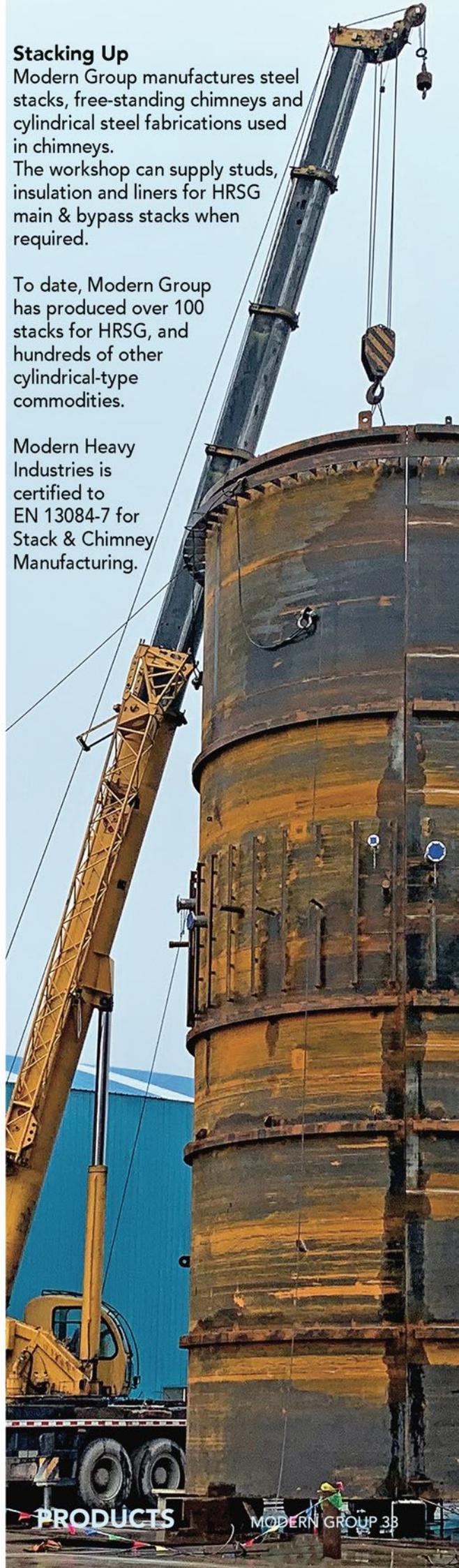


Stacking Up

Modern Group manufactures steel stacks, free-standing chimneys and cylindrical steel fabrications used in chimneys. The workshop can supply studs, insulation and liners for HRSG main & bypass stacks when required.

To date, Modern Group has produced over 100 stacks for HRSG, and hundreds of other cylindrical-type commodities.

Modern Heavy Industries is certified to EN 13084-7 for Stack & Chimney Manufacturing.



PRODUCTS

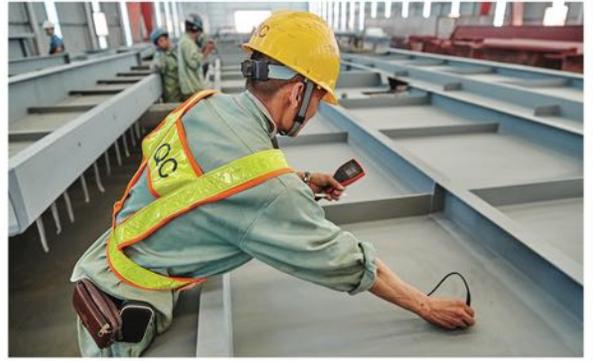
MODERN GROUP 38

DUCT & CASING

Casing & Ducts

Modern Group is a major supplier of steel ducts and casing for power applications. Heat Recovery Steam Generator (HRSG) clients are the main consumer for this category, occupying 20% of manufacturing output over the past five years.

In addition to HRSGs, Modern Group supplies boiler casing, equipment casing, large-capacity industrial air handling ducts, plenums, expansion joints, and access doors.



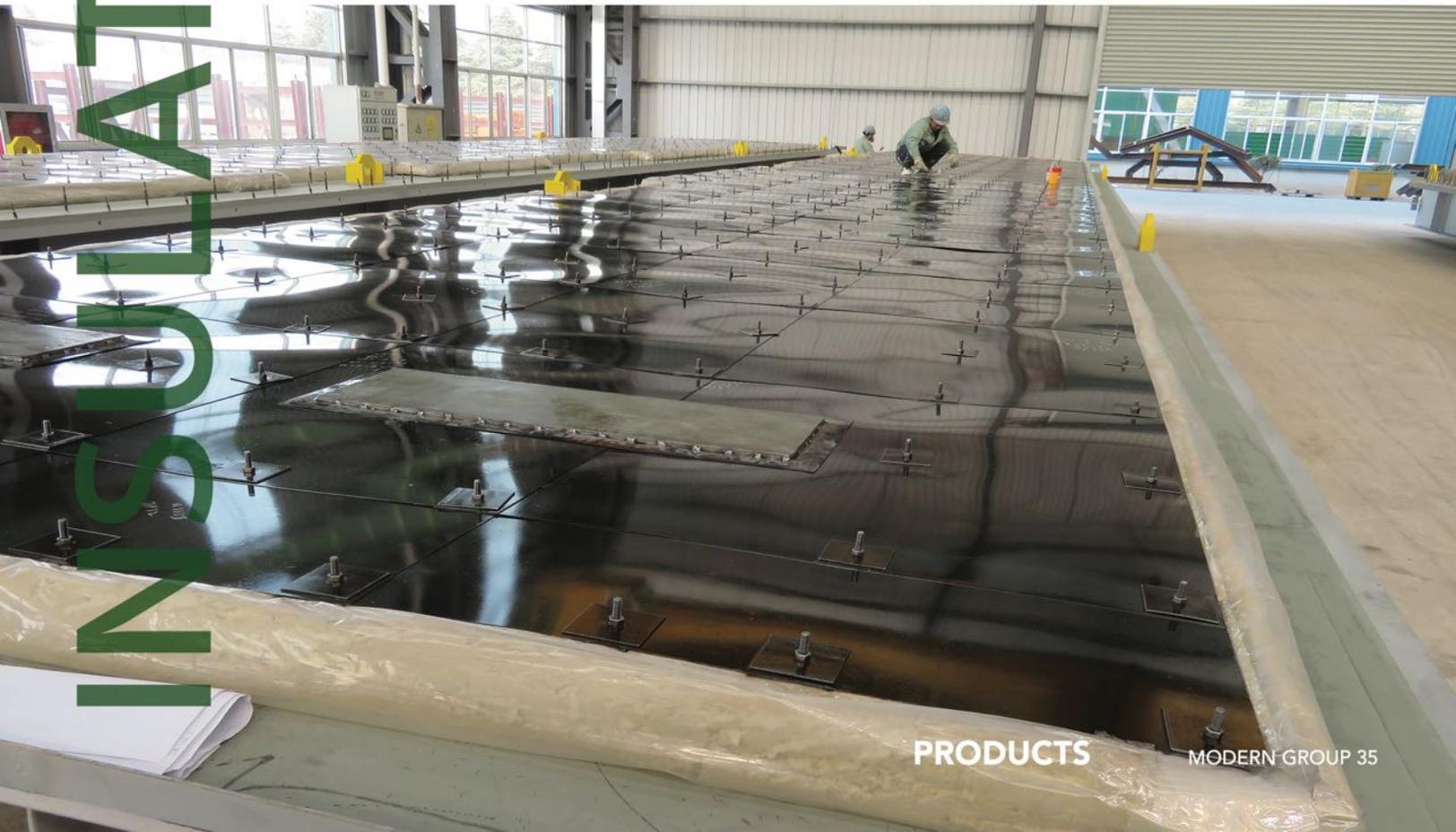
INSULATION & LINER



Heat Retention

Modern Group supplies and installs insulation and liners for Heat Recovery Steam Generator (HRSG) casing, boiler casing, exhaust systems, ducting, and piping. Insulation is installed in dedicated workshops by trained installers using various ceramic fiber blankets, Rockwool, Pyrobloc, ceramic tile, and other customer-specified materials.

Along with insulation, the installation includes stainless steel and carbon steel liner plates, studs, retention washers, lagging or cladding accessories.



LIK CONVEYORS



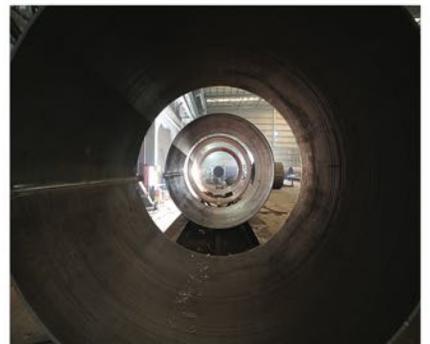
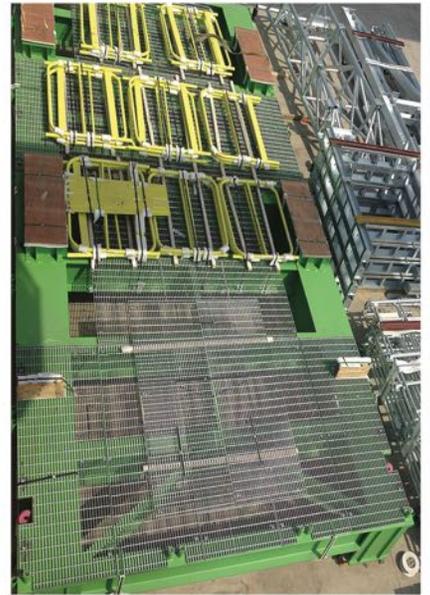
Material Handling

Modern Group supplies modular overland conveyors, transfer towers, drive units, chutes, galleries, support structures, and secondary steel.

Our shop can fabricate a variety commodities and components for ship-loaders, stacker/reclaimer, or other mechanical equipment on a case-by-case basis for mining, coal power and agriculture.



MARINE & OFFSHORE

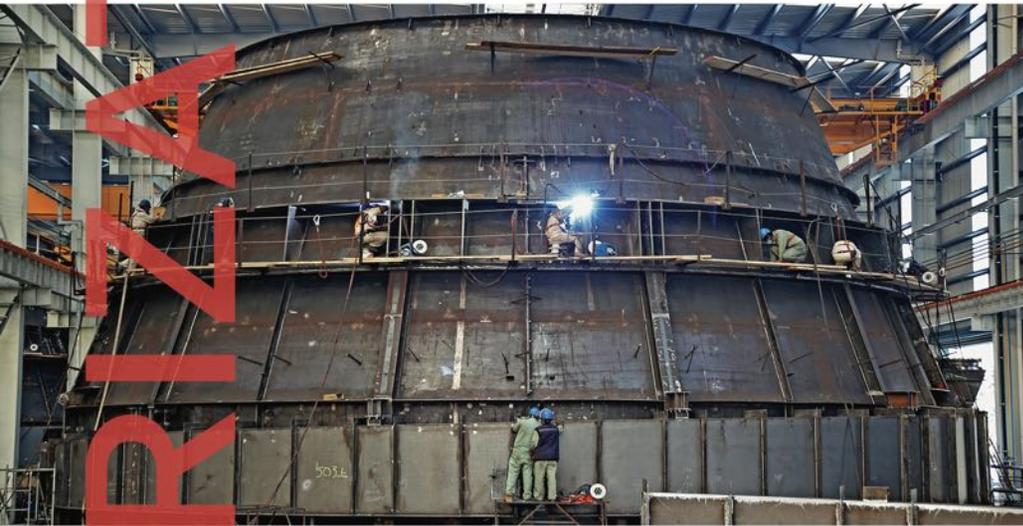


In The Sea

Modern Group manufactures marine terminal building structures and offshore steel structures. This includes wharf & pier structures, piles, trestles, mooring dolphins, mooring buoys, fendering camels, and floating pontoons. We also supply access steel such as platforms, gratings, ladders, handrails and stairs.



MODULARIZATION



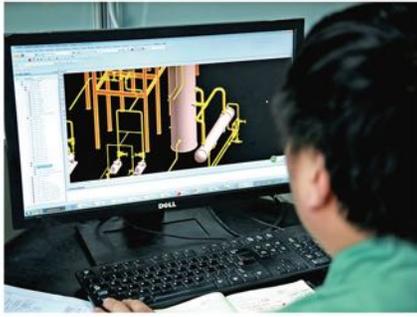
Complete Package

Modern Modular E&C supplies modular buildings, ducts, furnaces, pipe racks, process modules, well-pad skids, manifold skids, separation & water treatment skids, complex processes, and air-cooled condensers.

Our modular services include detail engineering, procurement, fabrication, piping, construction, E&I, coatings, insulation, fireproofing, testing, load-out, exporting, and logistics as required.



PIPELINE PROCESS



Getting Connected

An essential part of modular manufacturing is pipe fabrication. MMEC targets 200,000 Dia-Inch per year of pipe fabrication, 20,000LM of pipe erection, and 12,000ELM of pipe insulation. Twin 3000m² piping shops allow for the separation of carbon steel and stainless/duplex steel processing. MMEC engineers provide detailed piping design for modular construction, and the workshops utilize CNC pipe fabrication & welding machinery operated by skilled pipe fabricators.



STRUCTURE

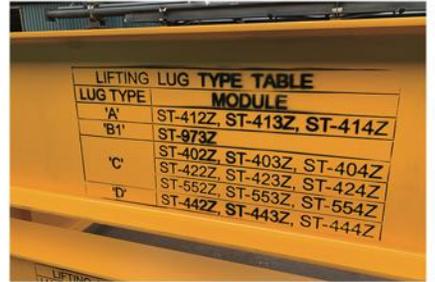


Hollow Sections

Modern Group fabricates structural tubes for theme parks ride supports, space frame structures, complex roof structures, canopies, awnings, and various architectural elements. This includes RHS (round), SHS (square), and RHS (rectangle) hollow profiles. The possibilities are unlimited.



LIFTING & TESTING



The Hollow

Modern Group fabricates high-capacity lifting apparatus for boiler structures, building structures, and large or irregularly-shaped steel assemblies. For critical application lifting, load testing ensures the frames and lugs can perform in the specified working range in regular use.

Our procurement team will source heavy-lift shackles, wire rope slings, or bridles to complete the package when required. The local port performs testing, where fixed luffing cranes have a capacity of over 1,500 metric tons and floating cranes with up to 5,000 tons capacity.



LIFTING LUG TYPE	MODULE
'A'	ST-412Z, ST-413Z, ST-414Z
'B1'	ST-973Z
'C'	ST-402Z, ST-403Z, ST-404Z ST-422Z, ST-423Z, ST-424Z ST-552Z, ST-553Z, ST-554Z
'D'	ST-442Z, ST-443Z, ST-444Z

ACCESS PLATFORMS

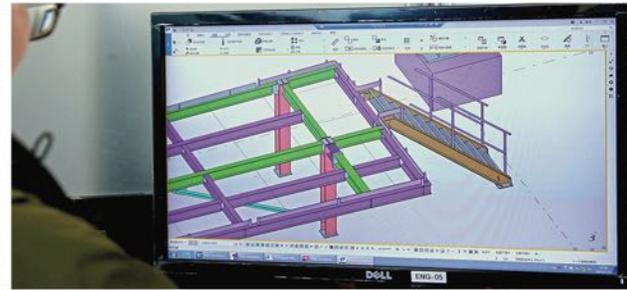
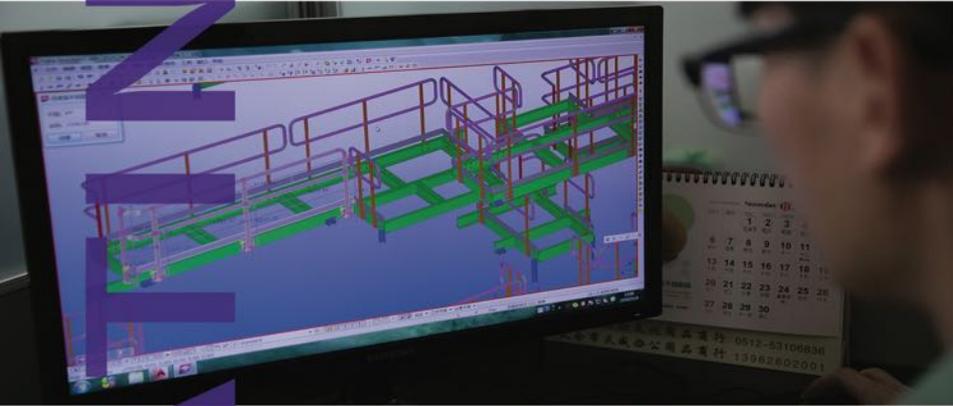


Getting There

Modern Group supplies industrial access platforms, walkways, elevated catwalks, mezzanines, facility footbridges, and supporting structures. This includes 3D modeling and detailing of structures and gratings.



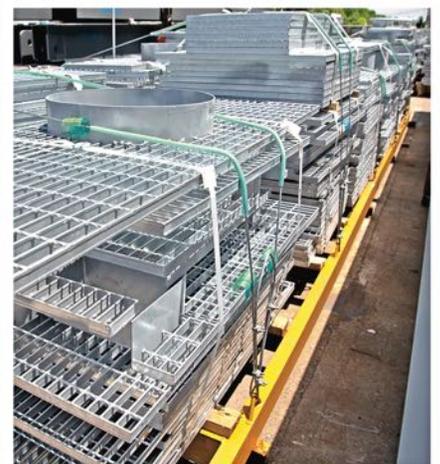
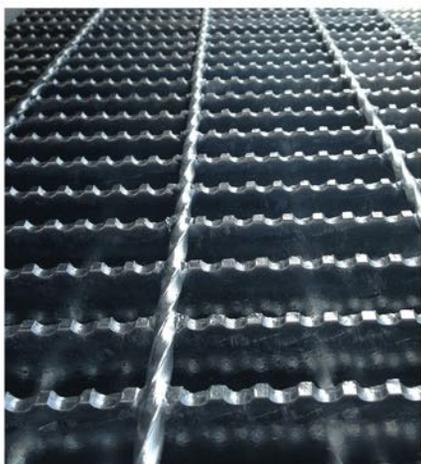
STEEL GRATING



Standard Gratings

Modern Group produces custom-fit gratings in popular dimensions and weights. Our engineers design platforms and grating together as a set, including metal decking, custom nosing, pipe passages, kick-plates, and several types of grating clips.

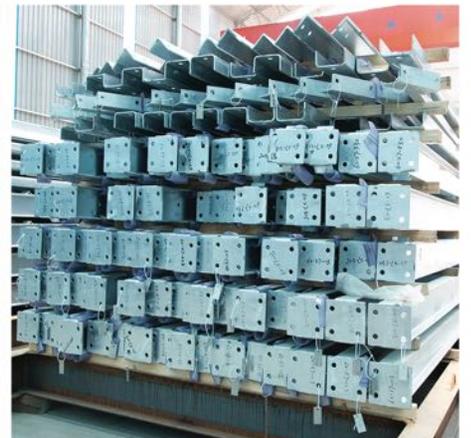
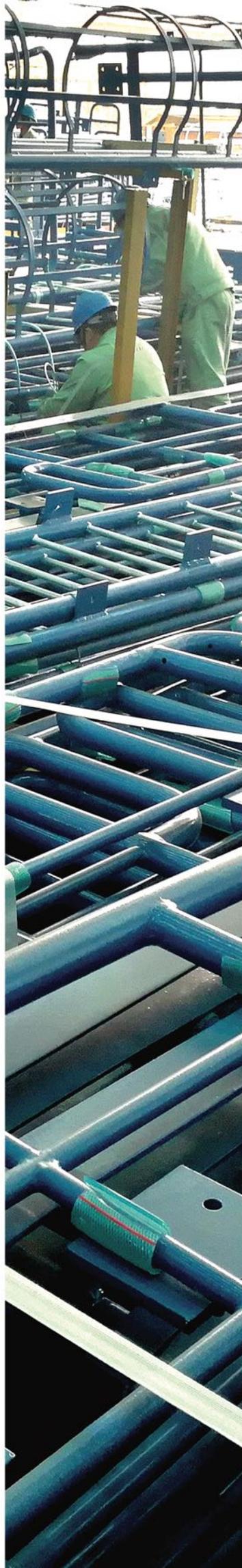
Installation is optional but ensures that all grating will be true-fit and ready for site erection.



HANDRAIL & LADDER



The Other Stuff
Modern Group supplies all types secondary steel, such as plate and profile bracings, angles, channels, support steel, framework, handrails, ladders, cage ladders, stair stringers, and other miscellaneous items.





TRIAL ASSEMBLY



Just Do It
Trial assembly confirms overall dimensional compliance and ensures jobsite erection accuracy. The aim of shop assembly is to reduce risk, cost, liability, and to allow stakeholders to focus on issues other than constructability.



BLASTING



Getting Prepared

Modern Group workshops employ three large manual shot blasting rooms and five automatic conveyor-fed blasting machines. The largest automatic blaster is 65x3x4m (LxWxH). The largest manual blasting room measures 60x30x20m (LxWxH) with 1,800m² of floor space.

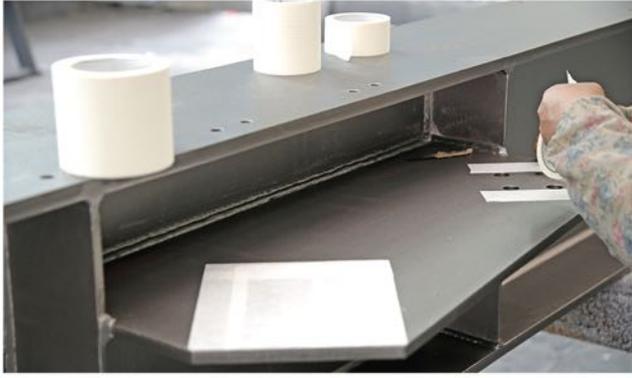
All shot blasters in use are all high-velocity steel shot abrasion type. The surface profile is customizable, able to obtain excellent cleaning and surface preparation for secondary finishing operations.



SHOT



SLIP CRITICAL



To Mask, or Not to Mask?

In a slip-critical connection, the faying (connected) surfaces resist movement due to friction achieved through bolting. This friction resists slipping that could have a critical impact on the structure's integrity and is called a Slip-Critical connection. These connections may be present both in primary steel connections as well as secondary.

Suppose paint was to be present in these connections. The paint's smoothness will allow the steel to slip, thereby converting the connection joint to a bearing-type, with structural forces applied to the bolts in shear, leading to instability of the connected members.

For this reason, to maximize friction forces between the joined surfaces, the faying steel surfaces will be specified to be left bare or painted with a Class-B slip coefficient primer (Zinc-rich) designated for high-strength bolted connections.



COATING



CORROSION RESISTANCE

Quality primers are applied within four hours of blasting and cleaning the exposed steel surfaces. The primers provide corrosion inhibition before the application of additional coatings. Zinc-rich primers very common, as well as epoxy zinc phosphate and red oxide.

PRIMER



INTERMEDIATE



In The Middle

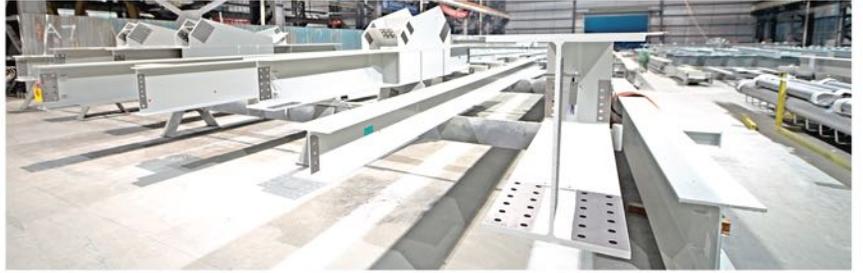
Intermediate (middle) coats are applied to build the paint system's total film thickness and enhance the overall steel protection. The high pigmentation of the coating decreases permeability to air and water.

After the middle coat is dry, Modern Group painters will scuff or rough-sand the middle coat by hand. This process opens the pores of the middle coat, allowing for much better topcoat adhesion.

Another sanding process is dual-action (DA) sanding. The DA sanding is for paint repair and reduces DFT thickness if the build is too high.



PAINTING



Your Favorite Color

MDHI workshop is AISC-certified for the application of complex protective coating systems. Our painting teams use various zincs, epoxies, urethanes, and multi-coat systems for many types of projects. The coating process is nearly the final step in manufacturing, and the finish quality showcases the final result of fabrication.



G
Z
Z
Z
A
V
A
G



The Ultimate Coating

When priming and painting will not do the trick, there is always galvanizing. Modern Group galvanizes according to ASTM A-123 unless otherwise specified. Hot-dip galvanizing (HDG) provides a rust-resistant coating by dipping the steel into a vat containing molten zinc.

The metallurgical reaction between the iron and molten zinc forms a tightly bonded alloy coating that provides superior corrosion protection. In many cases, HDG can cost less than multi-pack high-build paints, and the zinc surface can last for many years with no maintenance.



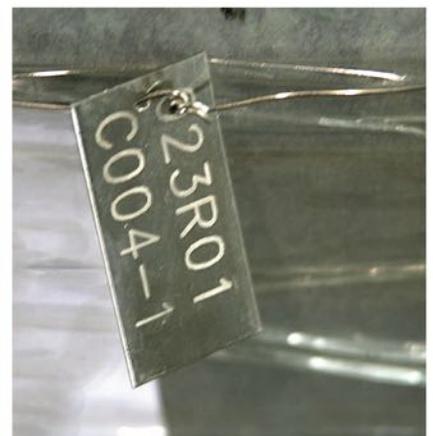
MARKING



I Finally Found You

Modern Group can provide most types of marking or tracking based upon the marking specifications. Lettering, stencils, paint marks, erection and direction marks, dot matrix printing, hard-stamps, welded stamps, wired tags, zip-tie tags, bar-codes, scan-codes, QR codes, and embossed, galvanized shipping marks are all available at the customer request.

Radio-frequency identification (RFID) tags are part of a trackable system consists of a tiny radio transponder, a radio receiver, and a transmitter. An RFID reader device transmits digital data, identifying inventory numbers back to the reader. This can quickly locate a single part at the job site.



ASSEMBLY



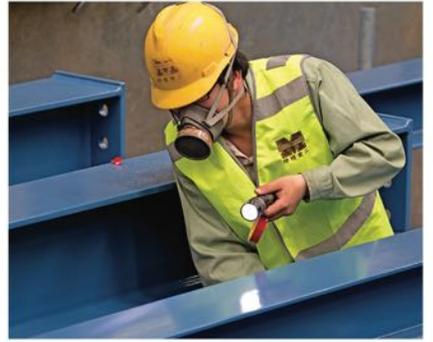
A Perfect Match

Modern Group offers pre-assembly of matched parts, such as columns and beams fitted with connection plates and end plates, large-span connectors, stair towers, platform & grating assembly, mining and agriculture assemblies, and modular building assemblies. The primary purposes of pre-assembly are to simplify and speed up the erection process and reduce labor and cost at the job site.



PRE-

FINAL INSPECTION



Before We Go

As far as the primary production goes, the final inspection is the last holding point to revisit dimension checks, tolerance, weld contour, pinholes, or any other defect that may cause a problem after delivery.

The final inspection will also trigger a round of cleaning and paint touchups that leave the finished goods ready for packing. After packing and before delivery, there is a repeat of the touchup process.



EXPORT PACKING



ROCKING & ROLLING

Modern Group offers the best quality packing to ensure the safe arrival of your goods. Edge protection, treated wood supports, foam padding, nylon banding, like-member bundling are incorporated to keep your shipment safe.

Whether you are shipping using intermodal containers or using break-bulk, our team can provide the packing solution suitable for your needs. Some packing materials, such as heavy plastic covers, canvas tarps, or shrink wrapping, are optional.



GLOBAL LOGISTICS



Yes, We Deliver

When the delivery time comes, Modern Group logistics managers can arrange logistics for your shipment. The logistics services include providing freight quotes, booking vessels, formal contract review, buying insurance, declaration of customs, invoices, packing lists, bill of lading, certificate of origin, witnessing loading, and taking photographs of the loading operations. Shipping methods include standard containers, high cube, long, flat racks, break bulk, and RO/RO.



THE THERMAL POWER

- 1 Australia Kwinana 36 (MW) (WTE) Main & 2nd Steel, Casing, Duct, Silo, Handrails, Grating, 3D Assembly
- 2 Belgium AMG Furnace - Built-Up Structural Steel for Vacuum Remelting Furnace
- 3 Chile Horcones Paper Mill Structural Steel, Supports, Pipe Rack & Pipe Bridge
- 4 China Hong Kong (IWMF) 480 (KW) (WTE) Heat-Recovery Structures, Buckstays, Hoppers, Casings, Ducts
- 5 China Huanggang Paper Mill Recovery Boiler Top Girders, Main Steel, Supports, Elevator Shafts, 3D Assembly
- 6 China Huazhong Paper Mill CFB Boiler Buckstay Structures and Support Beams
- 7 China Zhejiang Jiahua 450 (MW) x 3 CFB Boiler Plant Steel Structures, Walkways, handrails & Gratings
- 8 China Zibo Green Energy 108 (MW) CFB Boiler Main Steel, 2nd Steel, Supports, Platforms, Elevator Shafts
- 9 Denmark Hofer Amager 333 (MW) Subcritical CFPP - Structures for Flue Gas Treatment and Condensing Unit
- 10 Indonesia Boya 2 x 660 (MW) Coal-Fired Power Plant Top Girder & Columns Package
- 11 Indonesia Delong II Captive Power Plant Boiler Structures
- 12 Indonesia Jawa No. 7 1050 (MW) x 2 CFPP Boiler Steel Structures
- 13 Indonesia PLTU Cirebon C2 1000 (MW) CFPP - FGD Absorber Steel Structure, Chutes
- 14 Japan Buzen New Energy 75 (MW) CFB Biomass Boiler Structural Steel
- 15 Japan Fukushima Iwaki Biomass Project Steel Structures
- 16 Japan Hachinohe 12.4 (MW) Biomass CFB Boiler Steel Structures
- 17 Japan IG Tokuyama Biomass Power Plant Steel Structures
- 18 Japan Joetsu Thermal Power Plant Unit 1 Uprighting / Standing Beams
- 19 Japan Kushiro 112MWe CFB Coal / Biomass Boiler Structural Steel
- 20 Japan Ofunato 75 (MW) Biomass Boiler Structures
- 21 Japan Oita Biomass Boiler Steel Structures
- 22 Japan Omuta No. 1 & No. 2 Power Plant Boiler Steel Structures
- 23 Japan Onahama 75 (Mwe) CFB Boiler Steel Structure
- 24 Japan Saijou No. 1 (500 MW) Power Station Buckstays
- 25 Japan Taketoyo #5 1,070 (MW) Ultra-SC Structures, Pipe Racks
- 26 Japan Tokuyama East 3B 300 (MW) All Structures, Pipe Racks
- 27 Japan Yokosuka Thermal Power Boiler Steel Structures
- 28 Korea Daesan 109 (MW) CFB Biomass Plant Structural Steel
- 29 Malaysia Petronas Package Boiler Structural Steel, Casing, Inlet
- 30 Philippines Dinginin 1,336 (MW) CFPP Boiler Steel Structures
- 31 Philippines Mariveles 668 (MW) CFPP - Boiler Steel Structures
- 32 Poland Ostroleka C 1000 (MW) CFPP Boiler Structures & Buckstay
- 33 Russia Big Ust Ilimsk Recox Boiler Structures, Secondaries, ESP Building
- 34 Saudi Arabia Ras Tanura Integrated Project (RTIP) VU-60 Package Boilers
- 35 Thailand Siam Cellulose Recox Boiler Steel Structures
- 36 Turkey Cenal Karabiga 2 x 660MW UltraSC CFPP Power Block, Boiler Structures
- 37 U.A.E Mohammed bin Rashid al Maktoum 260m, 100 (MW) Solar Receiving Tower Structural
- 38 U.S.A. Albany Green Energy 50 (MW) (CHP) Boiler Structures
- 39 U.S.A. Naheola Hybex (BFB) Boiler Buckstays & Support Structures
- 40 U.S.A. SunCoke Energy Haverhill Boiler Steel Structures
- 41 U.S.A. Trimble County Generating Station Conveyors, Transfer Towers, Drive Frames, Walkways, Gratings
- 42 Vietnam Duyen Hai 660 (MW) Thermal Power Plant 2nd Steel Structures
- 43 Vietnam Mong Duong-II 2 x 660 (MW) CFPP Steel Structures
- 44 Vietnam Thang Long Power 2 x 300 (MW) CFB Buckstays & Support Steel



Karabiga Power Plant



JAWA NO.7 CFPP

HEAT RECOVERY PROJECTS

- 45 Algeria Ain Arnat 400(MW) x 3 HRSG Air Intakes, Ducts, Filterhouse Structures
- 46 Angola Soyo 1 - 750 (MW) x 4 HRSG - Steam and Gas (STAG) Stacks
- 47 Armenia Yerevan 2 - 250 (MW) HRSG Main Steel, 2nd Steel, Duct & Casing, Stack
- 48 Bangladesh Ashuganj N. 450 (MW) x 2-HRSG Main Steel, Casing & Duct, Platforms, Ladder, Gratings, Handrail, 2nd Steel
- 49 Bangladesh Bhola II 220 (MW) x 2 HRSG Ducts, Casing Platforms, Stack, Stairs
- 50 Bangladesh Kushiara 163 (MW) HRSG - Main Steel, Stair Tower, Platforms, Gratings, Handrails, Ladders, Walkways
- 51 Brazil Santa Cruz Repower 2 x HRSG Structural Steel Non-Pressure Parts
- 52 Canada Syncrude HRSG Main Steel, Casing, Ducts, Stair Towers, Insulation, Liners, Secondary Steel.
- 53 Egypt Beni Suef 4.8 (GW) x 8 HRSG - Modular Duct & Casing, Stacks, Platforms, Stair Towers, Ladders, Gratings, Hand Rails
- 54 Egypt Egypt Megaproject 14.4 (GW) x 24 HRSG - 2nd Steel, Stair Towers, Platforms, Handrails, Grating, Ladders, Supports
- 55 Egypt New Capital 4.8 (GW) x 8 HRSG - 4 Units Outlet Duct Panels, Stacks, Instrument Connections.
- 56 Georgia Gardabani 2 - 230 (MW) x 2 HRSG - Platform Structures and Support Steel
- 57 Japan Ogishima 180 (MW) x 1 HRSG D&C, Main Steel, Platforms, Insulation, Liners.
- 58 Japan Shin-Fukuyama Unit-2 HRSG - D&C, Structural Steel, Platforms, 2nd Steel.
- 59 Japan Takasago Structural Steel for HRSG Testing Facility
- 60 Korea YEOSU No.2 - 2x Vertical HRSG Main Steel, Ducts, Casing
- 61 Malaysia Alor Gajah (Melaka) 2,242 (MW) 3 HRSG Turbine Enclosures
- 62 Mexico San Luiz De La Paz 205 (mw) CCPP ACC Structures, Walkways, Gratings
- 63 Myanmar Thaton 120 (MW) x 2 HRSG - 2 Bypass Stacks
- 64 Oman Haima West (20MW) HRSG Casing & Ducts, Bypass Stack
- 65 Oman Ibri 1,509 (MW) x 4 HRSG - Stair Towers, Platforms, Structures, Grating
- 66 Oman Sohar 3 - 1,710 (MW) x 4 HRSG - Stair Towers, Platforms, Structures
- 67 Pakistan Balloki 1223 (MW) 2 x HRSG Structural Steel Framing and Roof Supports.
- 68 Russia Nizhnekamsk 495 (MW) x 2 HRSG Modular Ducts & Casing, NPP Structures.
- 69 Saudi Arabia Aramco Jazan 4000 (MW) x 10 HRSG - Main Steel, D&C, Stacks, 2nd Steel
- 70 Singapore FLNG - Vessel Topside HRSG Lifting Frames
- 71 South Korea FLNG - Vessel Topside HRSG Lifting Frames
- 72 UAE Al Layyah 1.026 (GW) x 2 HRSG - Modular Duct & Casing, Platforms, Stair Towers, Insulation, Liners, 2nd Steel, Gratings
- 73 UAE ATA Power & Steam 230 (MW) x 2 HRSG - Main Steel, Casing, Ducts, Insulation, Liners
- 74 UK Keabby 2 840 (MW) HRSG Casing & Ducts, Stack, 2nd Steel
- 75 USA Cricket Valley Energy Center 1,125 (MW) x 3 HRSG Air Cooled Condenser Condensate Header Fabrication
- 76 USA Fairview 1,050 (MW) x 2 HRSG - Modular Ducts & Casings, Liners, Insulation, Stair Towers, 2nd Steel, Platforms, Ladders.
- 77 USA Grand River 495 (MW) Unit #3 Platforms, Supports, Ladders, Stair Towers, Gratings, Handrails, 2nd Steel
- 78 USA Hummel Station 1000 (MW) x 3 HRSG - Main Steel, Ducts & Casing, Stair Tower, 2nd Steel, Supports
- 79 USA Lackawanna 1,480 (MW) x 3 HRSG - Modular Casing, Main Structural Steel, Ducts, Insulation & Liners, Stacks
- 80 USA Moxie Freedom 1,029 (MW) x 2 HRSG - Structural Steel Modular Casings, Insulation, Liners
- 81 USA Sewaren 7 - 540 (MW) HRSG - Main Steel Structures
- 82 USA Stonewall 750 (MW) x 2 HRSG - Main Steel, Casing & Ducts, Stacks, Bypass Stack, Secondary Steel.
- 83 USA Towntanic 785 (MW) x 2 HRSG - Modular Ducts & Casing, Insulation, Liners, Platforms, Walkways, Gratings, Hand Rails
- 84 USA Westmoreland 925 (MW) x 2 HRSG Platforms, Walkways, Ladders & Supports for CCPP project.
- 85 Uzbekistan Navoi 2 - 450 (MW) HRSG - Ducts & Casing, Stair Tower, Platforms, Ladders, 2nd Steel, Supports
- 86 Uzbekistan Turakurgan 900 (MW) x 2 HRSG - Casing and Ducts, Insulation & Liners, Stair Tower, Platforms, Ladders, Supports



TOWTANTIC ENERGY CENTER



EGYPT MEGAPROJECT - NEW CAPITAL
8 x HRSG 4,800 (MW)
COMBINED CYCLE POWER STATION

MAJOR BUILDINGS

- 87 Australia Industrial Work Zone Building Steel Structures
- 88 Australia Mass Transit Station Canopy Support Structural Steel
- 89 Australia Space Frame Swimming Pool Curved Truss Roofing

- 90 Belgium Hot Dip Galvanizing Production Line Elevated Platforms

- 91 Brazil Invista Polymers and Chemicals Manufacturing Plant Steel Structures
- 92 Brazil Michelin Tire Manufacturing Plant Steel Structures
- 93 Brazil Volkswagen Automotive Manufacturing Plant Structural Steel

- 94 China Beijing National Stadium - Erection Services
- 95 China Changzhou Xinyu Tianli Automobile Light Manufacturing Plant 32,000m2
- 96 China Disneyland Shanghai Hotel Structural Steel
- 97 China Eiffel Tower at Parisian's Hotel Macau - 525' (160M) Skyscraper
- 98 China HKRI Taikoo Hui Commercial Tower Atrium Superstructure
- 99 China Kunming Changshui Intl. Airport Complex Structures & Erection
- 100 China Kunshan Jingying 5th Tower Structural Steel
- 101 China Museum of Contemporary Art & Planning Structures & Erection
- 102 China Nanjing Gym Center Curved Roof Trusses
- 103 China Oji Paper Mill Structures, Platforms, Pipe Bridges, Stairs
- 104 China Optics Valley International Tennis Center - Steel Erection
- 105 China Shanghai Aviation Service Center Elevated Walkways and Stairs
- 106 China Shenzhen Bao'an International Airport - Steel Erection Services
- 107 China Shenzhen Bay Sports Center Multi-Use Stadium Structural Steel
- 108 China Skechers Footwear Distribution & Logistics Center Structural Steel
- 109 China Sun Tzu Cultural Park Launch Roller Coaster Support Structures
- 110 China Tower Crane Structural Steel Assemblies
- 111 China Yuguan Mushroom Cultivation Facility 62,000m2 Steel Structures

- 112 Japan UACJ Aluminum Continuous Annealing Line Pretreatment Facility
- 113 Japan Rengo Tonegawa Plant Steel Structures

- 114 Kazakhstan Almaty 12,000-Seat Multi-Purpose Indoor Arena Structural Steel

- 115 Panama Amador Cruise Ship Terminal Structural Steel

- 116 K.S.A. King Abdulaziz International Airport - Steel Structure Fabrication

- 117 USA American Dream Water Park Spaceframe Truss Structural Steel
- 118 USA Mitsubishi Chemical Electrolyte Solution Process Plant Structural Steel
- 119 USA National Football League Stadium Steel Structures
- 120 USA New York University Langone Hospital Kimmel Pavilion High Rise Steel



HKRI Taikoo Hui Tower



New York University Langone Medical Center
Kimmel Pavilion Main Steel Structures

OIL & GAS

- 148 Australia Air Cooler Heat Exchanger Structures, A-Frame, Superstructure, Shrouds
- 149 Australia Australia Pacific Liquefied Natural Gas Project Steel Structures, Heat Exchangers, Walkways, Platforms, Gratings
- 150 Australia Gladstone Liquefied Natural Gas Project Steel Structures, Heat Exchangers, Walkways, Platforms, Gratings
- 151 Australia Gladstone LNG Piping Modules, Integrated Separator Skids, Metering Skids, assembly, E&I, IFAT

- 152 Brazil Petrobras Air Cooled Condenser Steel Structures, Superstructures, A-Frames, Walkways, Ladders, Platforms, Gratings

- 153 China Cryogenic Process Modules Steel Structure Fabrication & Assembly, Piping, E&I
- 154 China MEG South China Sea Natural Gas Transportation Pier Steel Structures
- 155 China Offshore Fish Farm Hose Coupling Track Slot Modules, Guide Case, Movable Panels, Monorails, Sheave Blocks
- 156 China Sinochem-Bayer Platforms and Ladders
- 157 China Shanghai Chemical Industry Park (SCIP) Phase II Steel Structures
- 158 China Shanghai Fubao Port Wharf Pipeline Piperacks Steel Structures, Construction
- 159 China Shenhua-Dow Coal to Methyl Alcohol Plant Steel Structures & Pipe Racks
- 160 China SP Chemicals Olefins Integrated Modular Ethylene Quench-Water Treatment Skids

- 161 Iraq Karbala Refinery Project Plant Steel Structures, Supports, Platforms, Walkways, Gratings, Handrails

- 162 Italy Petronas RAPID Project Modular Air Condensers Steel Structures, Supports, Walkways, Handrails, Gratings

- 163 Japan Adnoc Refining (WHRP) Crude Flexibility Production Waste Heat Recovery Skids
- 164 Japan Kuraray Okayama Chemical Plant Steel Structures

- 165 Kazakstan Tengizchevroil Oil Field Modular Air Condensers Steel Structures, Supports, Walkways, Handrails, Gratings

- 166 Kuwait KNPC Clean Fuels Project Structures, Transfer Tower, Hoppers, Grizzly, Belt Feeder, Stairs, Mechanical Fab
- 167 Kuwait Kuwait Oil Pipeline Gathering Center Manifold Group Trunkline Modules Steel Structures

- 168 New Zealand Marsden Point Refinery Project Structural Steel, Storage Silos, Supports, Platforms, Walkways, Stair, Ladder

- 169 Russia Gazprom Omsk Refinery Conveyors, Bridges, Towers, Structures & Buildings, Tripper Car, Hoppers, Etc.

- 170 Saudi Arabia Honewell UOP Modular Hydrogen Gas Purification Skid Fabrication

- 171 Tatarstan Taif-Nizhnekamsk Refinery Air Cooled Heat Exchangers Steel Structures, Supports, Walkways, Handrails, Gratings

- 172 U.A.E. Jebel Ali Refinery Steel Structures, Air Cooled Heat Exchanger Frames, Walkway, Grating, Plenum, Ladder, Handrail

- 173 USA Freeport Liquefied Natural Gas project Modular Air Condensers, Structures, Supports, Walkways, Gratings
- 174 USA HeXia Chemical Plant Steel Structures, Supports, 2nd Steel
- 175 USA M&G Chemicals Polyethylene Terephthalate Plant Modular Jumbo Piperacks
- 176 USA Shell Pennsylvania Petrochemicals Complex Structural Steel, Pipe Racks, Platforms, Cooling Tower, 2nd Steel

- 177 Venezuela MBD Chemical Process Modules

Curtis Island, Australia
Gladstone LNG Project
Air Cooled Condensers & Steel Structures

MINING & AGRICULTURE

- 120 Argentina MG ALAS Mine Crusher, Mill, Silo, Filter House, Pre-Heat Tower, Clinker, Platforms, Ducts Supports
- 121 Australia Amrun Chith Export Facility Wharf Structural Steel and Platforms
- 122 Australia Byerwen Coal Processing Plant Structures, Modules, Transfer Stations, Supports, Chutes, Platforms, Gratings
- 123 Australia CBH Garner Bins, Frames, Trusses for Grain Handling & Storage Facility
- 124 Australia Front-End Loader Buckets for Mining & Excavation Work
- 125 Australia Gairdner Agriculture Expansion Project Structures, Silo Roof, Elevators, Garner Bins, Transfer Conveyors
- 126 Australia Hay Point Coal Terminal Phase 3 Expansion Project Wharf Temporary Structural Steel, Cantilever Traveler
- 127 Australia Karara Mine Base Plant Steel Structures & Thickener Piperacks
- 128 Australia Karara Mine Primary, Secondary and Tertiary Crushing System Structures
- 129 Australia Mining Mineral Automated Feed Control Unit Steel Structures
- 130 Australia Roy Hill Iron Mine Steel Structures, Overland Conveyor Galleries, Wharf Structure, Piling Frames, Roadway
- 131 Australia West Angelas Mining Project Steel Structures, Modular Conveyors, Handrail, Grating, Platforms, etc.

- 132 Canada Fort Hills Ore Preparation Plant Structures, Conveyors, Surge Bins
- 133 Canada Horizon Oil Sands Project Mining Steel Structures and Conveyors
- 134 Canada Mary River Iron Mine Shiploader Structural Steel, Trusses

- 135 China Chassis for Skid-Mounted Electric-Drive Jaw Crushing Units
- 136 DR Congo Kamoakakula Mining Project SMPP for surface mining plant
- 137 Indonesia Melawan Coal Handling Facility Conveyors, Steel Structures
- 138 Malaysia Rubiah Terminal Expansion Project Structural Steel
- 139 Mongolia Oyu Tolgoi Underground Mine Conveyors & Structures
- 140 Niger Imouraren Uranium Mine Modular Air Cooled Condensers
- 141 Nigeria Tonkolili Iron Ore Mine Conveyor Steel Structures & Supports
- 142 Peru Quellaveco Copper Mine Conveyors, Site Buildings, Mechanical Fab
- 143 Peru Quellaveco Mine Port Conveyor Project Conveyor Truss, Frame, Support Structures, Building structures
- 144 Peru Tintaya Mining Project Structural Steel for Transfer Tower & Belt Splicing Station, Mechanical Fabrication

- 145 Philippines Hardrock Mining Multiple Platform Structures & Supports, Lower Shaft Steelwork, Handrails
- 146 Saudi Arabia Yamama Cement Plant Structures, Conveyors, Bridges, Platforms, Gallery, Silos, Overland Truss
- 147 Serbia Tamnava West Mine Steel Structures for Belt Conveyors and Transfer Stations
- 148 USA Portable Mineral Sands Plant Modules; Reheat, Drying, Dust Collection, HTS, Conveying, Bagging, 2nd Steel
- 149 Uzbekistan Mining Conveyor Structures & Transfer Stations for Uzbek Mining Project

Hay Point Coal Terminal



Amrun Chith Export Facility



HEALTH & SAFETY



Health & Safety First

All Modern Group employees are indoctrinated on health, safety, and the environment when they join the company. The HSE Management System's function is to train, retrain, and provide continuous HSE improvement in the workplace. The lifeblood of the company is our workforce, and it is our mission to keep them safe.

Modern Group management team commitment is always to make progress, increase leadership responsibility and accountability. Our facilities have several classrooms and meeting rooms for worker's instruction, shop safety, fabrication process, rigging & handling, equipment & machinery safety, welding safety, paint & hazardous materials handling, and incident reporting channels. We aim to reduce risk in the workplace, improve supervision & business performance, and elevate audit result.



Code of Ethics

The Directors and management of Modern Group are committed to conducting business in an ethical manner that best serves our customers, employees, and families.

Modern Group is striving to build a robust and progressive culture that focuses on growth and improvement daily.

The company's operational excellence can only come from our people, so this is where we invest in the future. Modern Group management will ensure integrity, transparency, and fairness in all business operations and professional transactions.

- Modern Group internal policies include:
- Anti-Discrimination - Equal Employment
- Conflict Minerals Sourcing
- Substance Abuse Policy
- Child Labor Policy
- Employee Code of Conduct



Modern Heavy Industries supports the Ministry of Human Resources and Social Security of the People's Republic of China. Our company upholds all national labor policies, standards, regulations, the national social security system, fair labor practices, and social insurance management.





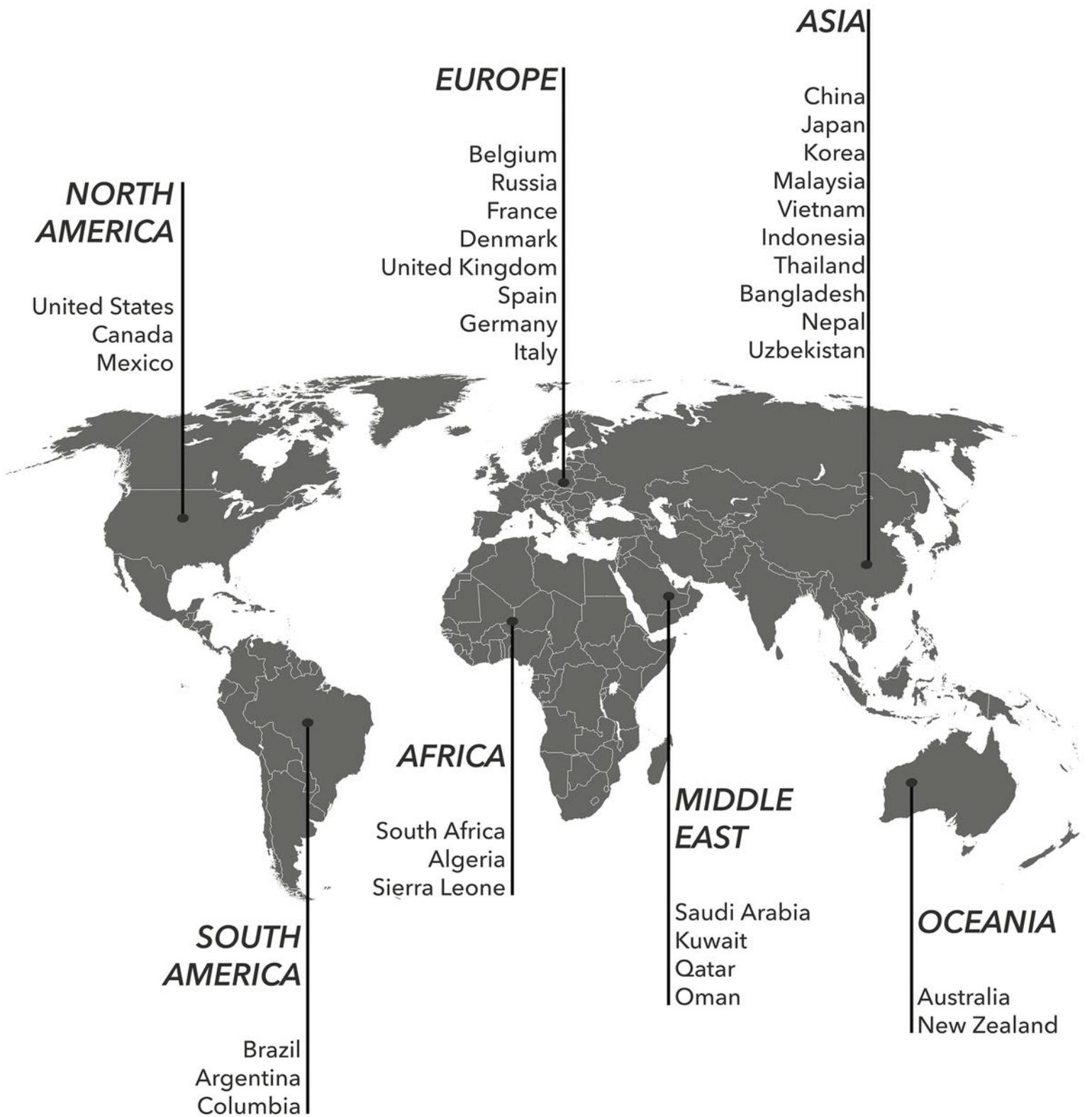
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