EPC capabilities
connected excellence in all we do
As business outcomes change and develop, we support our clients with proven project delivery and solutions to support the growth of their business.

Full-service provider of EPC/EPCM projects

+85% self-perform construction work

Amec Foster Wheeler is an integrated engineering, procurement and construction firm with in-house design and design-build capabilities. All components of our EPC team, along with EPC management and oversight, are physically located in the same building, which supports a truly integrated and seamless approach. Amec Foster Wheeler has a reputation for project delivery through an ongoing commitment to delivering excellence and unparalleled quality of service. The specialized knowledge & experience of our team enables us to provide end-to-end services on your project.

Amec Foster Wheeler has a great reputation of executing safe, fast-tracked projects for clients who desire to be first to market with specialized technology. We actively and intentionally engage with our clients and are flexible in our approach to using cost-effective strategies to deliver EPC projects. We deliver direct-hire and/or construction management projects to various clients across markets throughout the country.

In Amec Foster Wheeler, clients will find hometown personal collaboration with the backing of a global consulting, resourcing, engineering and project management firm.

Full-service supplier

We are a full-service supplier providing all aspects of project execution, including operator training, commissioning and start-up services. With our EPC delivery, these services can be developed, expedited and maintained throughout the project.

2 EPC services
Engineering
Amec Foster Wheeler provides a complete range of professional, in-house engineering services throughout the US, Canada and South America. Our projects are designed to be built and operated safely and include the latest technology and installation means and methods.

Engineering services:
- Feasibility studies
- Environmental study & permitting
- Front end engineering design (FEED)
- Owners engineering
- Process engineering
- Detail design – all disciplines
- 3D modeling / laser scanning
- Safety by design
- Value engineering
- DCS testing & staging

Design tools:
- 3D modeling – PDMS
- Aveva design tools (P&ID’s, equipment, instrumentation database)
- Cycle analysis
  - GateCycle
  - GT-Pro
  - Peace
  - Thermoflow
- Caesar II
- STAAD / GT STRUDL / Finite element analysis
- ETAP
- Fluent
- Control systems – staging & testing

Procurement
Timely procurement is key to a successful project. All members of the EPC team work very closely together to develop detailed specifications, site rules & regulations and commercial terms to ensure all orders meet or exceed performance requirements. Executing purchase orders and / or subcontract agreements and expediting key vendor information (footprints & loads) drive our detail design and installation schedule. We have a full time staff of professional procurement personnel who maintain continuous contacts with suppliers to ensure the most current and cost competitive orders.

Procurement deliverables:
- Equipment procurement
- Material supply / fabrication procurement
- Subcontractor procurement
- Detail tracking & expediting
- Shop inspection & equipment testing
- Escalation tracking & benchmarking
- Spare parts coordination
- Warranty management
Construction

We have an excellent track record in construction for world class installation and an industry leading safety record. As a result, many of our projects are repeat business with customers. Construction services include:

- General contracting – self-perform
- Construction management
- Subcontract coordination
- Outage services
- Safety, health and security management
- Quality assurance & quality control services
- Operator training
- Commissioning & start-up
- Performance testing

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Craft labor

We excel in our self-performed construction projects because of our craft labor. Our craft labor is a key to our success. We maintain a healthy craft labor database of all our employees. We value our craft, recognize their achievements, and provide them with long-term project assignments and / or Platinum employee status. These employees have exceptional safety and attendance records along with the knowledge and reputation of providing quality craftsmanship.
Project controls

All of our projects, no matter the size, utilize our detailed project control system. With a wealth of completed projects, known productivity rates and a detail quality breakdown structure, our tracking system has proven to be very accurate. We have full-time, dedicated, professional project control personnel assigned to every project.

- EPC schedule
- Critical path analysis
- Milestone tracking
- Productivity analysis
- Committed cost tracking
- Cost forecasting
- Weekly & monthly forecast reviews

Critical path management

Amec Foster Wheeler EPC delivery model allows us to control the critical path and manage our projects. Whether a change is required to the critical path in engineering, procurement, or construction, we can execute this under an expedited schedule. Our detailed knowledge of the EPC process, effective planning, integrity and coordination of all groups involved, result in delivering earlier project completion.
EPC projects

Solar PV project

EPC scope of services
- 250 MWac Photovoltaic
- Engineering design, procurement of all materials
- Features more than 1.1 million Trina modules

Baghouse project

EPC scope of services
- Pulse Jet Fabric Filters (PJFF)
- PAC silos, ductwork & ID fans
- Mercury gas reductions for emissions
- Major plant outage for tie-ins
- Schedule driven to meet compliance date

Wet to dry ash project

EPC scope of services
- Wet to dry coal fly ash conversion
- Coal boiler units 3,4,5,6
- CCR compliance project
- Schedule driven to meet compliance date

New recovery island project

EPC scope of services
- New 624,000 lb/hr, 1500 psig high efficiency recovery boiler
- New 52 MW double extraction condensing steam turbine generator
- New high solids black liquor concentrator
- Demineralizers for boiler water treatment equipment
- Fast track to market

Warm syngas clean-up project

EPC scope of services
- High Temperature Desulfurization Process (HTDP) Unit
- Water gas shift reactor system
- Low Temperature Gas Cooling (LTGC)
- CO₂ Amine capture
- 55,000 LF of pipe
- Commissioning & start-up support
"No Compromise" safety culture

Amec Foster Wheeler believes Six Safety Essentials are crucial in developing an incident and injury free environment. These elements are the foundation of Amec Foster Wheeler’s safety culture. The Six Safety Essentials came from analysis of a number of safety incidents over a 10 year period.

The success of our safety program and culture is due to a belief that safety is behavioral based and therefore people based. Our strong "No Compromise" safety culture has launched Amec Foster Wheeler to significant recognition within the industry. We have been recognized in the industry for our safety performance:

- 2014 ABC Award of Excellence in Construction
- 2013 TECO Platinum Level Energy Supply Infinity Safety Award

The Six Safety Essentials
taking the time to talk

- always take care
- follow the rules
- do a risk assessment
- stop! if you must intervene
- manage any change
- wear the correct ppe

We value your project. Your project is our resume. We deliver projects that meet or exceed the stated goals. Our installations are deemed World Class and we invite clients to visit any of our projects at any time. You will see a safe, organized, extremely clean and well run operation.

- Corporate QA policy
- Project specific quality program
- Inspection & test plans (ITPs)
- Job-specific quality plans
- Vendor shop inspections
- Quality surveillance reporting
- Site-dedicated QA / QC inspectors
- ASME certifications for boilers & pressure vessels
- National Board Certifications for repairs & alterations
- Pressure vessel stamps held by Amec Foster Wheeler
  - “R” Boiler & pressure vessel repairs and alterations
  - “S” Power boilers / “U” Pressure vessels

Quality Assurance Control
Employing around 35,000 people in more than 55 countries and with annual revenues of US$7 billion, Amec Foster Wheeler operates across the clean energy, power generation, oil and gas, mining and environment and infrastructure markets.

Amec Foster Wheeler offers full life-cycle services from initial planning and consulting through engineering, procurement and construction project delivery.

Amec Foster Wheeler shares are publicly traded on the London Stock Exchange and its American Depositary Shares are traded on the New York Stock Exchange. Both trade under the ticker AMFW.