In sulfur recovery, the goal is always to achieve the greatest benefit-to-cost ratio – broader processing capability, greater unit efficiency and maximum on-stream time, with the lowest capital investment and operating expenditure.

From our people to our processes to our technologies, Black & Veatch brings it all together for performance that delivers the highest benefit for the lowest cost at every level:

- Lowest life cycle cost
- Highest operating reliability
- Greatest operating flexibility
- Proven process performance
- Extensive operating plant references (including repeat clientele)
- Ongoing technical support

Black & Veatch is a world leader in the design and construction of sulfur recovery units and related sulfur management facilities, backed by a reputation for delivering long-term value to clients. Our design-to-construction experience covers the complete range of sulfur recovery applications, including gas/liquid treating systems, sour water strippers and flue gas desulfurization units. Total sulfur production of Black & Veatch-designed units exceeds 40,000 long tons per day (LTPD).

From conceptual process design to optimum selection and configuration, we excel in developing process design packages that incorporate the best-fit technology to meet our clients’ needs. We also offer full-scope engineering, procurement and construction (EPC) services for the construction of new or the revamp of existing facilities, with proven project delivery, on time and within budget.

**FULL-SCOPE SOLUTIONS**

- Conceptual process design
- Technology licensing
- Process design package (PDP)
- Front-end engineering and design (FEED)
- EPC
- Operator training, pre-commissioning, commissioning and startup assistance

**PUGUANG NATURAL GAS PLANT**

Sichuan Province, PR China
SULFUR RECOVERY EXPERIENCE

Acid Gas Removal
- Systems include chemical, physical and hybrid solvents; acid gas enrichment; and patented, high-pressure selective gas treating
- 100+ gas and liquid sweetening units
- 60+ refinery regeneration systems
- Gas treating capacity to 2,000 million standard cubic feet per day (MMscfd)
- Solvent circulation rates to 12,000 gallons per minute (gpm)

Sour Water Strippers
- Conventional and articulated
- Patented, high-level ammonia processing technology

Claus Sulfur Recovery
- Designed and constructed first unit (67 LTPD) in 1953
- 300+ projects worldwide
- Single-facility capacities over 8,000 LTPD
- Single-train capacities up to 1,900 LTPD
- Licensor and Engineering, Procurement and Construction Management (EPCM) contractor for 4,000 LTPD of sulfur recovery in the world’s largest refinery

Oxygen Enrichment Technology
- Simple enrichment to high-level injection projects
- Full range of oxygen technology suppliers
- Revamp and grassroots applications

Tailgas Treating
- Sub-dew point processes
- Hydrogenation/amine processes
- Licensor/implementer of all other major tailgas processes
- 200+ projects

Sulfur Degassing and Handling
- Patented MAG™ technology (simplified degassing process)
- Licensor/implementer of all other major degassing technologies
- Molten and solid sulfur handling

TECHNOLOGY FOCUS
Black & Veatch is a global leader specializing in gas processing, sulfur recovery and liquefied natural gas (LNG) technologies. Our comprehensive design to turnkey construction solutions, backed by our proven performance in safety, reliability and environmental considerations, deliver consistent value.

PROJECT TYPES
- Baseload/mid-scale/peak shaver natural gas liquefaction
- LNG regasification terminals
- Sour/rich gas processing
- Sulfur recovery
- Gasification

TECHNOLOGY LEADERSHIP
- PRICO® for liquefaction of natural gas
- LPG-PLUS® for liquefied petroleum gas (LPG) recovery
- PRICO-NGL®, PRICO-C2® for ethane recovery, PRICO-EX™ for ethane export
- Heat-assisted ambient air vaporization (LNG)
- Integrated natural gas liquids (NGL) recovery in LNG terminals
- Integrated power generation/LNG terminals

EXECUTION LEADERSHIP
- 3,000+ assignments in more than 40 countries
- Proven performance in safety, reliability and environmental considerations
- Innovative execution capabilities