

Tier 4 Construction Equipment

Construction Package 1 (CP 1) is the first significant construction contract executed on the Initial Operating Section of the high-speed rail program. The CP 1 construction area is a 29-mile stretch between Avenue 17 in Madera to East American Avenue in Fresno. It includes 12 grade separations, 2 viaducts, 1 tunnel and a major river crossing over the San Joaquin River. Current pre-construction activities are underway and significant construction is ramping up. CP 1 is a Design-Build contract that was awarded to Tutor Perini/Zachry/Parsons (TPZP), A Joint Venture, in 2013 after an extensive, multi-year competitive bidding process.

LIEBHERR LR1160 CRAWLER

- Used for construction of structures, viaducts, trenches, overpasses and underpasses
- Maximum lifting capacity of 160 tons
- Main boom maximum length of 334 feet



LIEBHERR LR1160 CRAWLER

TEREX 1100 CRANE

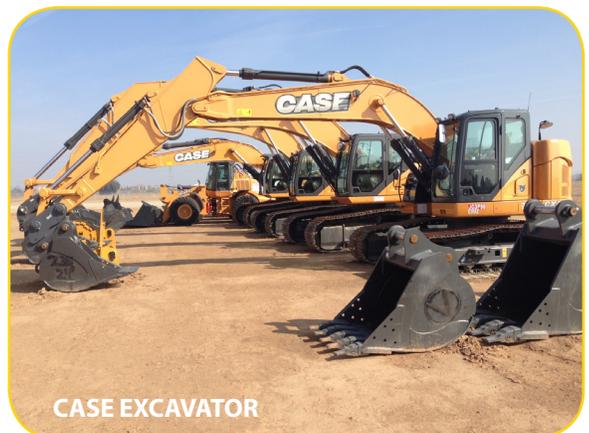
- Used for construction of structures, viaducts, trenches, overpasses and underpasses
- Maximum lift capacity of 100 tons
- Main boom maximum length of 155 feet



TEREX 1100 CRANE

CASE EXCAVATOR

- Used for water, sewer and storm drain relocation
- Used for excavating holes, removing structures and demolishing buildings



CASE EXCAVATOR

BENEFITS OF TIER 4 ENGINES NATIONALLY

By 2030, the annual benefits throughout the U.S. from using Tier 4 engines are estimated to:

- Reduce Nitrogen Oxide (NO_x) emissions by 1 million tons or 82 percent
- Reduce Particle Matter (PM_{2.5}) emissions by 90 percent
- Reduce Sulfur Dioxide (SO₂) emissions by 99.7 percent
- Avoid premature mortality for 12,000 people
- Avoid lost work days for 1 million people