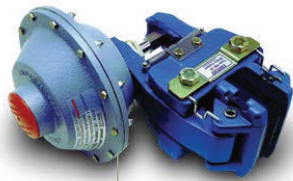




Courtesy of Caltrans



Product

MXS Caliper Brakes

Application

Bay Bridge Maintenance Travelers

Highlights

- Spring-applied, pneumatically released parking and emergency stop brakes
- MXS Series braking force range extends from 6.8 kN to 14.3 kN

The San Francisco-Oakland Bay Bridge is comprised of two equal length sections that carry about 240,000 vehicles per day. After more than 10 years of construction, the new 2,047 ft. long East Span of the bridge opened to traffic in 2013. This single-deck span features eastbound and westbound lane sections, positioned side-by-side. The bridge requires regular ongoing maintenance, including painting to protect against corrosion, to ensure it reaches its planned 150-year useful life.

Four large, moving scaffolds, called travelers, were designed and installed on the underside of the East Span's four main sections. The largest traveler is 20 ft. tall, 16 ft. wide, and 119 ft. long. A smaller fifth traveler also was installed under the 15.5 ft. wide pedestrian/bike lane. These moveable platforms allow crews safe access for routine bridge inspections, painting and repairs. They also are designed to prevent sandblasting grit, paint chips and overspray from falling into the Bay below.

The travelers, designed to withstand high winds, can move 20 ft./min. going west and 50 ft./min. heading east. They ride on two steel I-beam tracks and are powered by air compressors positioned on both ends of the span.

Twiflex supplied MXS Series spring-applied, pneumatically released caliper brakes for use on the travelers' wheel drive carriages. Each traveler utilizes eight MXS brakes that act directly on the I-beam tracks. The brakes provide reliable parking and emergency stopping functionality. The Model MXS25 brakes supplied for this application are rated at 11.2 kN braking force per brake. The MXS Series rated braking force range extends from 6.8 kN to 14.3 kN, with a nominal coefficient of friction $\mu = 0.4$.

Europe
+44 (0) 20 8894 1161
twiflex.com

US
1-844-723-3483

For a complete list of our global sales offices visit:
altramotion.com/contactus