



## Product

## BF Series Geared Motors

## Application

## Assembly Crane on World's Longest Cable-Stayed Bridge

## Highlights

- BF Series gear motors feature a hardened wear sleeve and spray ring
- Complies with NA and International standards, including NEMA, IEC, CSA, and CE
- Torque rating to 18500 Nm
- Low noise gearing
- IP65 Enclosure (Standard), IP66 (Optional)
- Completely enclosed, sealed against dust and moisture
- Corrosion protection COR01, COR02, COR03
- Connection Standard with CAGE CLAMP<sup>®</sup>

The world's longest cable-stayed bridge is located near Vladivostok, Russia. The bridge spans across the Eastern Bosphorous strait from Russky Island to the Muravyov-Amursky Peninsula. The bridge breaks numerous world records, rising more than 70m above the high water level, with a central span 1104m long.

One of the most demanding phases of the bridge construction was the assembly of the central span which is made up of 103 panels, each 12m long, 26m wide, and weighing a total of 23,000 tons. A special crane was needed to lift the enormous panels from barges to the 70m elevation and into position; a precision operation taking about one and a half hours to complete.

Mostovik Crane Factory turned to Bauer Gear Motor to provide gear motors for a custom-designed derrick crane which was installed on the bridge center span deck, cantilevered over the nose and facing toward the strait.

To meet the application requirements, Bauer supplied BF Series geared motors, with torques from 10100-13400Nm. BF Series models can be mounted in any required position – horizontally, vertically or suspended. Total flexibility in mounting options includes shaft, foot, face and flange solutions. Generously dimensioned ball or roller bearings, case-hardened forged and ground gears, and internally and externally reinforced gearboxes ensure a long, low-maintenance service life.

For absolute reliability, BF Series units are completely enclosed and sealed to IP65 as standard (IP66 optional) to withstand dust and water spray. The geared motors also provide comprehensive corrosion protection which is important for use in this Russky Island bridge application.

### Bauer Gear Motor

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