

Abstrak

Jembatan merupakan struktur yang dibuat untuk menyeberangi jurang atau rintangan seperti sungai, rel kereta api, ataupun jalan raya. Jembatan memiliki banyak jenis berdasarkan fungsi, lokasi, bahan konstruksi, dan tipe struktur. Salah satu jenis jembatan adalah suspension bridge, dimana gelagar jembatan digantung menggunakan hanger yang akan menyalurkan gaya melalui kabel utama yang kemudian disalurkan ke tanah lewat pondasi. Suspension bridge memiliki variasi dimana angkur jembatan tersebut diletakkan pada gelagar jembatan, jenis jembatan ini dinamakan self-anchored suspension bridge. Dengan program MIDAS CIVIL 2019 dianalisis gaya-gaya yang terjadi pada self-anchored suspension bridge dan perbedaannya pada suspension bridge dengan angkur luar.

Kata kunci: jembatan gantung, self-anchored, kabel, hanger

Abstract

Bridge is a structure made for crossing cliff or tough places such as river, train track, and traffic. There are many type of bridges depending on function, location, construction material, and structure type. Suspension bridge is a type of bridge where the deck is tied with a hanger which then transfer the load of the bridge to the main cable and transfer it to the ground via abutment. Suspension bridge has a variant where the anchor is placed on the deck of the bridge, this is called self-anchored suspension bridge. With MIDAS CIVIL 2019 program the forces of the self-anchored suspension bridge is analyzed and the difference with externally-anchored suspension bridge.

Keywords: *suspension bridge, self-anchored, cable, hanger*