Kajian perilaku sambungan kunci geser jamak tanpa perekat akibat beban vertikal = Study of dry multiple shear key subjected to vertical load / Mohammad Bagus Prasetyo

---

Abstrak

[Sambungan kunci geser merupakan sambungan berbentuk gerigi yang terdapat di setiap pertemuan antar segmen pada jembatan beton segmental. Tujuan dari kajian ini adalah mendapatkan gambaran besar beban yang terkait dengan potensi retak yang dihasilkan dari beberapa variasi kunci geser jamak tanpa perekat. Jumlah gerigi yang digunakan sebanyak 2 buah serta variasi yang digunakan meliputi tinggi gerigi, lebar gerigi, dan jarak antar gerigi. Pemodelan numerik dilakukan untuk mendapatkan beban potensi retak yang dihasilkan dari variasi tersebut. Pada tahap awal, dilakukan validasi model dengan memodelkan kunci geser berdasarkan rujukan eksperimen terdahulu. Hasil simulasi menunjukkan bahwa variasi kunci geser sudut 45 dan jarak antar gerigi sebesar tinggi gerigi belakang menghasilkan beban potensi retak terbesar.;Shear key connection is a joint resembling a key which is found in every meeting between segments at the segmental bridge of concrete. The purpose of this study is to obtain the potential cracking load from several variations of dry multiple shear key. The amount of keys used are two, and the variations used are the height of keys, the width of keys, and the distance between keys. To fulfill the purpose of this study, the modeling method used is numerical simulation. In the early phase of study, model validation is performed based on past experimental study. The result of modeling shows that shear key with 45 degree angle and distance between keys equal with back height of keys yields the highest load related to potential crack., Shear key connection is a joint resembling a key which is found in every meeting between segments at the segmental bridge of concrete. The purpose of this study is to obtain the potential cracking load from several variations of dry multiple shear key. The amount of keys used are two, and the variations used are the height of keys, the width of keys, and the distance between keys. To fulfill the purpose of this study, the modeling method used is numerical simulation. In the early phase of study, model validation is performed based on past experimental study. The result of modeling shows that shear key with 45 degree angle and distance between keys equal with back height of keys yields the highest load related to potential crack.]