

INTISARI

“METODE PELAKSANAAN *PRESTRESSED GIRDER* DAN ANALISIS PRODUKTIVITAS *CRAWLER CRANE* PADA PEKERJAAN *ERECTION GIRDER* JEMBATAN KALIKUTO PROYEK PEMBANGUNAN JALAN TOL BATANG – SEMARANG SEKSI 1 DAN 2”

ZAKA PRATAMA
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Pekerjaan *prestressed girder* merupakan salah satu pekerjaan yang memerlukan perhatian khusus karena terdapat banyak faktor yang mempengaruhi pelaksanaan pekerjaan ini. Salah satu faktor tersebut adalah kinerja dari alat berat *crawler crane*. Kinerja alat berat *crawler crane* sangat berpengaruh karena untuk mengangkat dan pemasangan *girder* membutuhkan bantuan alat berat *crawler crane*. Berdasarkan hal tersebut, tugas akhir ini mempunyai tujuan untuk mengetahui metode pelaksanaan *prestressed girder* dan menganalisa produktivitas alat berat *crawler crane* pada pekerjaan *erection girder* Jembatan Kalikuto.

Ada beberapa data yang harus diperoleh untuk mengetahui produktivitas alat berat *crawler crane*. Data tersebut adalah kapasitas alat, *cycle time*, dan efisiensi. Selain data-data tersebut, tahapan pelaksanaan dan permasalahan yang ada selama *prestressed girder* berlangsung juga diamati untuk mendukung data produktivitas *crawler crane*. Tahapan tersebut adalah distribusi *girder*, penurunan *girder*, *levelling*, *install strand*, *stressing girder*, *patching*, *grouting*, *erection girder*.

Setelah dilakukan pengamatan dan pengolahan data, didapat dua nilai produktivitas alat berat *crawler crane*. Produktivitas *crawler crane* pada pekerjaan *erection girder* bagian barat adalah 77,62 ton/jam, dan pada bagian timur adalah 81,55 ton/jam. Berdasarkan data tersebut, dua *unit crawler crane* dalam waktu tiga jam kerja mampu memasang lima bentang *girder*.

Kata Kunci : Metode Pelaksanaan, *Erection Girder*, *Crawler Crane*,
Produktifitas

ABSTRACT

“METHOD OF PRESTRESSED GIRDER IMPLEMENTATION AND ANALYZE THE CRAWLER CRANE PRODUCTIVITY OF ERECTION GIRDER AT KALIKUTO BRIDGE ON BATANG – SEMARANG TOLL ROAD DEVELOPMENT PROJECT SECTION 1 AND 2”

The job of prestressed girder is one of the jobs that needs special attention because many factors influence the implementation of this job. One of the most influential factors is the performance of heavy equipment crawler crane. The performance of heavy equipment crawler is very influential because in this job needs help of heavy equipment crawler crane for lifting and installation of girder. Based on this fact, this final project has a purpose to know the method of prestressed girder implementation and analyze the productivity of heavy equipment crawler crane of erection girder at Kalikuto Bridge.

There is some data that must be obtained to know the productivity of heavy equipment crawler crane. These data includes tool capacity, cycle time, and efficiency. In addition to these data, the stages of implementation and problems that exist during the prestressed girder are also observed to support the data of crawler crane productivity. These stages are girder distribution, unloading girder, levelling, install strand, stressing girder, patching, grouting, erection girder.

After observation and data processing, there are two productivity values of heavy equipment crawler crane. The crawler crane productivity on the west region of erection girder jobs is 77,62 tons/hours, and on the east region is 81,55 tons/hours. Based on the data, two units of crawler crane within three working hours capable to intalling five spans of girder.

***Keyword : Methods of Implementation, Erection Girder, Crawler Crane,
Productivity***