

**METODE PELAKSANAAN *TRUSS* DENGAN BENTANG 198,32 METER
PADA PROYEK PEMBANGUNAN *DOME COAL YARD* PLTU 2 JAWA
TENGAH ADIPALA, CILACAP**

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INTISARI

Dome coal yard merupakan struktur *truss* atap baja yang berbentuk lengkung dengan bentang 198,32 m dan berfungsi sebagai atap pengganti untuk melindungi persediaan batu bara yang berada di PLTU Adipala, dikarenakan atap eksisting sebelumnya belum melingkupi seluruh area *coal yard*. Proses pelaksanaan struktur *truss* baja tersebut melewati tahap fabrikasi dan tahap *erection* yang membutuhkan tingkat kehati-hatian tinggi, sehingga diperlukan metode pelaksanaan pembangunan yang tepat. Penelitian bertujuan untuk menganalisis metode pelaksanaan *truss* dengan bentang 198,32 meter pada proyek pembangunan *dome coal yard* PLTU 2 Jawa Tengah Adipala, Cilacap serta evaluasi dalam pelaksanaannya. Data yang digunakan berasal dari data sekunder yang diberikan secara daring serta hasil dari wawancara yang dilakukan dengan pengawas proyek.

Hasil penelitian berupa metode pelaksanaan fabrikasi dimulai dengan melakukan pekerjaan *coating* ditempat workshop, pengiriman ke *site*, perakitan, pengelasan, *coating* ulang, dan inspeksi. Metode pelaksanaan lainnya yaitu kegiatan *erection* yang meliputi proses pengangkatan dan perakitan serta tahap inspeksi. Evaluasi terhadap pelaksanaan *dome coal yard* terdapat ketidak sesuaian diantaranya *overdimension* sehingga pelaksanaan fabrikasi perlu dilakukan dilapangan, kesalahan pembacaan *shop drawing* sehingga diperlukan pergantian plat *gusset* menjadi plat *stiffener*, adanya perbedaan standar *flange* sehingga perlu dilakukan analisis ulang, area *erection* berada di *coal yard* mengharuskan operasional PLTU harus tetap bekerja 24 jam sehingga diperlukan komunikasi yang intensif dengan pihak *coal handling*, serta kurang presisinya proses *fit up* sehingga perlu dilakukan penambahan plat dalam waktu pemasangannya.

Kata Kunci: *Dome Coal Yard*, Metode Pelaksanaan, Fabrikasi, Ereksi, Evaluasi

***198,32 METERS LONG TRUSS IMPLEMENTATION METHODS ON DOME
COAL YARD DEVELOPMENT PROJECT OF PLTU 2 CENTRAL JAVA,***

ADIPALA, CILACAP

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ABSTRAC

The dome coal yard is a structure of curved-steel roof truss with 198.32 m long-span and used as a replacement roof to protect the coal supply at the Adipala PLTU because the existing roof did not cover the entire coal yard area. The implemented process of the steel truss structure goes through the fabrication and the erection stage which requires a high level of care so that the appropriate construction implementation method is needed. The aims of this final project written is to analyze the 198,32 meters long truss implementation methods on dome coal yard development project of PLTU 2 Central Java, Adipala, Cilacap, and evaluate its execution. The data source was from secondary data given by online platforms and the results of interviews with project supervisors.

The results of research are the implementation of fabrication starting with coating work at the workshop, delivery to the site, assembly, welding, re-coating, and inspection.. Another implementation method is erection activities which include the lifting and assembly process until the inspection stage. Evaluation of the coal yard dome implementation has incompatibilities. The incompatibilities such as over-dimension so that the implementation of fabrication needs to be done in the field, there is also shop drawing, reading errors so that it is necessary to change the gusset plate to be a stiffener plate, there are many differences in flange standard so that it needs to be re-analyzed, the erection area in the coal yard requires the operation of the PLTU to keep working for 24 hours so that intensive communication with coal handling is needed, and the lack of precision in the fit-up process so it is necessary to add plates during installation.

Keywords: *Dome Coal Yard, Construction Method, Fabrication, Erection, Evaluation*