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SPUN PILE INSTALLATION IN DRY DOCK AT MALAYSIA MARINE AND HEAVY ENGINEERING HOLDINGS BERHAD (WEST YARD)

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ABSTRACT

Pile foundations are principally used to transfer the loads from superstructures, through weak, compressible strata or water onto stronger, more compact, less compressible and stiffer soil or rock at depth, increasing the effective size of a foundation and resisting horizontal loads. This report provides an overview of Spun Pile Construction. There are two objectives for this report. To determine the factors should be considered in spun pile installation and to identify the process of spun pile installation. To gain selective information, there are 3 methods currently being used. The first one is by interviewing the contractor, observation directly by site visit and document analysis that has been obtained. For the results, the required specifications and full step of installation are being listed down in this report. As for the conclusion, spun pile installation is more suitable for this kind of project.

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CHAPTER 1

INTRODUCTION

1.1 Background and Scope of Study

Pile, in building construction, a post like foundation member used from prehistoric times. In modern civil engineering, piles of timber, steel, or concrete are driven into the ground to support a structure; bridge piers may be supported on groups of large-diameter piles. On unstable soils, piles are indispensable building supports and may also be used on stable ground when exceptionally large structural loads are involved. Piles are driven into the ground by pile drivers, machines consisting usually of a high frame with appliances for raising and dropping a pile hammer or for supporting and guiding a stream or air hammer (Alison Eldridge, 2016).



Figure 1.1 Pile Example