

INTISARI

Sebagai tindak lanjut atas hasil *assesment* PT Pelabuhan Tanjung Priok (PT PTP) terhadap alat bongkar muat eksisting di Terminal 009 Pelabuhan Tanjung Priok yang di antaranya berupa *Quay Container Crane* (QCC) dan *Rubber Tyred Gantry Crane* (RTGC) yang menunjukkan bahwa alat bongkar muat di Terminal 009 tersebut tidak menjamin tercapainya standar *availability* dan produktivitas yang telah ditetapkan PT PTP dalam *Key Performance Indicator* (KPI) *availability* alat bongkar muat yaitu sebesar 90%, PT PTP berencana untuk melakukan pekerjaan investasi pengadaan RTGC untuk Terminal 009 Pelabuhan Tanjung Priok. Oleh karena itu diperlukan perencanaan pekerjaan pengadaan RTGC yang di antaranya penentuan kriteria-kriteria pengadaan RTGC berikut pembobotannya yang akan dijadikan dasar dalam seleksi vendor pengadaan RTGC.

Penelitian ini menggunakan metode *Analytical Hierarchy Process* (AHP) untuk penentuan kriteria-kriteria dalam pengadaan RTGC Terminal 009 dan pembobotan/*scoring* terhadap kriteria-kriteria yang telah dibuat sebagai dasar seleksi pemilihan *vendor* pengadaan RTGC Terminal 009 tersebut. Dalam menentukan kriteria-kriteria dan pembobotan kriteria-kriteria tersebut diperoleh dari responden terpilih yang mempunyai pengalaman, pengetahuan dan keahlian tentang RTGC dan atau pengadaan RTGC.

Berdasarkan hasil pengolahan data didapatkan 5 (lima) kriteria utama dan 16 (enam belas) sub kriteria yaitu kriteria *reliability* (sub kriteria: kesesuaian dengan spesifikasi teknis, *spare part availability*, kemudahan perbaikan, populasi), kriteria *project management* (sub kriteria: pengalaman perusahaan, jadwal pelaksanaan, struktur organisasi, personil, garansi), kriteria operasional (sub kriteria: *user friendly*, *equipment operating life*), kriteria *safety and health environment/SHE* (sub kriteria: *safety features*, sumber energi, konsumsi energi) dan kriteria finansial (sub kriteria: harga, *term of payments*). Adapun dari hasil perhitungan bobot global terhadap seluruh sub kriteria pengadaan RTGC didapat lima prioritas teratas yaitu: kesesuaian dengan spesifikasi teknis (20,3%), *equipment operating life* (12,5%), *user friendly* (10,2%), harga (9,9%) dan *spare part availability* (8,3%).

Kata Kunci: *Rubber Tyred Gantry Crane* (RTGC), seleksi vendor pengadaan, *Analytical Hierarchy Process* (AHP).

ABSTRACT

As a follow up of PT Pelabuhan Tanjung Priok (PT PTP) assessment on loading and unloading equipment in Terminal 009 of Tanjung Priok Port which includes Quay Container Crane (QCC) and Rubber Tyred Gantry Crane (RTGC) showing that loading and unloading equipment at Terminal 009 does not guarantee the achievement of availability and productivity standards which has been set by PT PTP in Key Performance Indicator (KPI) that loading and unloading equipment availability is as big as 90%, PT PTP plans to procure RTGC investment for Terminal 009 of Tanjung Priok Port. Therefore, it is necessary to plan the procurement of RTGC which includes the determination of RTGC procurement criteria and its weighting that will be used as the basis for selection of RTGC procurement vendors.

This research uses Analytical Hierarchy Process (AHP) method to determine criteria in procurement of RTGC Terminal 009 and weighting/scoring of criteria which have been made as base of selection of procurement vendor of RTGC Terminal 009. In determining criteria and weighting from criteria are: obtained from respondent elected who have experience, knowledge, and expertise in RTGC and or RTGC procurement.

Based on the results of data processing, there are five (5) main criterias and 16 (sixteen) sub-criterias are reliability criteria (sub-criteria: conformity with technical specifications, spare parts availability, ease of repairment, population), project management criteria (sub-criteria: company experience, execution schedule, organizational structure, personnel, warranty), operational criteria (sub criteria: user friendly, equipment operating life), safety and health environment criteria/ SHE (sub criteria: safety features, energy sources, energy consumption) and financial criteria (sub criteria: price, term of payments). As for the global weight calculation results of all RTGC procurement sub criterias, there are five main priorities, namely: compliance with technical specifications (20.3%), equipment operating life (12.5%), user friendly (10.2). %, price (9.9%) and spare parts availability (8.3%).

Keywords: Rubber Tyred Gantry Crane (RTGC), selection of procurement vendors, Analytical Hierarchy Process (AHP).