Web Application Requirement Specifications

for

Ashok Engineering Works (AEW)

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*Document Version – 1.1*

**Introduction**

This document for AEW provides an overview of the entire functional and nonfunctional requirements with purpose, scope, definitions, acronyms, abbreviations, references and overview of the system at bare minimum level.

The aim of this document is to gather and analyze and give a high level requirements​ insight of the complete AEW backend system such that the product prototype is made in the shortest duration possible. Nevertheless, it also concentrates on the capabilities required by stakeholders and their needs while defining high-level product features. This document does not encapsulate business vision, mission, future strategies or any management / marketing plans with respect to APMS. The sole motive of the document is to get the idea into an operational base version prototype keeping time constraints in mind.

**Purpose**

The purpose of AEW is to provide a web application​ that gives AEW management and their team a platform to keep a track of all the enquiries generated for the business along with the corresponding order tracking. The admin shall get a status of all the client enquiries, order management, employee and important client data which will help the management take business decisions and improve the operational efficiency of the existing system.

**Users**

**Super Admin** – this user will have control of the entire system and will have access to the database, web server details. He shall be able to view, edit and delete any information on the web application as and when necessary.

**Sub Admin** – these can be multiple users which will have access to various modules available in the system. The usage rights and roles needs to be defined by the Super Admin. The sub admin can view, edit and delete the information for the modules he has control over.

**Specific Requirements and Functionality**

The project will be divided into the following modules -

1. Client Enquiry Module
2. Order Management Module
3. Employee Attendance Module
4. Client Information Module
5. Raw Materials Module
6. Purchase Order Generation Module

**1.0 Client Enquiry Module**

Currently, AEW gets an enquiry in the form of an email or over calls.

* + 1. **Client Enquiry Form**

A client enquiry form has to be created. Every enquiry has specific data which has to be tracked and entered in the system. The data points which need to be captured for the enquiry through the system will be –

* **Sr. No** – Auto Generated (Number)
* **AEW Quotation No.** – Auto generated. Useful for tracking of orders in the future (can be Alpha-Numeric) *Format to be YYYY-AEW-0001. This will be generated only after the rate field is entered. Until that point, it will be a pending enquiry*
* **Party Name** (input type : text) *to be selected from dropdown*
* **Plant / Unit** (input type : text) *to be selected from dropdown*
* **Enquiry No**. – specified in the mail (input type : alphanumeric)
* **Drawing No**. – specified in the mail. There can be more than 1 drawings for a particular enquiry (input type : alphanumeric)
* ***Item Code*** *- (input type: number) There can be more than 1 item codes per drawing. So in a gist, there can be more than 1 drawing per enquiry and more than 1 item codes per drawing. We need to keep track at item code level and drawing level.*
* **Product** – specified in the mail. There can be more than 1 products per enquiry (input type : text)
* **Enquiry Date** (input type : date)
* **Due Date** (input type : date)
* **Enquiry Submitted** – (input type : option - YES / NO)
* **Quantity** – this will be mapped per product (input type: number + unit which can be either set, no., kg, metre)
* **Rate / piece** – this will be mapped per product (input type : number) *should prompt the user to upload cost sheet if not already uploaded*
* **Total Order Value** (input type : number) *to be calculated based on quantity \* rate*
* **Negotiated Rate** (input type : number)
* **Order Received** – (input type : option - YES / NO)
* **~~Repeat Order~~** ~~– (input type : option - YES / NO)~~
* **Contact Person -** (input type: text. Auto suggestions from Client Information Module)
* **Previous/ Lowest Rate** - (input type : number)

**1.0.2 Quotation Generation Functionality**

Based on the client enquiry, a quotation will be generated. All the data entered in the client enquiry form will be captured and fetched. Static information of AEW such as company address, logo, contact nos. etc. will be presented in the predetermined format. Input fields to provide information related to the following to be additionally put in –

* **Description** (this will be a combination of product and drawing no. specified in the enquiry)
* **Excise duty** (input type – number)
* **Taxes** (input type – number)
* **Delivery** (input type – text)
* **Payment** (input type – text)
* **Packing** (input type – text)

**1.0.3 Client Enquiry Collated Data**

For every client enquiry, the following data has to be saved –

* All data mentioned in the Client Enquiry form
* Drawings (PDF upload, can be more than 1 per enquiry)
* Cost Sheet (.xls upload)
* Quotation (PDF which is generated from the system)
* Autocad drawing (jpeg or PDF format, can be more than 1 per enquiry)

A search mechanism to view all the details of the client enquiry will be provided. The search can happen based on item code, drawing number, filter data based on date range, plant/unit or party name

**1.0.4 Client Enquiry Status**

All the enquiries filled in the system will be first treated as pending enquiries. Only when the rate is filled and the associated cost sheet is updated, the enquiry will be submitted enquiry.

**2.0 Order Management Module**

Upon receiving the enquiry, an order may have to be processed and the necessary information has to be captured.

**2.0.1 Order Form**

An order form has to be created. Every order has specific data which has to be tracked and entered in the system. The data points which need to be captured for the order through the system will be –

* **Job No. -** (Auto generated – alphanumeric). *1 order can have more than 1 job numbers.*
* **Order Date** – (input type: date)
* **Purchase Order Number** – (input type: text)
* **Company Name** - (input type: text)
* **Unit / Plant** - (input type: text)
* **Section** - (input type: text)
* **Make** - (input type: text)
* **Description** - (input type: text)
* **Drawing Number** - (input type: text. This has to be mapped from the corresponding client enquiry)
* **Item Code** - (input type: number)
* **Quantity** - (input type: number)
* **Rate / Piece** - (input type: number)
* **Discount (%)** - (input type: number)
* **Total Order Value** - (input type: number)
* **Due Date** - (input type: date)
* **Delivery Date** - (input type: date)
* **Challan No.** - (input type: text / alphanumeric)
* **LR No.** - (input type: text / alphanumeric)
* **AEW Quotation No.** - (to be auto-selected)
* **Job Currently At –** (input type : text)
* **Late Delivery** -(input type : option - YES / NO)

**2.0.2 Tax Invoice Generation**

*The user will be provided with an option to generate the invoice. All the orders for which invoices are not generated are pending orders.*

Based on the order form, a tax invoice will be generated. All the data entered in the order form will be captured and fetched. Static information of AEW such as company address, logo, contact nos. etc. will be presented in the predetermined format. Input fields to provide information related to the following to be additionally put in –

* Excise Duty – (input type: number)
* VAT - (input type: number)

**2.0.3 Order Collated Data**

For every order generated, the following data has to be saved –

* Original order request (to be uploaded in PDF format)
* All data mentioned in the Order form
* Drawings (PDF upload, can be more than 1 per enquiry)
* Cost Sheet (.xls upload)
* Tax Invoice (PDF which is generated from the system)
* Autocad drawing (jpeg or PDF format, can be more than 1 per enquiry)
* Test Certificate

A search mechanism to view all the details of the order will be provided. The search can happen based on AEW Quotation No, drawing no, item code, Job No.

**3.0 Employee Attendance Module**

An employee attendance module will be created which will keep a track of the employee attendance. A panel will be created where employee data can be added. The fields captured will be -

* Employee Name
* Employee Id

The admin can then track attendance for every day by marking the employee as Present or absent. A count of total number of working days in the month and total number of days attended by the employee will be presented in the dashboard.

**4.0 Client Information Module**

A panel to create a database of clients will be provided. The data captured for this module will be –

* **Company Name** – (input type: text)
* **Plant Name** - (input type: text)
* **City -** (input type: text / dropdown)
* **State -** (input type: text / dropdown)
* **Address –** (input type : text)
* **Plant Code –** (input type : number)
* **Contact Person** (input type: text)
* **Designation** (input type: text)
* **Phone Number** (input type: number)
* **Mobile Number** (input type: number)
* **Email Id** (input type: text)

**5.0 Raw Materials Module**

Once the order is created in the order management module, an option to create details of Raw Materials is to be provided.

The parameters to be input will be

* **Job No.** – This will be auto selected.
* **Plant / Unit** – this will also be pre-fetched based on the job no.
* **Material Type** – dropdown (dropdown options will be provided)
* **Material Grade -** dropdown (dropdown options will be provided)
* **Dimensions** – input type - number
* **Quantity** – (input type – number) + metre / set/ no. / kg