JASMINE IDMS

PROJECT MANAGEMENT INTEGRATION SYSTEM EPCC SOLUTIONS

Introduction

Organizations face challenges every day. The business environment is more ambitious and complex, and teams are more distributed. Work completion schedules are tighter with a higher level of standard.

By increasing the volume of data and crucial needs to collaborate with internal and external stakeholders, using an information system in the organization is inevitable.

SPARKLESS helps organizations harness the power of digital technology without the complexity associated with digital transformation.

SPARKLESS provides tools, and services to transform the business and organizational activities, processes, competencies, and models to fully leverage the changes and opportunities of a mix of digital technologies with seamless and integrated software solutions.

This integrity empowers the company and managers to manage effectively and gain insight and consistency of processes.

In both the public and private sectors is a great need for ways to efficiently and effectively realize necessary changes. Giving shape to the desired changes is the subject of project management. A project-based approach provides a proven method to define the desired change, plan and realize.

Working on the daily routines, and working on projects, ask for different approaches. Due to the growing importance of projects, we see that more and more organizations develop policies to ensure that they are well prepared for their project challenges. Therefore, they develop the ability to respond timely and successfully to necessary changes for the organization.

Every project-based company has to face new challenges daily and need to deliver complex projects within budget, on schedule, and within the scope of the contract.

Multi-disciplined teams are more distributed than ever, with more communication and integration needs with higher visibility.

Project Managers need to be more responsive to the owners and organizations' managers during the project. Besides, they need to consider all the aspects of engineering to construction.

JASMINE IDMS EPCC Management is an integrated software solution and can be leveraged as a Project- ERP or even Project Management Information System.

Managers use separate and stand-alone software products or datasheets to manage different stages of the project, including tendering, proposing, engineering,

procurement, fabrication, construction, installation, pre-commissioning, and commissioning.

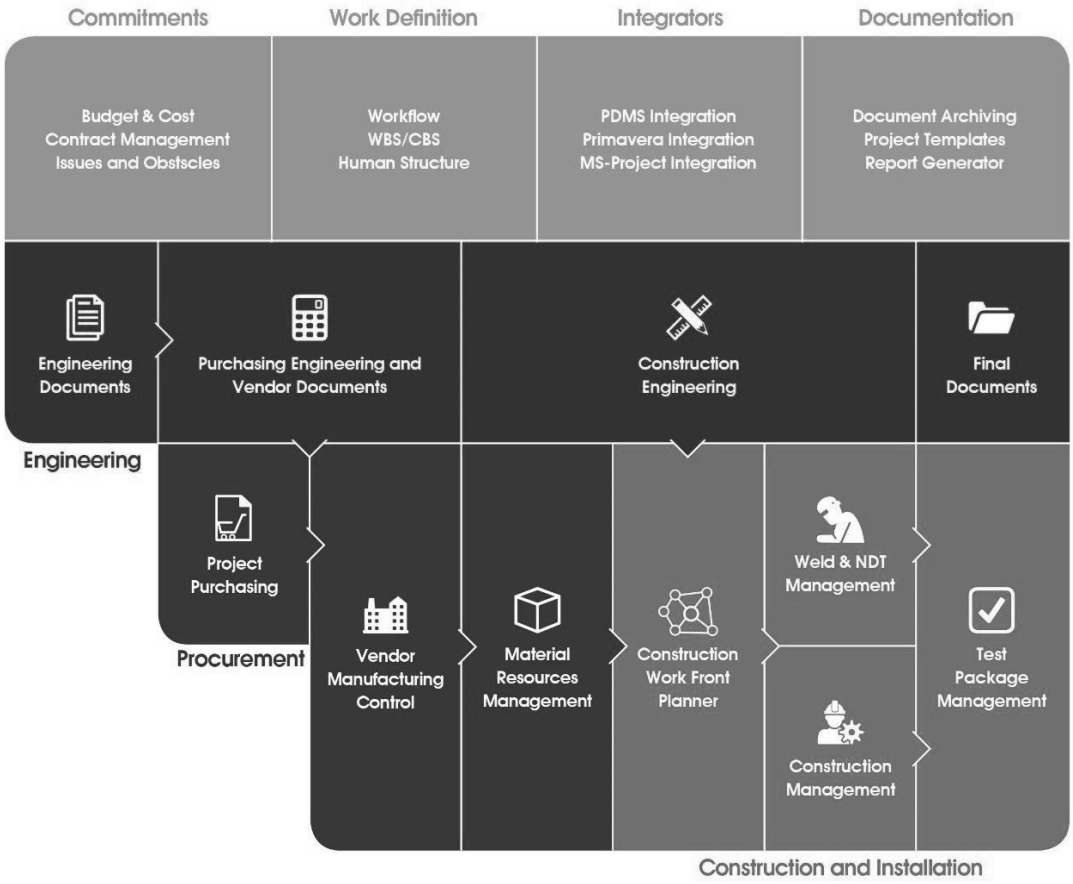
JASMINE unites these steps together in an integrated software which enables multiple stakeholders to work concurrently on their process territory and with different level of access on a single information system built around project management principles rather than respective processes.

That is why JASMINE is the solution of choice for project-intensive industries in both Engineer- Procure-Construct and Engineer-Fabricate models.

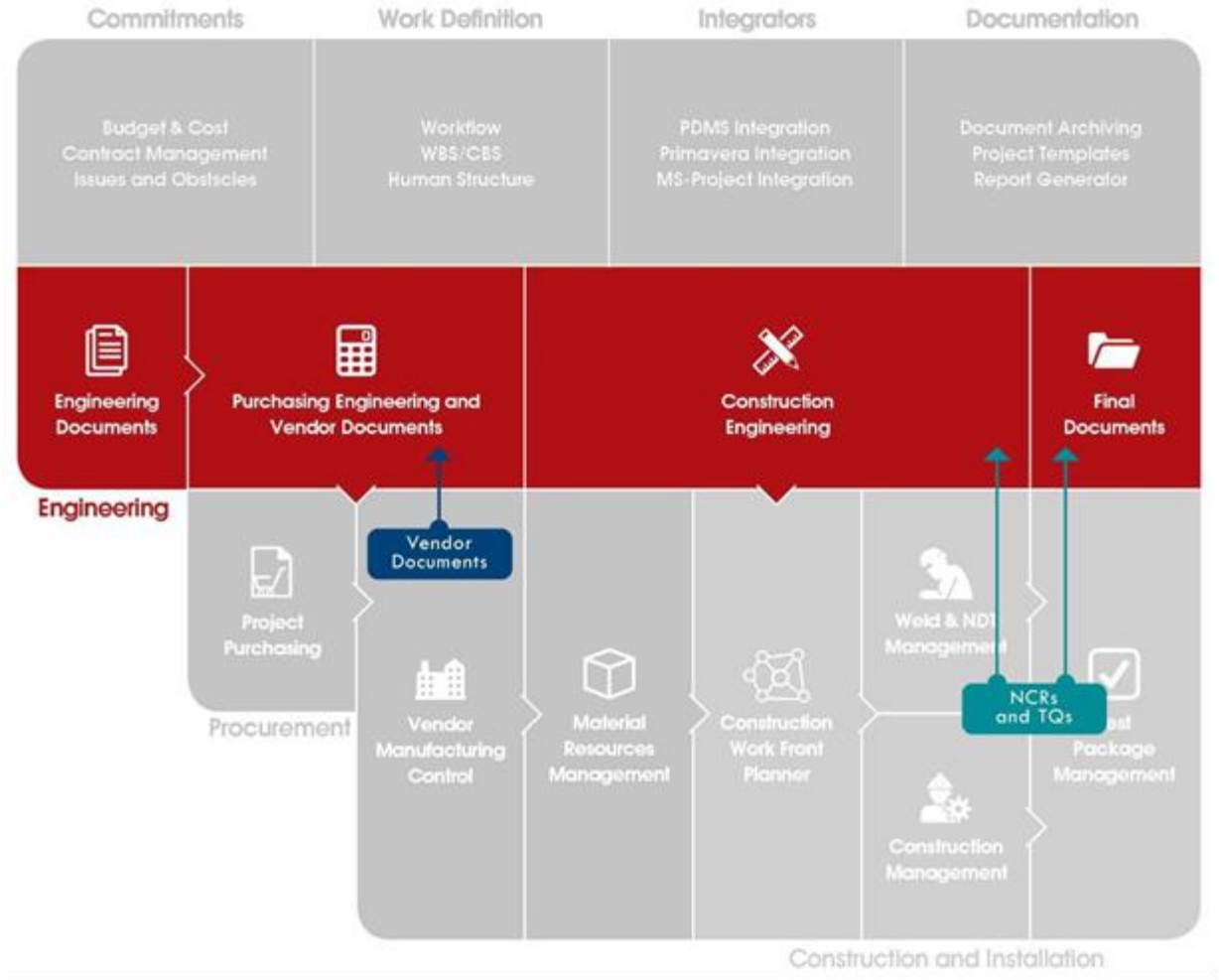
JASMINE IDMS EPCC Management focuses on Engineering, Procurement, Construction, and Pre- Commissioning as core business processes of an EPC project and Commitments, Documentation, Work Definition of the project as supportive processes.

This integrated system also could be integrated with the organization's ERP or financial modules and makes integration with some project's popular tools.

The figure below illustrates JASMINE IDMS EPCC Management's modules:



ENGINEERING PROCESS AREA



ENGINEERING DOCUMENTS

The engineering phase of the project is the starting point of both Engineering Procurement

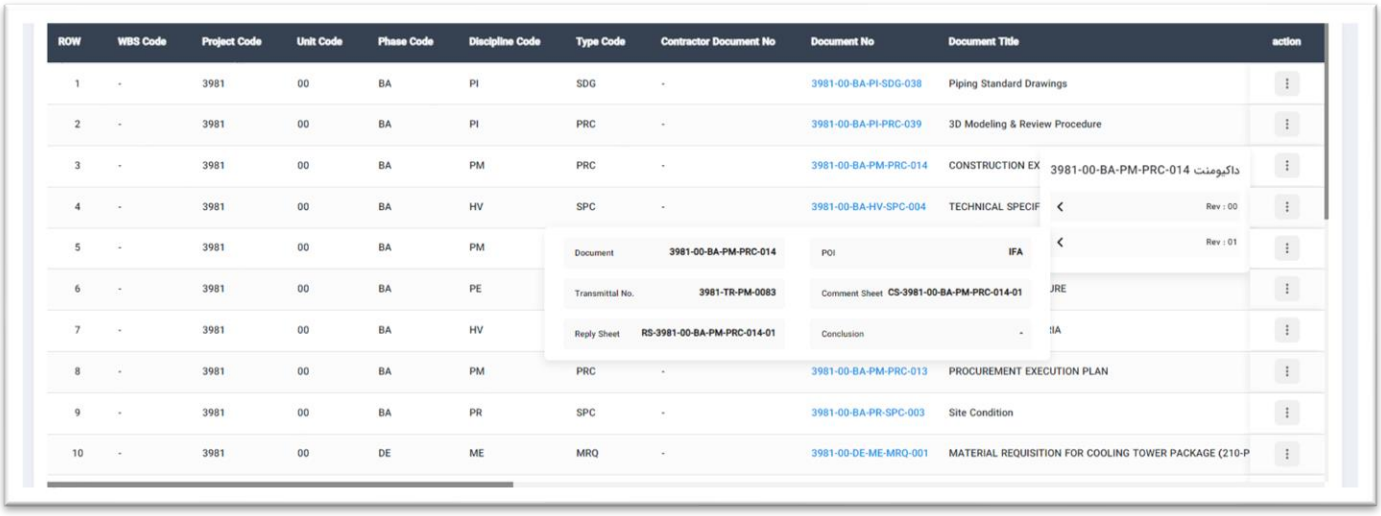
Construction and Design Fabrication projects.

Most engineering companies use spreadsheets, custom-made software, or an engineering document management system (EDMS) software to manage their engineering flow and work products.

The bigger the size of the projects as well as the more volume of the documents, the more difficult and crucial controlling the scope of work, calculating weight changes and work progress, controlling revisions, managing changes and strict plan adherence becomes.

JASMINE IDMS Provides an EDMS that covers all the above concerns and even integrates other parts of the project from the beginning of construction to operation.

Engineering Scope



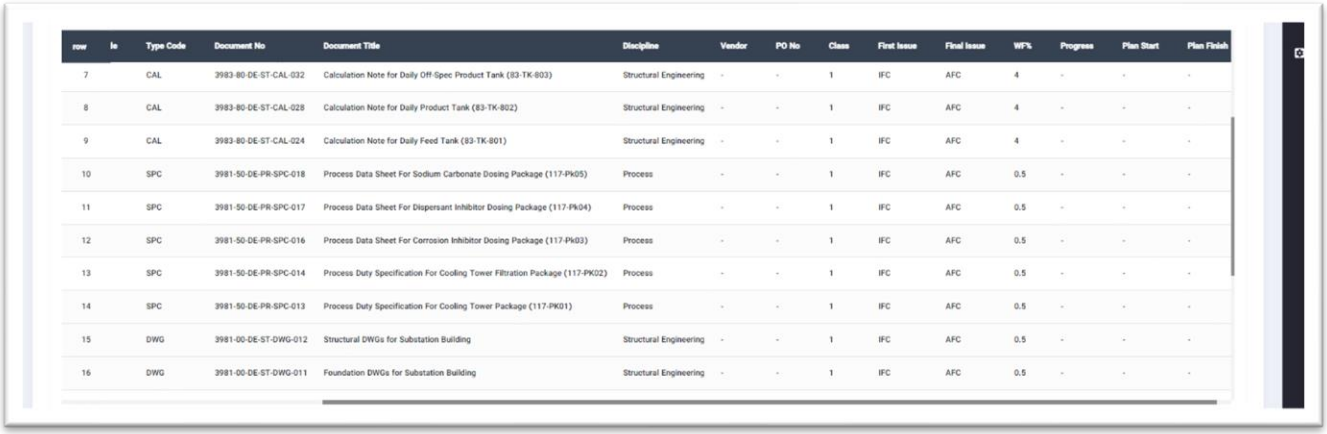
- Master Document Register (MDR) for the main project and sub-projects;
- Ability to control several MDRs for a single project;
- Project scope's change management;
- Documents' responsibility control;
- Interface control between sub-contractors;
- Inter-project Engineering control.

Document Control Center (D.C.C.)

Disc.	% Plan	% Actual	% Dev.	Plan Issue	Actual Issue
CV	62.6%	25.8%	39.9%	8916	3428
AR	92.1%	24.9%	20.2%	8589	5784
EL	16.9%	52.7%	54.1%	4648	4364
IN	42.5%	45%	34.2%	1966	5126
MA	21.5%	19.5%	2.1%	304	6187
ME	23.7%	93.6%	59.9%	8723	4144
PI	44.8%	77.5%	36.7%	7309	2888
PR	13.8%	39.5%	14.3%	6919	855
Total	27.7%	38.1%	95.4%	3767	9377

- Internal Review workflows;
- Internal distribution workflows to produce new documents or to complete current documents;
- Document automatic numbering based on the numbering procedure of each project;
- Controlling major and minor revisions;
- Auto starts working on each document, after reaching the planned start date and performing all the predecessors.

Document List

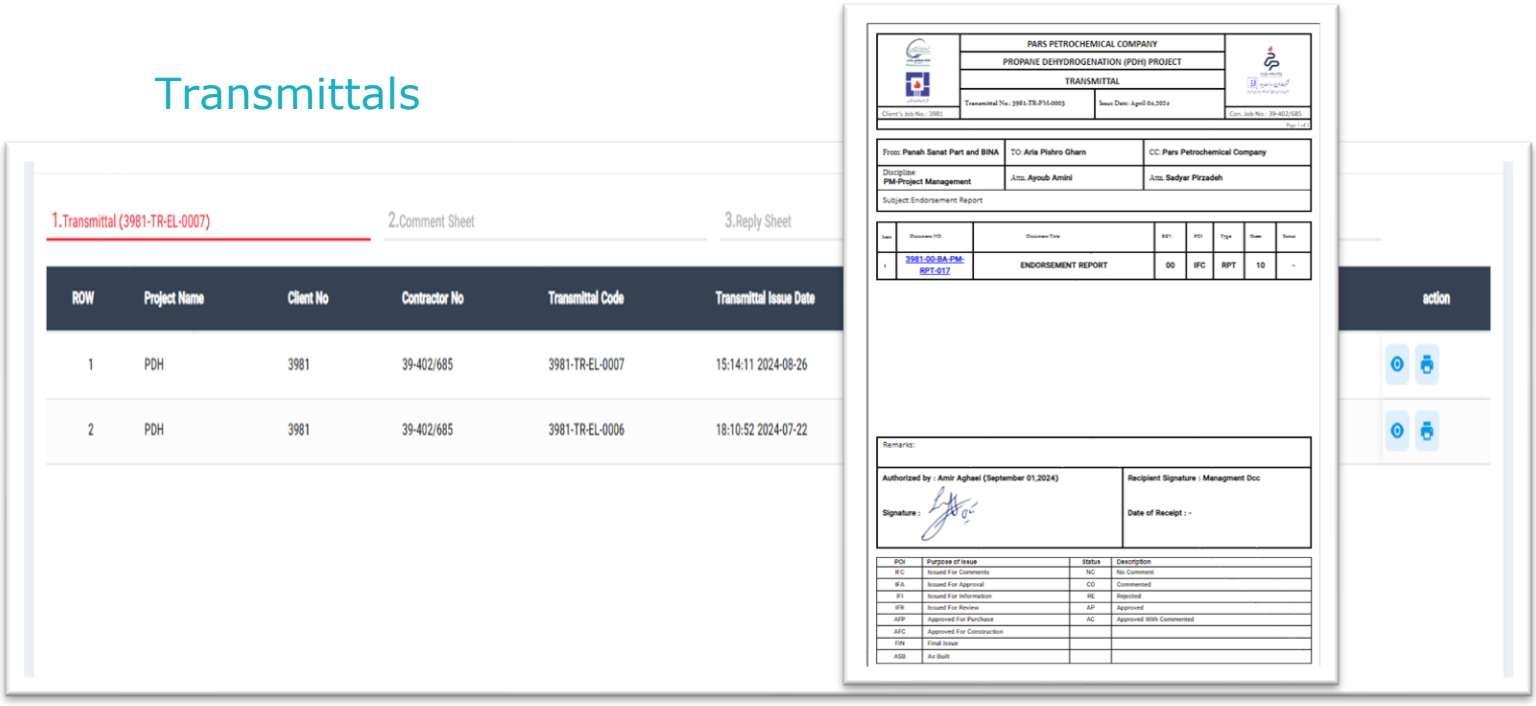


row	Ie	Type Code	Document No	Document Title	Discipline	Vendor	PO No	Class	First Issue	Final Issue	WF%	Progress	Plan Start	Plan Finish
7		CAL	3983-80-DE-ST-CAL-032	Calculation Note for Daily Off-Spec Product Tank (83-TK-803)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
8		CAL	3983-80-DE-ST-CAL-028	Calculation Note for Daily Product Tank (83-TK-802)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
9		CAL	3983-80-DE-ST-CAL-024	Calculation Note for Daily Feed Tank (83-TK-801)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
10		SPC	3981-50-DE-PR-SPC-018	Process Data Sheet For Sodium Carbonate Dosing Package (117-Pk05)	Process	-	-	1	IFC	AFC	0.5	-	-	-
11		SPC	3981-50-DE-PR-SPC-017	Process Data Sheet For Dispersant Inhibitor Dosing Package (117-Pk04)	Process	-	-	1	IFC	AFC	0.5	-	-	-
12		SPC	3981-50-DE-PR-SPC-016	Process Data Sheet For Corrosion Inhibitor Dosing Package (117-Pk03)	Process	-	-	1	IFC	AFC	0.5	-	-	-
13		SPC	3981-50-DE-PR-SPC-014	Process Duty Specification For Cooling Tower Filtration Package (117-PK02)	Process	-	-	1	IFC	AFC	0.5	-	-	-
14		SPC	3981-50-DE-PR-SPC-013	Process Duty Specification For Cooling Tower Package (117-PK01)	Process	-	-	1	IFC	AFC	0.5	-	-	-
15		DWG	3981-00-DE-ST-DWG-012	Structural DWGs for Substation Building	Structural Engineering	-	-	1	IFC	AFC	0.5	-	-	-
16		DWG	3981-00-DE-ST-DWG-011	Foundation DWGs for Substation Building	Structural Engineering	-	-	1	IFC	AFC	0.5	-	-	-

- Access to the latest valid revision of documents;

- Access to previous revisions for authorized people;
- Document's history and chain reports.

Transmittals



- Transmittals and documents receiving based on agreed MDR;
- Transmittals management and creation;
- Creating and issuing comment sheets for sub-contractors;
- Comment sheets receiving from the project owner or client.

Progress Tracking

- Progress calculation based on project's PMS;
- Engineering progress calculations;
- Notifications on delays and events;
- Various progress, delays, hold points' reports.

External Stakeholder's Access

- Engineering Outsourcing management;
- Providing online access to engineering sub-contractors to check or submit documents or transmittals based on their scope of works;
- Providing online access to the client or project owner to review or send comments and approvals.

PURCHASING ENGINEERING AND VENDOR DOCUMENT

Documents in a large project may change in every stage of the project even after constructing. Most of these changes may cause alterations in the bill of materials and eventually purchase lists. In medium or large projects, controlling the effect of these changes are not possible with spreadsheets or manual methods.

Besides, after placing a purchase order (PO) with a vendor, controlling hundreds of vendor documents may take up the company's resources as much as a small engineering project.

Purchasing Documents

- Automatic Material Requisition (MR) creation based on BOMs and MTOs;
- Purchasing surplus management;
- Management of out of engineering purchasing requests (PR);
- Management of construction's material shortage requests;
- Change management control between engineering designs and purchasing packages;
- Integrates with AVEVA PDMS's .DXF output to get BOM from Isometrics;
- Ability to create supportive documents automatically.

Vendor Documents

- Control each PO's scope of engineering within Vendor Document Registers (VDR);
- Access to the latest valid revision of vendor documents;
- Vendor documents internal review and workflow;
- Create each equipment or Vendor's document package;
- Vendor's transmittals and documents receiving based on VDR;
- Issuing comment sheets and generating coversheets for vendors;
- Vendors engineering progress calculations;
- Delays calculation reports;
- Notifications on delays and events.

CONSTRUCTION ENGINEERING

After the engineering phase and during the construction, documents that have been marked as

"Approved for Construction" would be automatically available to the project's technical office.

This module also facilitates the distribution of documents to sub-contractors or construction units. It informs stakeholders about the changes, controls the flow of Technical Queries and Non-Conformity Reports, and finally adds "As-Built" documents.

- Integration of Engineering and Construction;
- Document Distribution between the company and construction sub-contractors and parties;
- Access to live and valid "Approved for Construction" documents repository;
- Dynamic workflow for each type of "Technical Query" from raising trough closing, to
- archiving;
- Dynamic workflow for each type of "Non-Conformity Report" from raising through closing, to archiving;
- Access to Construction Document Center for each sub-contractor based on access levels;
- Status reports of each discipline, area, unit, work package, and sub-contractor.

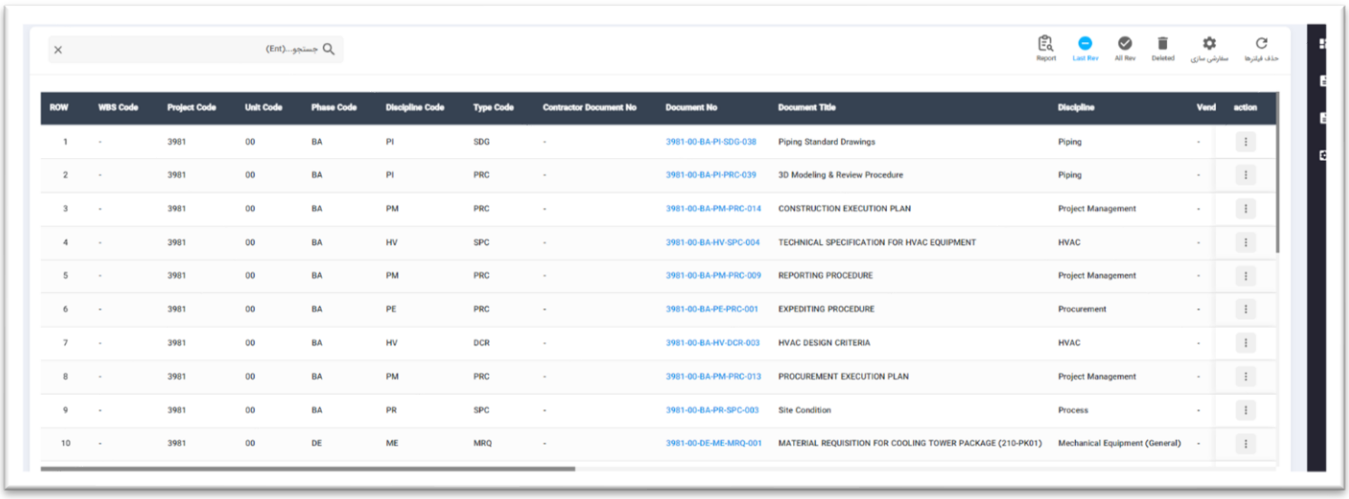
FINAL DOCUMENTS

Final Document Book is the documentation package that should be provided as a part of the contract to the project owner, hierarchically, and well categorized.

Does not differ to be an EPC contractor or a fabricator; this package should be provided. However, in an EPC project, one of the thousands of documents is each vendor's Data Book, which should provide before delivery of equipment.

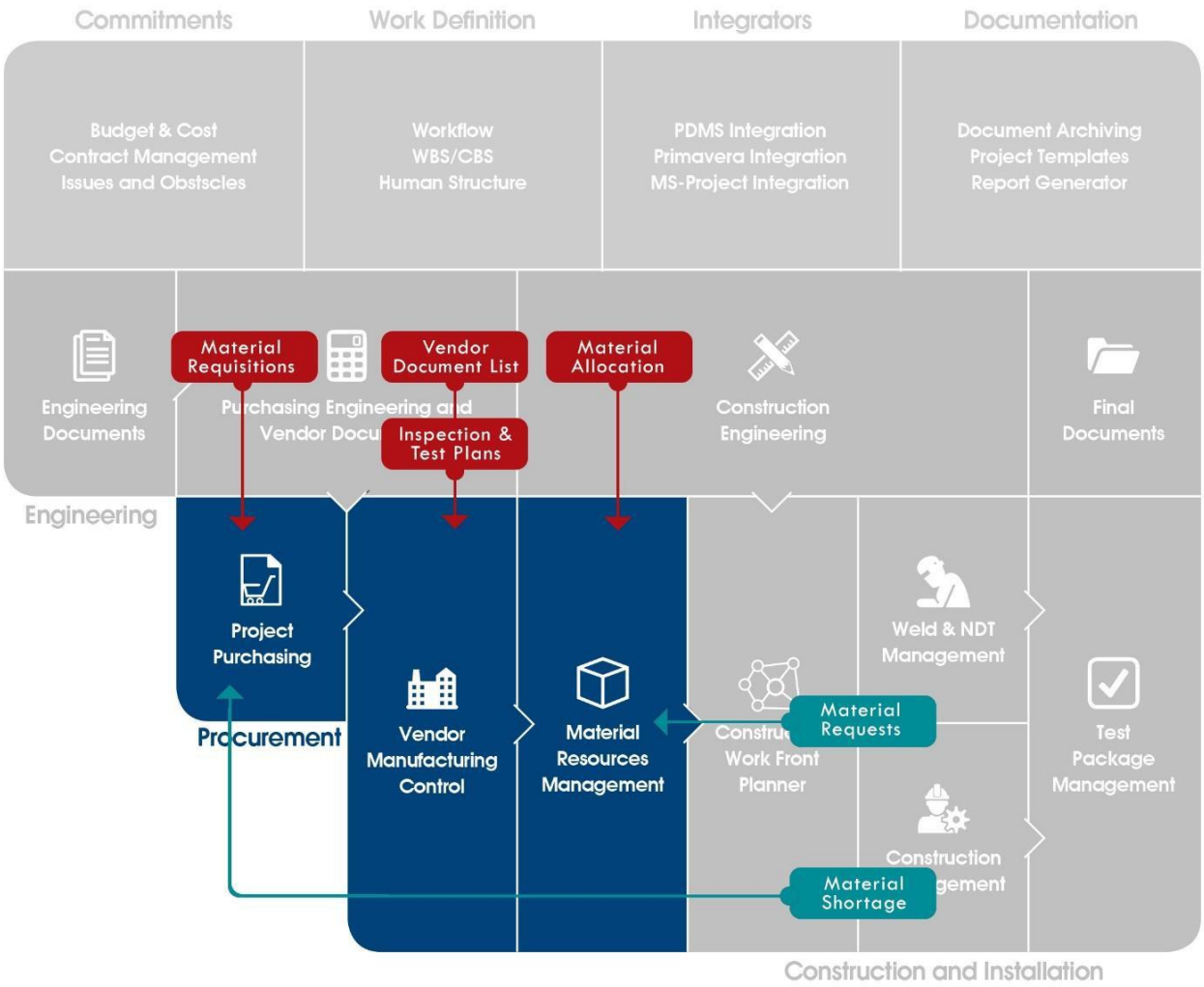
These documents most commonly supply progressively, and the system should gather and integrate them from where they raised or archived.

- Ability to configure the structure of the package;
- Ability to create the latest revision Data Book or all the revisions of Data Book;
- The dynamic hierarchy of documents, based on the type of data book;
- Ability to get the project's data book or a selected portion such as a discipline, a piece of equipment, a commissioning system, a vendor or a construction unit;
- Ability to make a .zip package to write on a portable media;
- Facility to create a linkable index file.



ROW	WBS Code	Project Code	Unit Code	Phase Code	Discipline Code	Type Code	Contractor Document No	Document No	Document Title	Discipline	Vend	action
1	-	3981	00	BA	PI	SDG	-	3981-00-BA-PI-SDG-038	Piping Standard Drawings	Piping	-	
2	-	3981	00	BA	PI	PRC	-	3981-00-BA-PI-PRC-039	3D Modeling & Review Procedure	Piping	-	
3	-	3981	00	BA	PM	PRC	-	3981-00-BA-PM-PRC-014	CONSTRUCTION EXECUTION PLAN	Project Management	-	
4	-	3981	00	BA	HV	SPC	-	3981-00-BA-HV-SPC-004	TECHNICAL SPECIFICATION FOR HVAC EQUIPMENT	HVAC	-	
5	-	3981	00	BA	PM	PRC	-	3981-00-BA-PM-PRC-009	REPORTING PROCEDURE	Project Management	-	
6	-	3981	00	BA	PE	PRC	-	3981-00-BA-PE-PRC-001	EXPEDITING PROCEDURE	Procurement	-	
7	-	3981	00	BA	HV	DCR	-	3981-00-BA-HV-DCR-003	HVAC DESIGN CRITERIA	HVAC	-	
8	-	3981	00	BA	PM	PRC	-	3981-00-BA-PM-PRC-013	PROCUREMENT EXECUTION PLAN	Project Management	-	
9	-	3981	00	BA	PR	SPC	-	3981-00-BA-PR-SPC-003	Site Condition	Process	-	
10	-	3981	00	DE	ME	MRQ	-	3981-00-DE-ME-MRQ-001	MATERIAL REQUISITION FOR COOLING TOWER PACKAGE (210-PK01)	Mechanical Equipment (General)	-	

PROCUREMENT PROCESS AREA



PROJECT PURCHASING

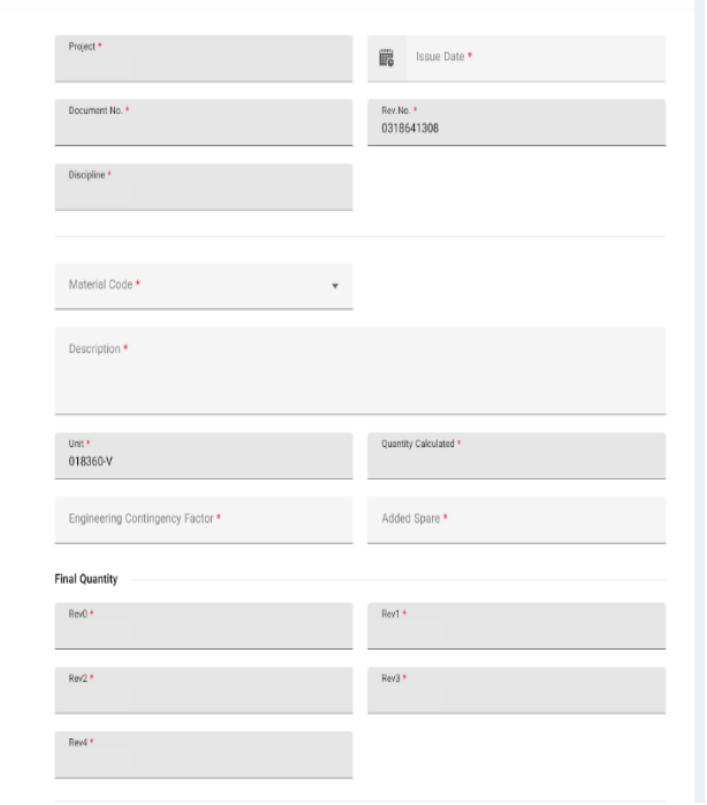
Purchasing Management module prevents purchasing from making mistakes such as duplicate or incorrect purchasing, facilitates the process, and finally creates, issues, and archives purchasing documents.

Vendors

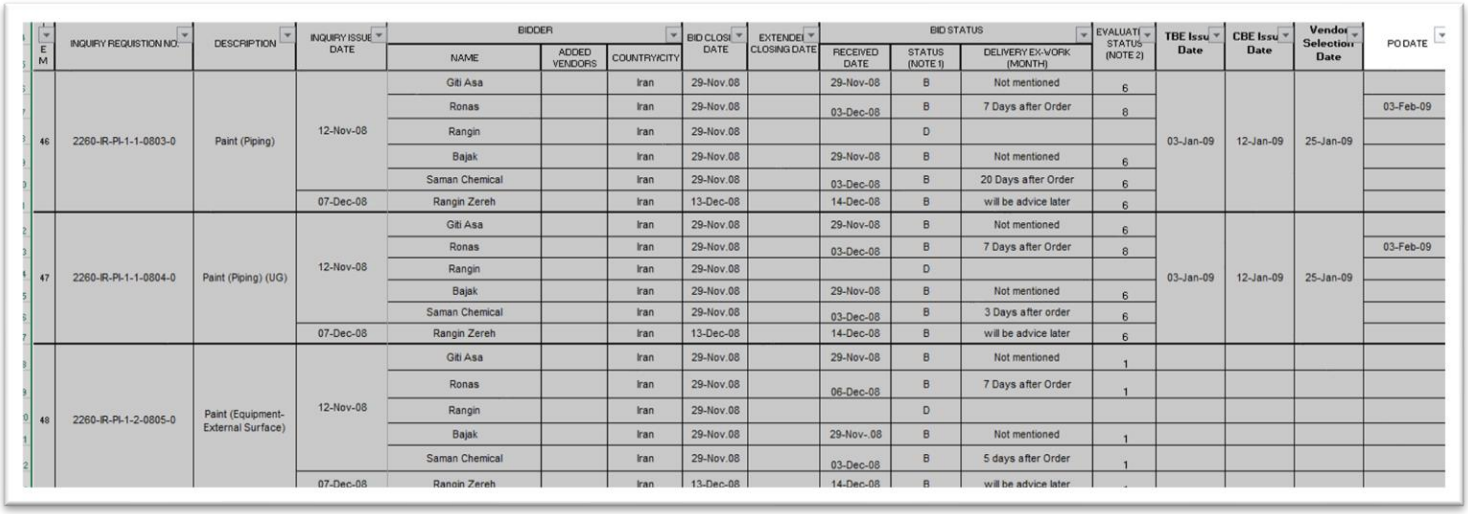
- Vendor's database including contact data, contact points, brochures, and documents;
- Categorizing vendors in groups;
- Ability to define evaluation factors for each group including qualitative and quantitative factors;
- Vendor's evaluation points history and current situation;
- Approved vendor list for each project and the whole organization;
- Whitelist and blacklist for the company vendors;
- Facility to define each material group's approved vendors;
- Categorizing vendors into manufacturers, distributors, representatives and importers types and the ability to prioritize them.

Purchasing Package

- Ability to create purchasing packages on the latest revisions of engineering Material
- Requisitions (MR);
- Procurement planning;
- Ability to generate purchasing packages on non-engineering Purchase Requests (PR);
- Ability to create Purchasing packages on-site shortage lists;
- Assigning purchasing packages to purchasing teams or managers;
- Ability to Shortcut MRs or PRs to sign Purchase Order directly;
- Price history database on historical data.



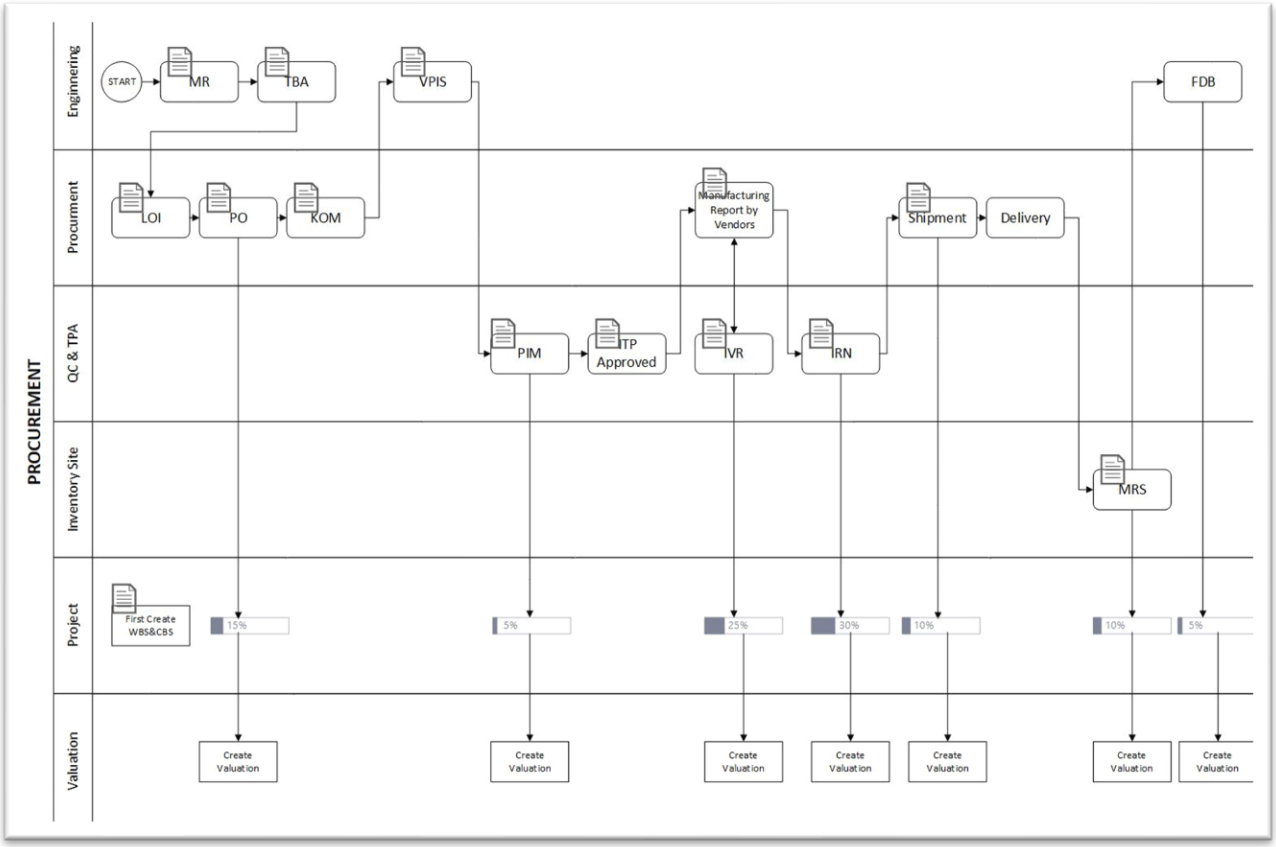
Bid and Quotation



E M	INQUIRY REQUISTION NO:	DESCRIPTION	INQUIRY ISSUE DATE	BIDDER			BID CLOSI DATE	EXTENDEI CLOSING DATE	BID STATUS			EVALUATI STATUS (NOTE 2)	TBE Issu Date	CBE Issu Date	Vendor Selection Date	PO DATE
				NAME	ADDED VENDORS	COUNTRY/CITY			RECEIVED DATE	STATUS (NOTE 1)	DELIVERY EX-WORK (MONTH)					
46	2260-IR-PI-1-1-0803-0	Paint (Piping)	12-Nov-08	Giti Asa		Iran	29-Nov.08		29-Nov-08	B	Not mentioned	6	03-Jan-09	12-Jan-09	25-Jan-09	
				Ronas		Iran	29-Nov.08		03-Dec-08	B	7 Days after Order	8				03-Feb-09
				Rangin		Iran	29-Nov.08			D						
				Bajak		Iran	29-Nov.08		29-Nov-08	B	Not mentioned	6				
				Saman Chemical		Iran	29-Nov.08		03-Dec-08	B	20 Days after Order	6				
			07-Dec-08	Rangin Zereh		Iran	13-Dec-08		14-Dec-08	B	will be advice later	6				
47	2260-IR-PI-1-1-0804-0	Paint (Piping) (UG)	12-Nov-08	Giti Asa		Iran	29-Nov.08		29-Nov-08	B	Not mentioned	6	03-Jan-09	12-Jan-09	25-Jan-09	
				Ronas		Iran	29-Nov.08		03-Dec-08	B	7 Days after Order	8				03-Feb-09
				Rangin		Iran	29-Nov.08			D						
				Bajak		Iran	29-Nov.08		29-Nov-08	B	Not mentioned	6				
				Saman Chemical		Iran	29-Nov.08		03-Dec-08	B	3 Days after order	6				
			07-Dec-08	Rangin Zereh		Iran	13-Dec-08		14-Dec-08	B	will be advice later	6				
48	2260-IR-PI-1-2-0805-0	Paint (Equipment-External Surface)	12-Nov-08	Giti Asa		Iran	29-Nov.08		29-Nov-08	B	Not mentioned	1				
				Ronas		Iran	29-Nov.08		06-Dec-08	B	7 Days after Order	1				
				Rangin		Iran	29-Nov.08			D						
				Bajak		Iran	29-Nov.08		29-Nov-.08	B	Not mentioned	1				
				Saman Chemical		Iran	29-Nov.08		03-Dec-08	B	5 days after Order	1				
			07-Dec-08	Rangin Zereh		Iran	13-Dec-08		14-Dec-08	B	will be advice later					

- Maintaining all bid steps for further references;
- Multi-currency support;
- Ability to advise proper vendor shortlist based on what is in the package;
- Facility to generate and send bid interest letter to the shortlist and continue with interested and conditional interested vendors;
- Maintaining clarification history on each package;
- Supporting technical and commercial bid evaluation and results;
- Ability to control the purchasing plan and bid plan;
- Quotations management and ranking;
- Comparison of vendor quotations;
- Sending proper notifications to vendors and team.

Bid Selection and Awarding the Contract



- Choose the winner according to the portion of the purchasing package;
- Award multiple vendors on a purchasing package;
- Ability to generate and send “Letter of Intent (LOI)”;
- Sending awarded package to the legal department to prepare a Purchase Order;
- Maintaining purchase orders, including winning prices, negotiations and terms, and conditions.

VENDOR MANUFACTURING CONTROL

Lots of items and equipment in a project should be manufactured in job shop manufacturers; controlling stages of manufacturing based on agreed Inspection & Test Plans (ITP) are a crucial issue to receive items on time, on budget with desired quality.

This module controls all activities from signing Purchase Order with a vendor to delivering material at the project.

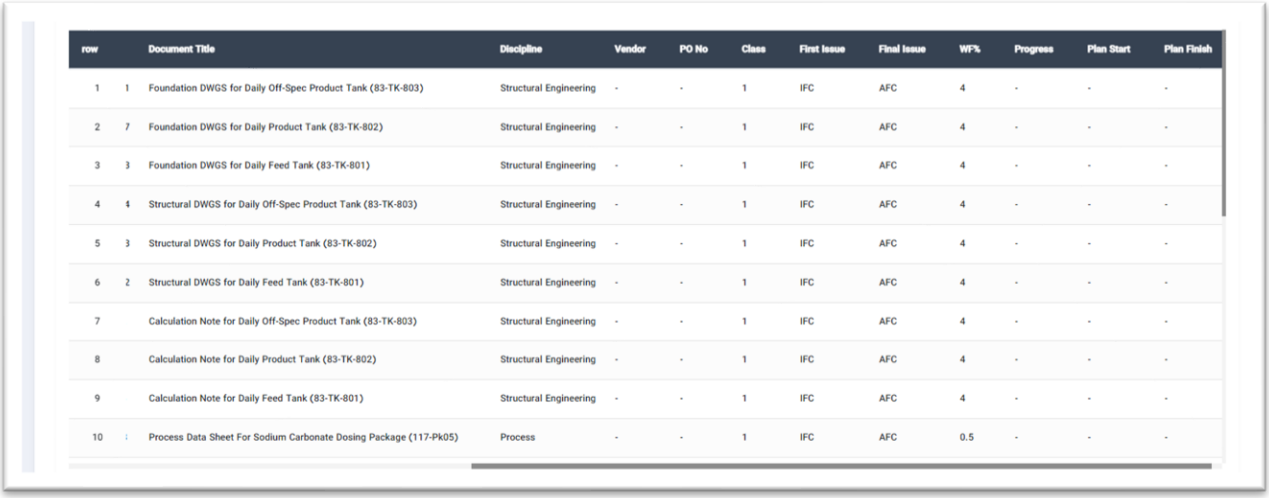
Purchase Order

- Companies database with a filing system for each;
- Purchase Orders definition;
- Detail information on each P.O. including Items, quantities, dates, terms of payment, terms of delivery, detail costs and prices and shipping method;
- Scope of Manufacturing
- Inspection and Test Plans (ITP) definition;
- Defining manufacturing sub-activities for each activity;
- Definition of ITP activities' responsibility for Owner, Contractor, Vendor, and Inspection
- Third Party;
- Integration of Engineering design and the latest version of ITP.

Vendor Documents

These features are working alongside in integration with "Purchasing engineering and Vendor

Documents" module.



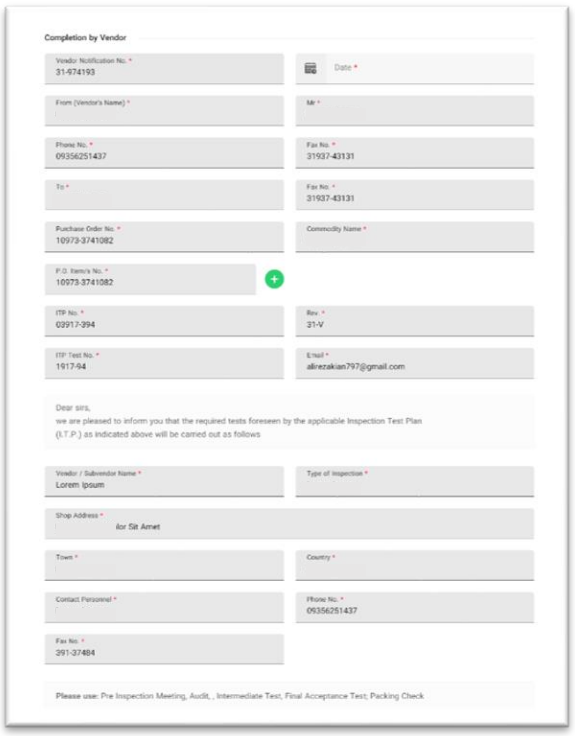
row		Document Title	Discipline	Vendor	PO No	Class	First Issue	Final Issue	WF%	Progress	Plan Start	Plan Finish
1	1	Foundation DWGS for Daily Off-Spec Product Tank (83-TK-803)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
2	7	Foundation DWGS for Daily Product Tank (83-TK-802)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
3	3	Foundation DWGS for Daily Feed Tank (83-TK-801)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
4	4	Structural DWGS for Daily Off-Spec Product Tank (83-TK-803)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
5	3	Structural DWGS for Daily Product Tank (83-TK-802)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
6	2	Structural DWGS for Daily Feed Tank (83-TK-801)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
7		Calculation Note for Daily Off-Spec Product Tank (83-TK-803)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
8		Calculation Note for Daily Product Tank (83-TK-802)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
9		Calculation Note for Daily Feed Tank (83-TK-801)	Structural Engineering	-	-	1	IFC	AFC	4	-	-	-
10		Process Data Sheet For Sodium Carbonate Dosing Package (117-Pk05)	Process	-	-	1	IFC	AFC	0.5	-	-	-

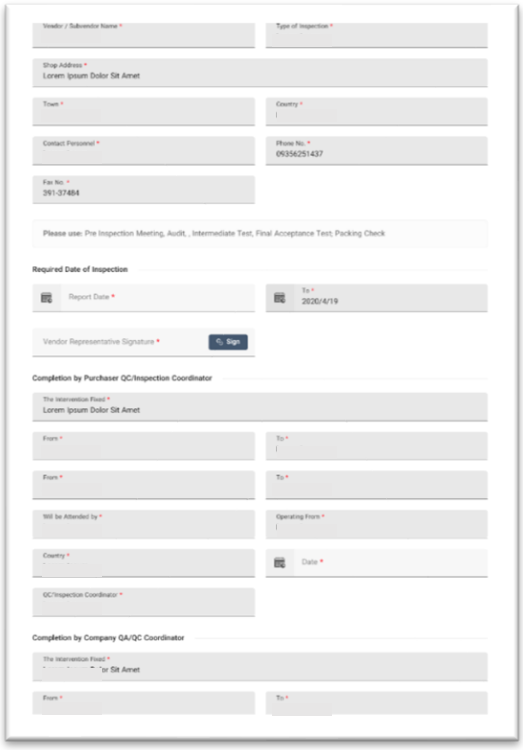
- Maintaining Vendor Document Register for each Purchase Order;
- Ability to set access for a vendor to submit transmittals and vendor documents;
- Vendor Document's progress reports

Inspection Package

- Inspectors database including certifications, abilities, skills and work history;
- Ability to define Inspection packages;
- Maintaining each package's items based on whole or part of the Purchase Order.

Manufacturing Inspection





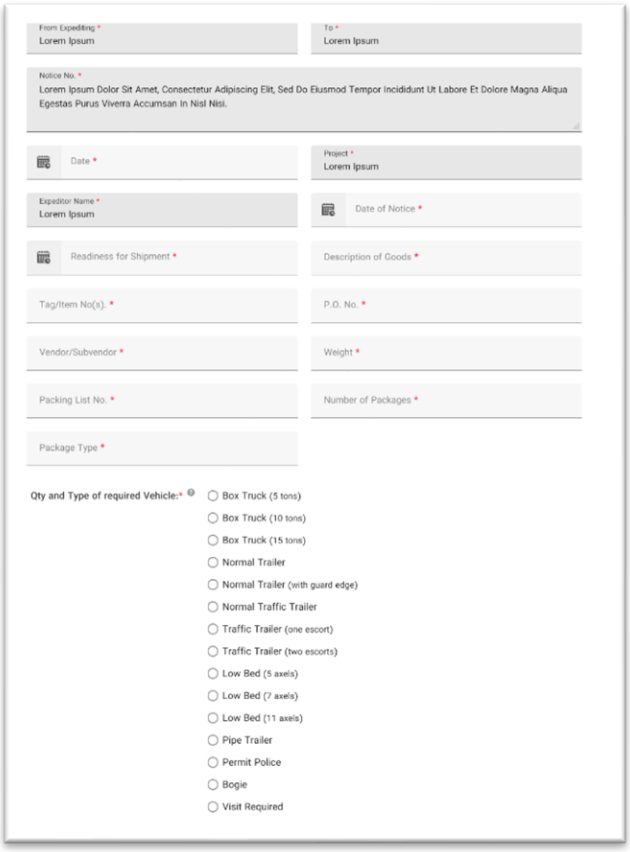
- Automatic notifications to each party based on ITP steps and responsibilities;
- Access level to submit Inspection Application (IA);
- Creating Inspector Dispatch Requests (IDR) and sending to the inspector;
- Access to submit Inspection Reports;
- Ability to create Inspection Release Notes;
- Non-Conformity Reports (NCR) workflow from raising to resolving;
- Inspection work front based on ITP's tasks;
- Inspection status and backlog reports.

Release

- Maintaining Inspection Release Note (IRN);
- Permit to pack and ship based on final IRNs;
- Control received Packing Lists based on Purchase Order's backlog;
- Packing list definition for each P.O.;
- Balance control of packages of each P.O.;
- Packaging and shipping detail of each packing list including package type, weights, dimensions, and parts;
- Control and issue Shipping Release Note (SRN);
- Track of Material and Packing List.

Shipping

- Package loading status report;
- Package's departure status report;
- Shipping plan and milestones control such as ETD, ETA;
- Custom Clearance status report;
- Shipping millstones forecasts;
- Shipping actual reports;
- Material shipment status reports;
- Managing shipping processes based on Delivery terms.



Delivery

- Package's delivery and unloading status based on the term of delivery;
- Delivery controls and documentation;
- Integrating with "Material Resources planning and control" module.

MATERIAL RESOURCES MANAGEMENT

Effective inventory management and optimization is the primary goal of this module. While the module is designed to ensure adequate inventory at the required period of times and millstones, a project can be tempted to hold more stock than is necessary to reduce hold times, thereby driving up inventory costs.

JASMINE's Material Resources Management System (MRMS) is designed to meet three objectives simultaneously:

- To ensure that materials are available for fabrication and installation on time;
- To maintain the lowest possible material and product levels in the warehouse;
- To plan construction activities and issue schedules.

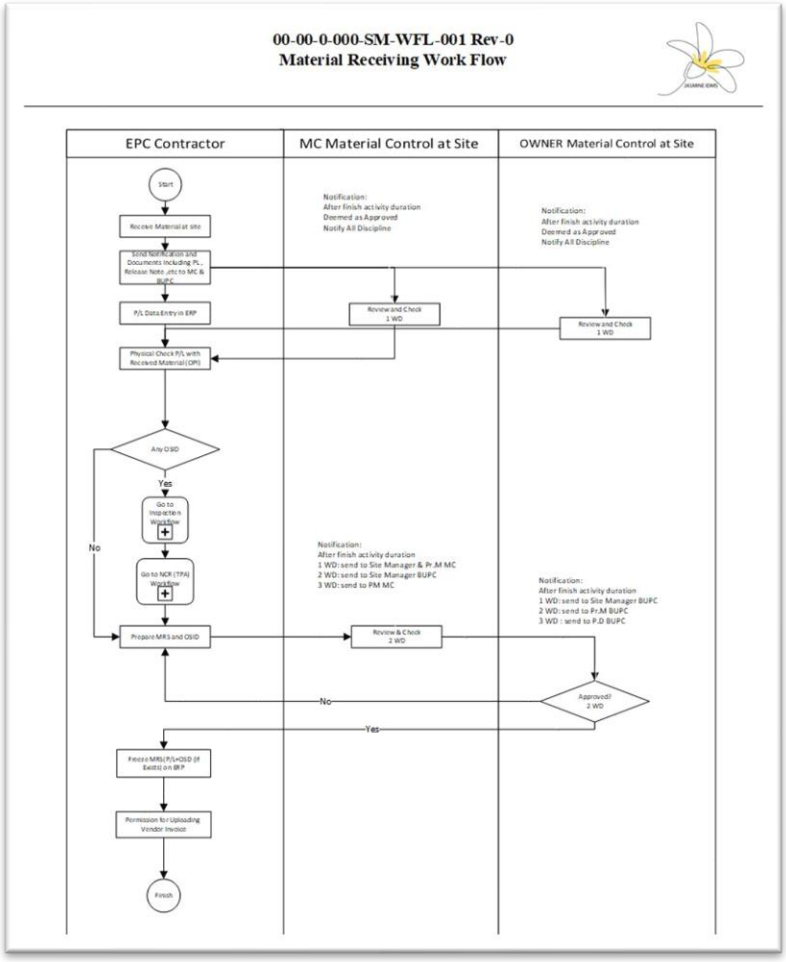
Warehouse and Material Setup

- Primary and Temporary warehouses definition;
- Warehouse partitioning into multiple locations and sub-locations;
- The capacity definition of each location and sub-location in quantity and dimension;
- Material definition and coding in a configurable manner;
- Ability to control each item in five parallel codes (internal code, customer code, etc.);
- Triple unit rates for each item and conversation rates to automatically convert measurement systems;
- Definition of Maximum Limit, Minimum Limit and Re-order point for each item and getting proper notifications;

Purchase Orders and Packages

- Companies database with a filing system for each;
- Incoming and outgoing purchase orders' definition;
- Detailed P.O. including items, quantities, dates, terms of payment, terms of delivery, costs, and prices, shipping method;
- Packing list's definition for each P.O.;
- Balance control of packages of each P.O.;
- Packaging and shipping details of each packing list;

Material Receiving



- Ability to receive and store materials in a quarantine;
- Ability to receive packages, items and supportive items (i.e., spare parts);
- Opening Package Inspection and generating overage, shortage, incorrect or damaged items report (OSID report);
- Balance control on each P.O, packing list, supplier, and warehouse in point of receiving;
- Automatic Material Receiving Voucher (MRV) generation;
- Making suggestions on proper storing location-based on empty capacities and material preservation conditions;
- Automating all the paperwork and acceptance processes of receiving;
- Material movement;
- Movement control of each material to another warehouse or another storing location in the current warehouse
- Automatic Material Movement Voucher (MMV) generation;
- Making suggestions on proper “From” and “Destination” sub-locations based on empty capacities;
- Automating all the paperwork and acceptance processes of movement.

Material Return

- Return control of issued materials;
- Damaged items' return management;
- Automatic Material Return Voucher (MREV) generation;
- Making suggestions on the proper storing location of a returned item based on empty capacities and material preservation conditions;
- Automating all the paperwork and acceptance processes of return;
- Material Request;
- Clients' material requests management;
- Check for request availability;
- Ability to make a purchase request in case of unavailability.

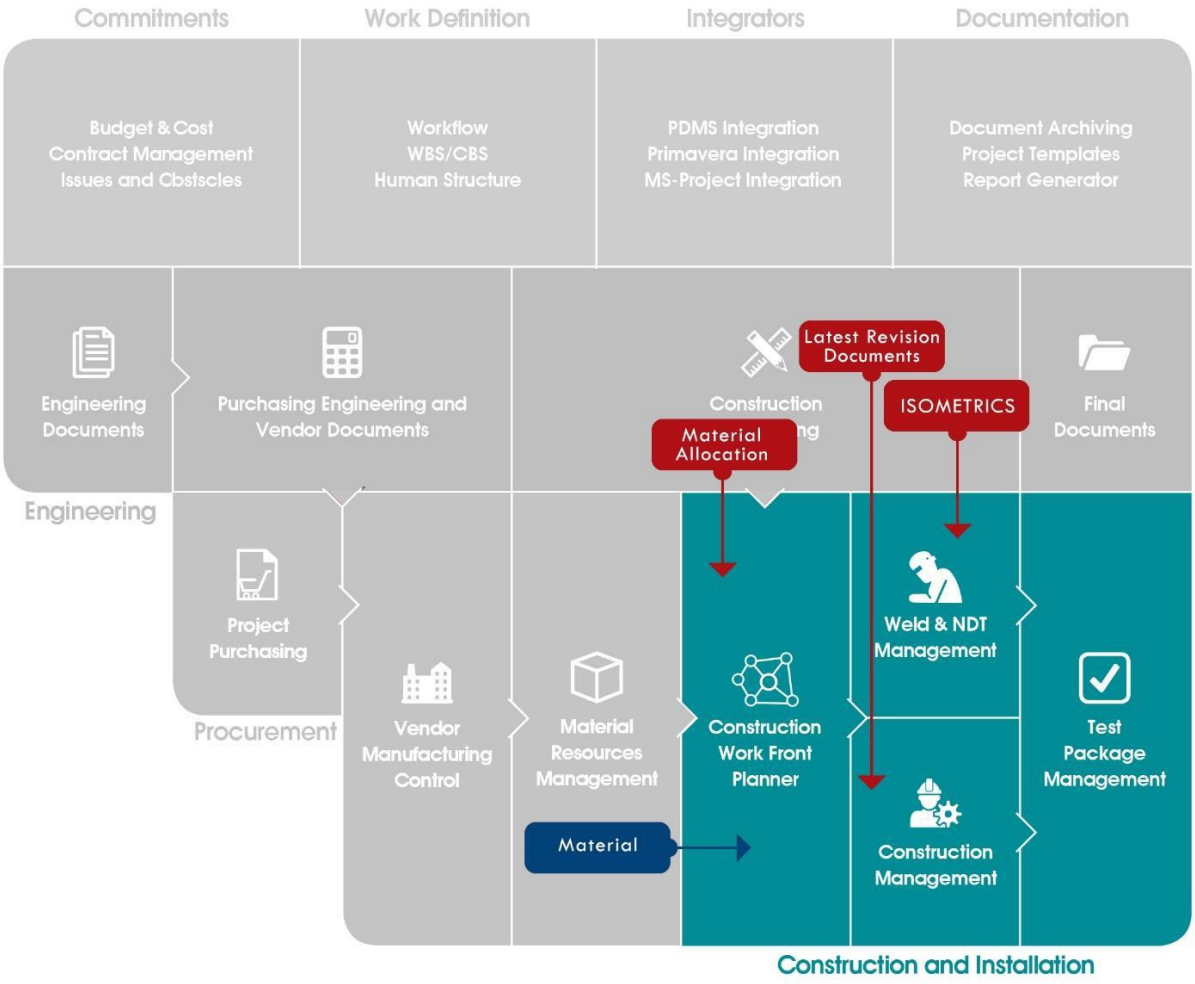
Material Reservation and Issue

- Ability to reserve items for a sub-contractor in a specific period;
- Ability to reserve items based on sub-contractor requests;
- Issuance control of each material to sub-contractor;
- Automatic Material Issue Voucher (MIV) generation;
- Generating invoice based on approved issue vouchers;
- Ability to convert a valid reservation to an issue slip;
- Systematic suggestions on proper pickup location of an item based on sub-locations inventory;
- Automating all the paperwork and acceptance processes of reservation and issue between the company and the client;
- Ability to issue packages and get reports on package or inside items;
- Ability to issue cutout or divided items based on the request (i.e., pipes and sheets);

Reports

- Online inventory report on each warehouse, location or even sub-location
- Material transaction report, which gathers all transactions of each item in a period;
- OSID. vs. Package vs. Inventory Report;
- Client transaction report;
- Material availability report based on requests;
- Invoice report;
- Over 30 other managerial reports and dashboards.

CONSTRUCTION PROCESS AREA



CONSTRUCTION WORK-FRONT PLANNER

Planning activities as a vital part of the construction management facilitates completion of the project on time and within the budget.

The term 'Construction' does not only denote physical activities involving men, materials, and machinery but also covers the entire gamut of activities from conception to realization of a construction project. Thus, managing resources such as men, materials, and machinery require adequate planning and scheduling for each activity.

Construction Work-Front Planner spotlights priority and sorts activities based on Engineering Design, Material Availability, Project Plan, and remained work.

Set Goals, Reach, Repeat

- Facility to set the goal to progress more;
- An alternative to permit more work items and reduce inaction rate;
- Ability to limit the calculation on specific sub-contractor, Unit, Area or commissioning sub-system;

Design-Material-Plan Matrix

- Oblige using the latest revision of drawings and documents;
- Calculating each drawing's material balance to achieve material-wise progress;
- Prioritizing drawings based on the construction plan;
- Checking material availability to work on imparted documents;
- Analyzing different scenarios of the material issuance to progress more;
- Facility to set manual priorities to overwrite the plan;
- Calculation of material shortage to complete the work.

Live Calculation

- Automatic feedback on work performance to recalculate work-front;
- Recalculation of work-front based on improved scenarios at any time.

Piping Focus

- Focus on piping isometrics and activities as an essential part of construction;
- Maintaining detailed information on piping and welding works including left and right materials and cut-lengths of each joint;
- Specific work permits for Fit-up and weld activities;
- Integration with the "Weld and NDT Management" module.

WELD AND NDT MANAGEMENT

Welding is the most critical process in piping and steel structure projects. JAMINE Weld and NDT Management software facilitate controlling all required activities and data processing to manage welding process, controlling the quality of work, Non-Destructive Tests (NDT) management, Welder Performance analysis, and technical documentation creation.

Practice of Welding

- Maintaining the Welding Procedure Specification (WPS);
- Further use of welding parameters, such as joint design, position, base metals, electrical characteristics, filler metals, technique, shielding, preheat, and post-weld heat treatment are all detailed in the WPS document in the welding process and welders' certifications;
- Maintaining Related Product Qualification Record (PQR) to WPS;
- Automatically creating updated WPS document and make it visible to users;
- Ability to define, Piping Material Specification (PMS) information, to make system sensitive to line specification and required actions;

Piping Definition

- Access to the latest revision of Documents and Piping Isometrics of each line;
- Ability to define Piping MTO in the system;
- Ability to get Isometrics MTO directly from AVEVA PDMS .DXF output;
- Access to ISO Sheets & Transmittals history;
- Maintaining ISO Sheets Technical Information. (i.e., NDT Percent per sheet, Service,
- Class, Coating, Design Pressure, Design Temperature, …);
- Dividing ISO Sheets' BOM to sub-contractors BOM.

Welders

- Welders Database including certification, work history, grades, etc.;
- Recording Information of Test Coupon (i.e., Welding Process, Welding Position, Base
- Material, Thickness, and Size);
- Welder Card & Certificate Issuance;
- Welders and Tack Welders' (Fitters) stamp number validity check;
- Assigning Welder to a Specific Sub-contractor for a Period;
- Calculation of Welder Performance based on the number of Segments, Films, and
- Dedicated Environment;
- Welder grade calculation and classification to Good, Warning, Disqualified;
- Welder disqualification zone adjustment;
- Prevention of disqualified welders to perform welding operations.

Fit-up and Weld Process

- Ability to define joints and spools;
- Daily Fit-up reports;
- Daily Bonding / Shaving reports;
- Record left and right Heat No. to trace material;
- Daily Welding reports;
- Welder count check based on line size;
- Supports up to four welders for a single joint;
- Visual check results;
- Re-shoot, retake or repair functions based on NDT reports;

Fit-up and Weld Process

- Ability to select joints to check, manually or randomly;
- Facility to choose Joints to check based on welder's performance points;
- Unique RT/PT/MT/UT No. assignment based on numbering procedure;
- Check for Performed weld Information;
- Reshoot or Retake distinction;
- Maintaining RT detailed information based on the number of films, segments or environment dedicated;
- Specification of a faulty welder;
- Penalty specification for faulty welders, manually or automatically or semi-automatically;
- Revising or repairing joints on rejected RT;
- NDT reports with detailed information;
- Ability to set access for inspection party or sub-contractor to submit NDT;
- Ability to set acceptance checkmark.
- Re-shoot, retake or repair functions based on NDT reports;
- Recording PWHT reports and results;
- Make second PWHT acceptable to reduce residual stresses, as a method of hardness control, or even to enhance material strength.

Reports

- Performed work reports;
- (Daily, Weekly, Monthly, Periodic) Progress;
- Backlog reports;
- Welder Performance report;
- NDT Status report;
- Subcontractor status reports;
- A detailed report on Fit-Up/Weld, NDTs, PWHT;
- NDT backlog reports;
- Ability to archive all the related documents and reports related to the line, Isometric, ISO Sheet, sub-contractor, welder including documents, films, snapshots, work captures or even voices;
- Facility to create welding documentation and filled forms based on the project's
- templates.

CONSTRUCTION MANAGEMENT

In a multi-discipline construction project, you may have to face a variety of activities and tests to ensure proper completion of work.

Controlling several sub-contractors with differences in scope of work and nature of activities requires an integrated software solution to control the flow of work and approvals.

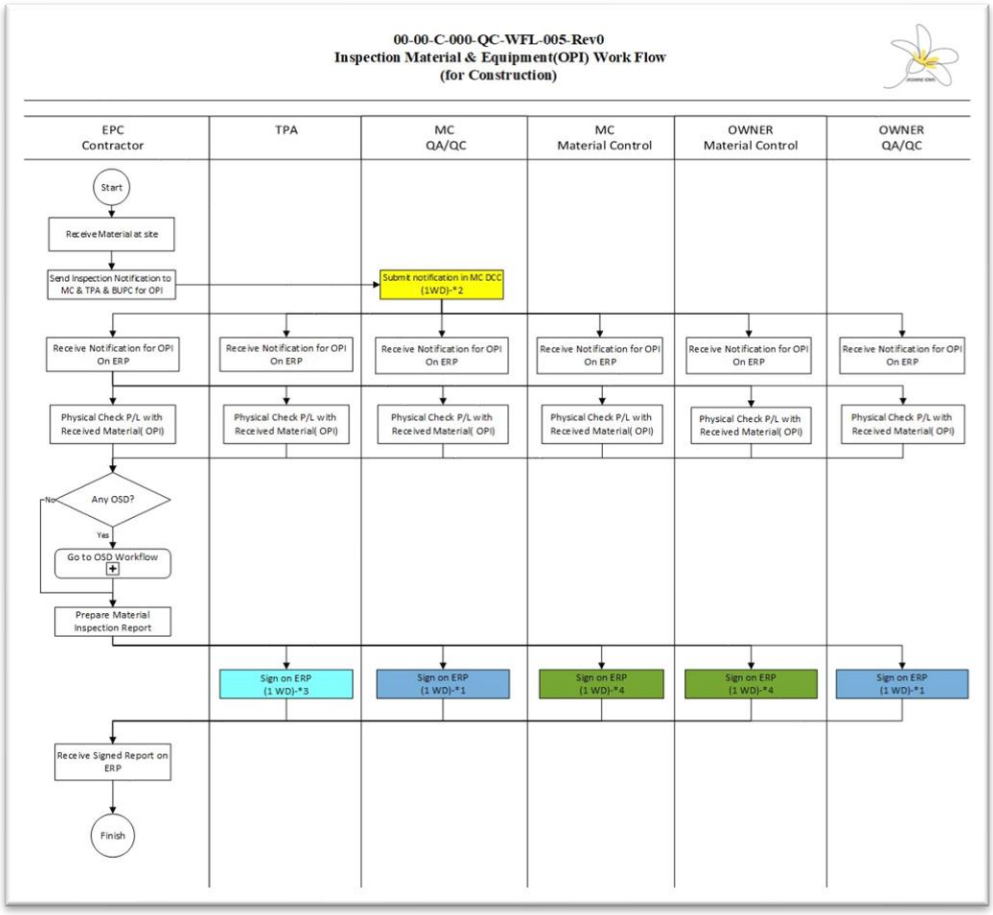
Work Definition

- Determining construction method including activities, sub-activities, related tests, and inspections;
- Definition of each activity's responsibility for owner, general contractor, sub-contractor, and inspection third-party;
- Determining commissioning systems and sub-systems to categorize work based on commissioning priorities;
- Defining construction work packages and assigning it to construction internal parties or sub-contractors;
- Setting each work package related to the commissioning system, equipment, unit, and area;

Sub-Contractors

- Maintaining sub-contractors' records and data;
- Defining the access level of each sub-contractor;
- Setting each sub-contractor human resources;
- Allocation of work packages to sub-contractor and auto-creation of work permits;
- Balance control of each P.O. packages;
- Packaging and shipping details of each packing list;

Workflow



- The automated workflow permit to sub-contractors;
- Ability to submit inspection application by sub-contractor and its approval flow;
- Flexible workflow of Field Inspection Notices (FIN) and Filed Inspection Reports (FIR);
- Automatic notifications on each step;
- Defining obstacles of each activity, and auto-start of predefined flow;
- Non-conformities submission on each activity, and auto-start of clarification flow;
- Identifying the risks of each activity including probability, occurrence, impact, and severity;
- Automatic documentation of activities, work permits, inspection reports, inspection notices, etc.;
- Archiving documents, datasheets, pictures, and reports.

TEST PACKAGE MANAGEMENT

At the final stages of the project, concluding all activities across all disciplines is the most crucial concern to formal completion of the project.

Most of the contract agreements are usually written to allow the owner to retain the final payment to the general contractor as retainage.

Contract bonds the contractor to complete a list of contract items, incomplete or incorrect works or incidental damage to existing items, to receive final payment from the owner.

Test Packages

- Facility to package related tests and evidence in a bundle;
- Detailed tasks and activities of each package;
- An ability that provides a clearance list of each test package;
- Responsibility management of each test package;

Punch Lists

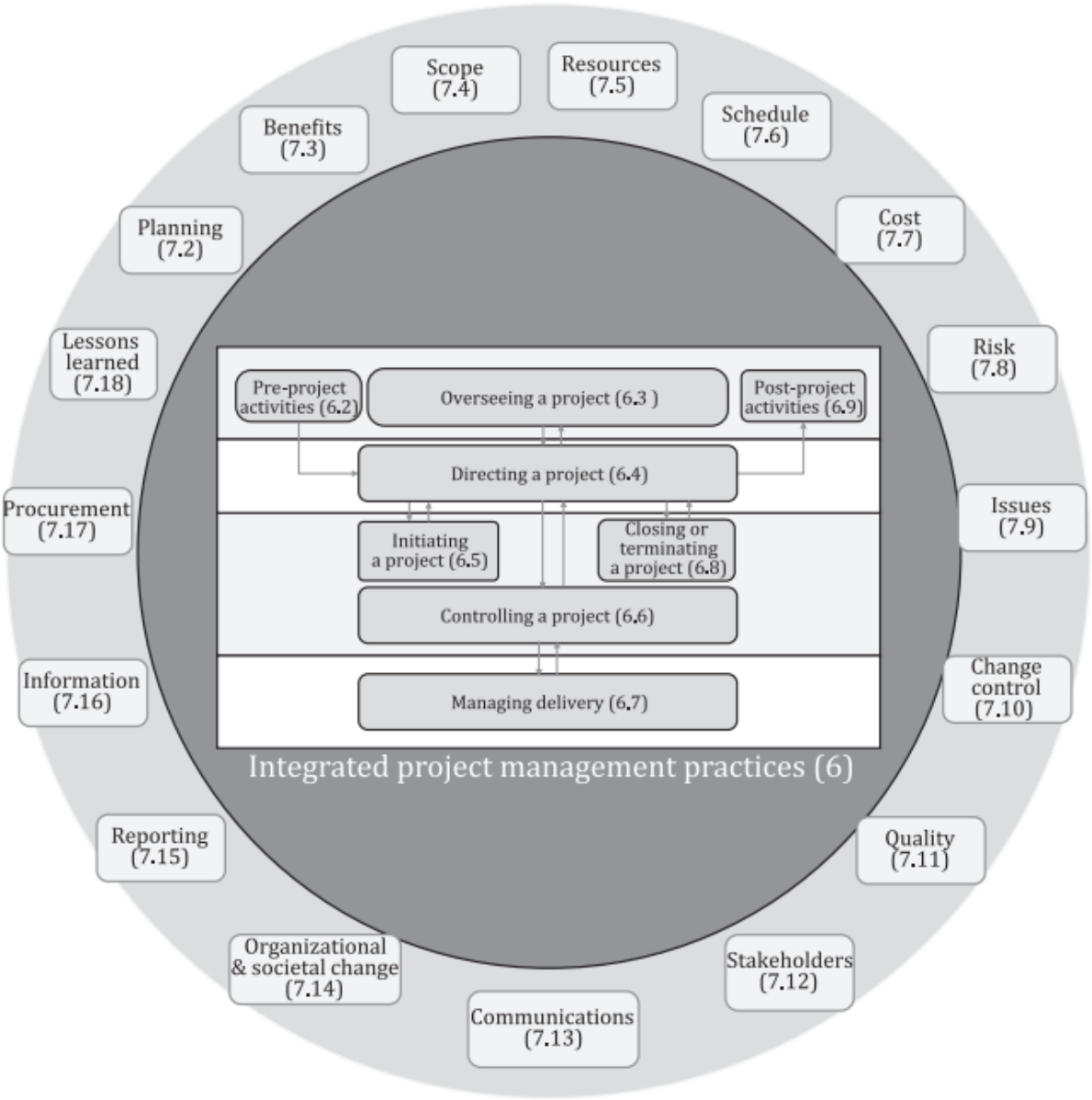
- Facility to define several punch lists and listing work not conforming to the scope and contract specifications that the contractor must complete;
- Facility to categorize punches on impact level;
- Ability to use predefined workflows for each punch based on punch type from initiation to completion;
- Archiving facility to make a file of documents and evidence for each punch;
- Facility to define obstacles and tasks needs to complete a punch.

Commissioning Systems

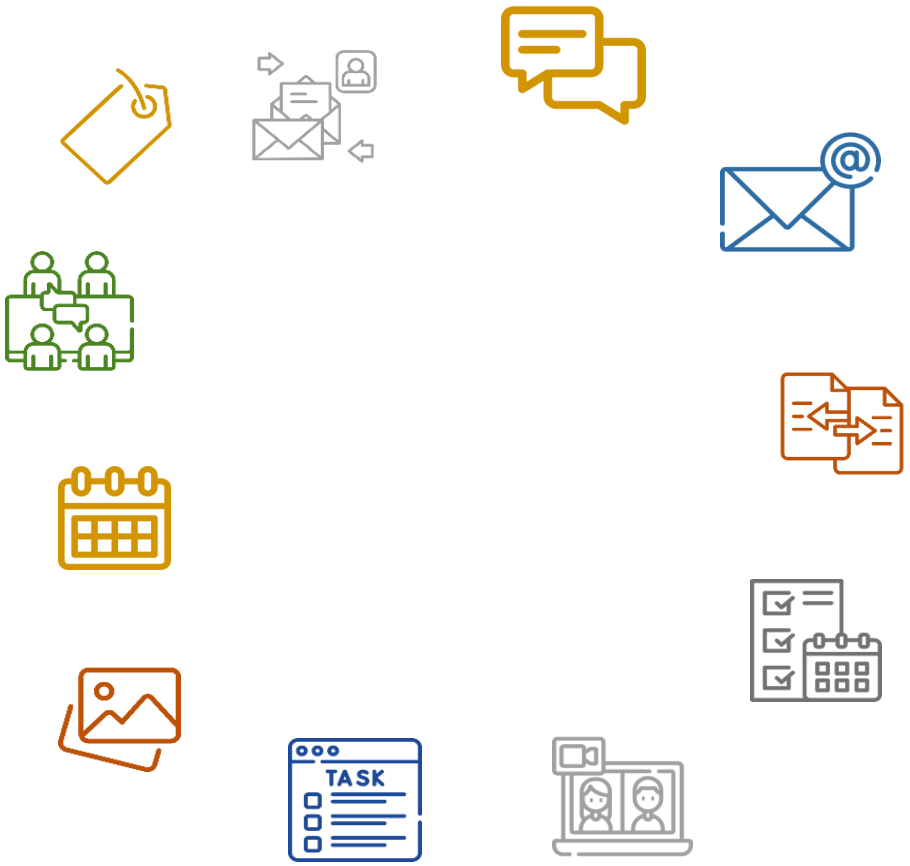
- Maintaining all systems and components of the project;
- Relating activities and test packages to clearance of a system or sub-systems punches;
- Ability to prioritize works based on system priorities.

Project Management PROCESS AREA

Project Management Based on ISO21502:2020



Tools Management



Calendar:

Calendar tools allow you to easily manage events, tasks, and meetings online. This tool has the ability to coordinate with other tools of the body system and allows you to access today's date and the list of your programs anytime and anywhere.

- Definition of event types
- Personal and organizational events
- Regular (recurring) events
- Tagging events
- Definition of stakeholders of organizational events
- Attachment of file types to the event
- Definition of venue
- Calendar display as monthly, weekly, daily and Gantt
- Display organizational events to users based on their role in the organizational chart
- Grant personal calendar access to other users with privacy protection
- The possibility of providing API to other systems
- Provide all kinds of reports of events based on user access
- Define reminders for events and processes
- Send SMS
- Send email
- The possibility of personalizing reminders
- The possibility of displaying the public calendar on the organization's website

Image gallery:

With this tool, you can create an album of images in the physical system. Connect the images to the activities of the project work breakdown structure. Write a description of the uploaded image on each image and record the date and location of the image.

Management of meetings:

It is a tool for managing and organizing various meetings and gatherings between different elements and stakeholders at the project level

- Planning meetings
- Preparation of agenda
- Invitation and coordination
- Management of meeting information
- Active participation of participants
- Follow-up of post-meeting actions by transferring approvals to the task management tool

Report Management:

A tool for producing reports at different levels and with different applications and at defined times. The possibility of generating reports by calling data and information from various modules and tools of the system to consolidate and integrate them and generate decision-making reports for senior project managers.

Web Mail:

A tool similar to Microsoft Outlook with the ability to send and receive text messages with multimedia attachments (text, audio, image, video and clip). The possibility of connecting all the stakeholders of the different elements of the project in a platform with different access levels.

Correspondence management:

It is a tool for managing and circulating all kinds of letters and correspondence. By using this system's folder, you can see the list of your internal, incoming and outgoing mails and according to your organizational access levels, initialize them, refer them, and search among the mass of mails and perform the necessary actions and follow-up easily. give Cartable of this system also provides the possibility of receiving letters automatically and tracking their circulation.

- The possibility of referring a letter (for subpoena, for action, for signature, etc.) and inserting descriptions of different references to one or more recipients.
- Inserting the file when referencing the letter
- The possibility of referring letters to one or more organizational units and all personnel members of the units
- The possibility of defining a specific reference for the user in order to refer letters outside the access levels set in the organizational chart
- The possibility of withdrawing the referral letter if it is not read by the recipient of the referral
- Ability to refer letters confidentially and view confidential references if you have the necessary access level
- The possibility of referring a letter for action and placing the letter in the follow-up list of the sender of the referral and the action list of the recipient of the referral
- The possibility of choosing the type of referral urgency (normal, urgent, instant) when referring a letter and inserting an adjustable response deadline for the recipient.
- The possibility of setting a response deadline for the recipient of the referral
- Ability to define commonly used texts for quick insertion of reference text

Online chat:

A very practical tool like many social networking apps such as Telegram and WhatsApp and for quick conversation and interaction between users in a safe and centralized environment within the organization and under control. With this tool, you can exchange opinions on documents and organizational programs and avoid time-consuming administrative bureaucracy. With this tool and the level of access between users, it is possible to send and receive information, documents and documents quickly to get users' opinions.

File Sharing:

The sharing tool makes it possible to share any file between project stakeholders in the easiest possible way. The function of the tool is that by selecting a file and uploading that tool, the file is ready to be shared and you can provide it to internal/external stakeholders. People with whom you have shared a file can download the desired file after receiving the notification.

Tag management:

A tag management system (TMS) makes it simple for users to implement, manage, and maintain tags on their digital properties with an easy-to-use web interface.

Task management:

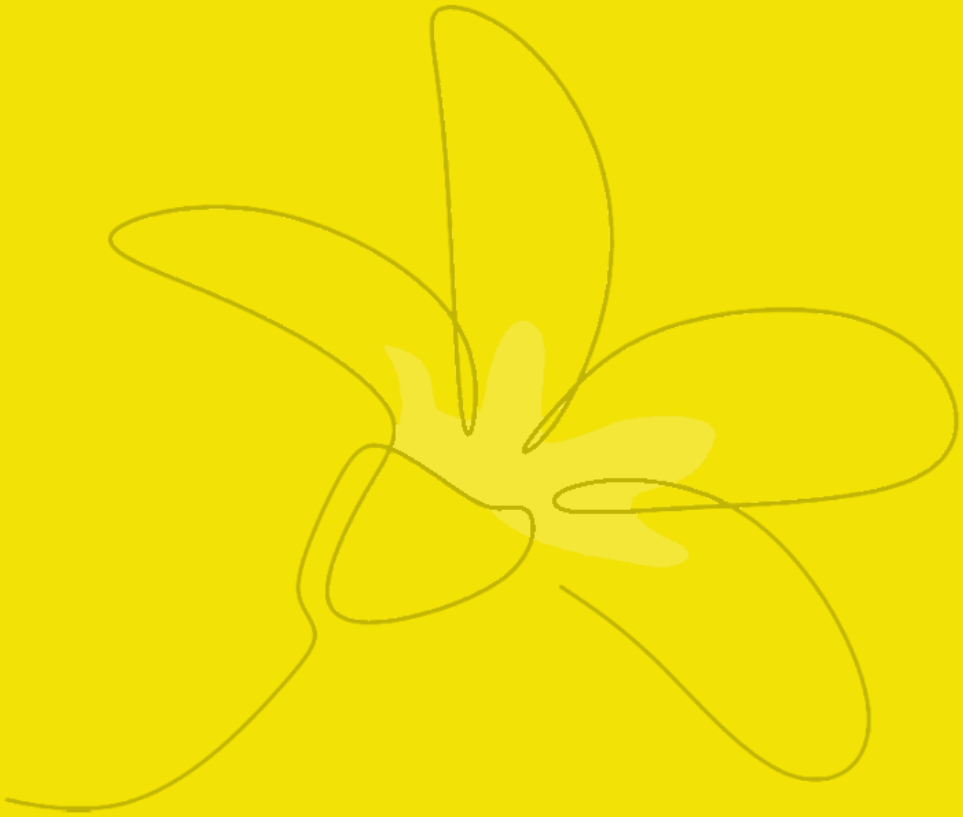
A task management tool is a program that automates the process of creating, delegating, and completing tasks. These tools are designed to help project managers get the most out of their teams. The task management software combines all the features needed by the project manager to manage and do the work, while it is also possible to select activities from the work breakdown structure loaded in the body, and in a way, the activities with the project team through the project work breakdown structure and the related organization. are connected

The features of task management software are:

- Creating work and distributing them
- Delegating tasks to people
- Break tasks into smaller tasks
- Ability to tag with multiple colors to categorize and manage tasks

Video conference:

Video conferencing is no longer a novelty, it is useful for many businesses around the world today. Video calling enables entrepreneurs and other professionals to conveniently work from home and meet face-to-face with colleagues, clients, and managers. Studies have shown that more than 60% of managers agree that video conference calls create strong relationships between participants and lead to better communication compared to audio conference calls. This shows the importance and very effective use of video conferencing.



Be in touch with us...

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