

REQUIREMENT DOCUMENT



REQUIREMENT DOCUMENT

Inventory Module

1. Design Code Setup

1.1 Purpose

The **Design Code Setup Master Form** allows configuration of manual design code generation patterns for different product types — **Metal**, **Stone**, and **Brand**. Based on the selected type and generation dependency, the system dynamically renders the necessary filter dropdowns and data grid for detailed input like prefix, suffix, and other numbering attributes.

1.2 User Type

Registered Users, Admins.

1.3 Screen Layout

Tyf	Generation Type	Style	Stone Group Category	Prefix	Suffix	Starting Number	Is Have Variant	Variant Type	Status	Action
Metal	Style	Antique		ANT	M	0001	Active	Stone	Active	
Metal	Style	Victorian		VCT	M	0001	Active	Stone	Active	
Metal	Style	Casting		CST	M	0001	Active	Stone	Active	
Stone	Group Category		Diamond	DIA	LS	0001	Active		Active	
Stone	Group Category		Color Stone	CST	LS	0001	Active		Active	

1.4 UI Elements-Design Code Setup Grid View

○ Module Over View

This UI module is part of the **Design Code Setup** under **Inventory > Product Definition**. It displays a table of all existing **design codes** and allows users to efficiently manage design code entries. The interface enables users to view, create, update, and remove design code records, ensuring easy configuration and maintenance of standardized design codes used throughout the system.



○ Functional Areas

- Top Navigation and Tabs
 - **Tabs:** Design Setup, Variant Setup
 - **Current tab selected:** Design Setup
- These tabs will help navigate to the related design code setup components, providing seamless access to different design configurations.

○ Header Buttons

- **Search Option:** A search bar located at the top of the data view section to filter currency displayed in the table.
- **Functionality:**
 - Enable users to filter data by specific criteria (e.g., type, generation type, style, stone group category, status).
 - Dynamically updates the displayed table to show only results that match the search query.

○ Display Dropdown

- **Description:** A dropdown control to set the number of rows shown in the table at once.
- **Options:** Common choices (e.g., 5, 10, 25, 50, 100 rows per page).
- **Functionality:**
 - Allows users to control the number of Design code records displayed per page.
 - Updates the table view immediately based on the selected number of rows.

○ Buttons

- **Add Button**
 - **Label:** "New"
 - **Functionality:** Opens the Design Setup Form to add a new design setup record.
- **Export Button**
 - **Label:** "Export" (or Icon button as specified)
 - **Functionality:** Allows users to export the displayed design setup data in various file formats (e.g., Excel).
 - **Export Options:**
 - Exports all or filtered data based on the current table view and search filter.
- **Import Button**
 - **Label:** "Import" (or Icon button as specified)
 - **Functionality:**
 - Redirects to the Import Form page, where users can upload design setup data.

○ Tabular View

- **Description:** The **Tabular View** displays all saved records in a structured table format.

○ Paging for Table View

- **Description:** Includes pagination controls at the bottom of the table for navigating through multiple pages of design code setup records.
- **Functionality:**





- Displays navigation buttons (e.g., "Previous", "Next") to move between pages.
- Shows page numbers to allow users to jump directly to specific pages.
- Updates the displayed design code setup records based on the selected page

Permissions Functionality

○ **Functionality:**

- **Permission Settings:** Permission Settings: Restricts the visibility and accessibility of buttons and actions based on user roles or permissions.

○ **Available Permissions:**

- **Add Design Code Permission:** Grants authorized users access to the "Add" button for creating new design code setup records.
- **Edit Permission:** Enables authorized users to access the Edit button in the Action column, allowing modification of existing design code setup entries.
- **Delete Permission:** Provides authorized users access to the Delete button in the Action column, enabling deletion of design code setup records

- **Permission Assignment:** Admins or authorized personnel can assign specific permissions to individual users or defined user roles within the system.

1.5 Screen Layout

1.6 UI Elements for Design Code Setup

○ **Type:** Single Selection Dropdown

- **Options:** Metal, Stone, Brand
- **Purpose:** Determines the base item for which the design code is being generated.





- **Impact:** Based on the selected Type, the "Generation Dependency" dropdown and the grid behavior will dynamically change.
- **Generation Dependency:** Single Selection Dropdown
 - **Purpose:** Filters the base attributes on which the code will depend.
 - **Dynamic Options Based on Type:**

Type	Generation Dependency Options
Metal	Continuous, Combination, Group Category, Category, Sub Category (Dynamic)
Stone	Continuous, Stone Combination, Stone Group Category, Stone Category, Stone Sub Category (Dynamic)
Brand	Continuous, Brand, Combination, Group Category, Category, Sub Category (Dynamic)

Note: Dynamic Sub Categories are auto-loaded based on existing master configurations.

Functional Behavior:

- When the user selects a Type, the system dynamically loads respective Generation Dependency options.
- Once a Generation Dependency is chosen, the system filters available categories/sub-categories and loads them into the grid.
- Users must define prefixes, suffixes, and starting numbers as per internal standards.
- On pressing **Submit**, the configuration is saved and becomes active for design number generation across the ERP.
- **Clear** resets the form and selections.
- **Dynamic Behavior Based on Selection**

Below are the different behaviors depending on the Type and Generation Dependency combinations:

- **Type: Metal**
 - **Dependency: Continuous**
 - Filter Dropdowns Shown: None
 - **Display UI Elements:**
 - **Prefix**
 - **Type:** Text Input
 - **Description:** Static alphanumeric characters to be added before the auto-generated code.
 - **Mandatory:** Yes
 - **Usage:** Helps in identifying the design code origin/type (e.g., MET, STN).
 - **Suffix**
 - **Type:** Text Input





- **Description:** Static alphanumeric characters to be added after the auto-generated code.
- **Mandatory:** Optional
- **Usage:** Useful for denoting end-tag categories like year, variant group.
- **Start From**
 - **Type:** Text Input
 - **Description:** Initial number from where the sequence should begin.
 - **Validation:** Must be numeric & must be greater than or equal to 1
 - **Mandatory:** Yes
 - **Usage:** Defines the starting index for the auto number generation.
- **Auto Number Segment Length**
 - **Type:** Text Input
 - **Description:** Total number of digits for the auto-number part of the code.
 - **Validation:** Must be numeric & Range: 1–10 - Cannot be less than length of Start From
 - **Mandatory:** Yes
 - **Usage:** Controls the padding size and structure of auto-generated numbers.
- **Padding Character**
 - **Type:** Text Input
 - **Description:** Character used to pad the auto number to match segment length.
 - **Validation:** Must be a single character - Allowed: 0-9, A-Z - No symbols
 - **Mandatory:** Yes
 - **Usage:** Ensures uniform length by padding unused digits (e.g., 001, 002).
- **Is Have Variants**
 - **Type:** Checkbox
 - **Description:** Indicates whether the design code has sub-variants (like size, purity).
 - **Mandatory:** Optional
 - **Usage:** When checked, design code will be further divided into variants.
- **Dependency: Combination**
- Filter Dropdowns Shown: Group Category, Category, Dynamic Activated Sub Category
- **Grid Displays:**
 - Combination Names (from Article Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Dependency: Group Category**
- Filter Dropdowns Shown: Group Category
- **Grid Displays:**





- Group Category Names (from Group Category Master)
- Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Dependency: Category**
- Filter Dropdowns Shown: Group Category, Category
- **Grid Displays:**
 - Category Names (from Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Dependency: Dynamic Sub Category**
- Filter Dropdowns Shown: Group Category, Category, Selected Dynamic Sub Category
- **Grid Displays:**
 - Selected Dynamic Sub Category Names (from Dynamic Sub Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Type: Brand**
 - **Dependency: Brand**
 - **Filter Dropdowns Shown:** Brand.
 - **Grid Displays:**
 - Brand Names (from Brand Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Type: Stone**
 - **Dependency: Stone Group Category**
 - **Filter Dropdowns Shown:** Stone Group Category.
 - **Grid Displays:**
 - Stone Group Category Names (from Stone Group Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
 - **Dependency: Stone Category**
 - **Filter Dropdowns Shown:** Stone Group Category, Stone Category.
 - **Grid Displays:**
 - Stone Category Names (from Stone Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
 - **Dependency: Stone Sub Category**





- **Filter Dropdowns Shown:** Stone Group Category, Stone Category, Stone Sub Category.
- **Grid Displays:**
 - Stone Sub Category Names (from Stone Sub Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.
- **Dependency: Stone Dynamic Sub Category**
- **Filter Dropdowns Shown:** Stone Group Category, Stone Category, Stone Sub Category, Dynamic Sub Category.
- **Grid Displays:**
 - Stone Dynamic Sub Category Names (from Dynamic Stone Sub Category Master)
 - Prefix, Suffix, Start From, Auto Number Segment Length, Padding Character, Is Have Variants.

Notes

- The grid auto-loads based on filters to avoid manual entry errors.
- "Is Have Variants" helps configure sub-level design numbers (e.g., sizes or weights).
- All master data used in filters must be pre-configured through respective modules (e.g., Category Master, Stone Group Master).

2. Variant Setup

2.1 Purpose

A *variant* defines a specific attribute of a product (like size, purity, color) used to distinguish and manage different versions of the same design. It enables accurate code generation, inventory tracking, reporting, and simplifies master data by organizing product combinations efficiently.

2.2 User Type

Registered Users, Admins.



2.3 Screen Layout

Setup Type	Variant Type	Variant	Status	Action
Metal	Stone	CZ	Active	
Metal	Stone	CZR	Active	
Metal	Polish	RD	Active	
Metal	Polish	TM	Active	
Metal	Size	I26	Active	

2.4 UI Elements-*Variant* Grid View

○ Module Over View

This UI module is part of the **Variant** under **Inventory > Product Definition**. It displays a table of all existing **variants** and allows users to efficiently manage variants entries. The interface enables users to view, create, update, and remove variant records, ensuring easy configuration and maintenance of standardized variant used throughout the system.

○ Functional Areas

- Top Navigation and Tabs
 - **Tabs:** Design Setup, Variant Setup
 - **Current tab selected:** Variant Setup
- These tabs will help navigate to the related variant setup components, providing seamless access to different design configurations.

○ Header Buttons

- **Search Option:** A search bar located at the top of the data view section to filter currency displayed in the table.
- **Functionality:**
 - Enable users to filter data by specific criteria (e.g., type, variant, status).
 - Dynamically updates the displayed table to show only results that match the search query.

○ Display Dropdown

- **Description:** A dropdown control to set the number of rows shown in the table at once.
- **Options:** Common choices (e.g., 5, 10, 25, 50, 100 rows per page).
- **Functionality:**
 - Allows users to control the number of Variant records displayed per page.



- Updates the table view immediately based on the selected number of rows.
- **Buttons**
 - **Add Button**
 - **Label:** "New"
 - **Functionality:** Opens the Variant Setup Form to add a new variant record.
 - **Export Button**
 - **Label:** "Export" (or Icon button as specified)
 - **Functionality:** Allows users to export the displayed design setup data in various file formats (e.g., Excel).
 - **Export Options:**
 - Exports all or filtered data based on the current table view and search filter.
 - **Import Button**
 - **Label:** "Import" (or Icon button as specified)
 - **Functionality:**
 - Redirects to the Import Form page, where users can upload variant data.
- **Tabular View**
 - **Description:** The **Tabular View** displays all saved records in a structured table format.
- **Paging for Table View**
 - **Description:** Includes pagination controls at the bottom of the table for navigating through multiple pages of variant records.
 - **Functionality:**
 - Displays navigation buttons (e.g., "Previous", "Next") to move between pages.
 - Shows page numbers to allow users to jump directly to specific pages.
 - Updates the displayed design code setup records based on the selected page

Permissions Functionality

- **Functionality:**
 - **Permission Settings:** Restricts the visibility and accessibility of buttons and actions based on user roles or permissions.
- **Available Permissions:**
 - **Add Variant Permission:** Grants authorized users access to the "Add" button for creating new variant records.
 - **Edit Permission:** Enables authorized users to access the Edit button in the Action column, allowing modification of existing variant entries.
 - **Delete Permission:** Provides authorized users access to the Delete button in the Action column, enabling deletion of variant records





- **Permission Assignment:** Admins or authorized personnel can assign specific permissions to individual users or defined user roles within the system.

2.5 Screen Layout

2.6 UI Elements for *Variant Setup*

- **Variant Type Name**
 - **Type:** Text Input.
 - **Description:** Enter a unique name for the variant type.
 - **Validation:** No special characters, min 3 chars.
 - **Mandatory:** Yes.
- **Prefix**
 - **Type:** Text Input.
 - **Description:** Code or abbreviation to prefix in generated variant codes.
 - **Validation:** Optional.
 - **Mandatory:** Yes.
- **Number Setup**
 - **Type:** Single Selection Dropdown.
 - **Description:** Select the numbering logic.
 - **Options:** Numbers, Alphabets, Dynamic Creation.
 - **Validation:** Valid selection required.
 - **Mandatory:** Yes.
 - **Conditions:** Triggers condition for Starting Number, Starting Alphabet fields.
 - **Behavior**





- **Dynamic Enable/Disable:**
 - When Number Setup is set to Dynamic Creation, the Starting Number and Starting Alphabet field should be disabled.
 - When set to **Numbers** the **Starting Number** field should be **enabled**, **Starting Alphabet** field should be **disable** and **validated** for numeric input.
 - When set to **Alphabets**, the **Starting Alphabet** field should be **enabled**, **Starting Number** field should be **disabled** and **validated** for alphabet input.
- **Starting Number**
 - **Type:** Text Input.
 - **Description:** Base number from which auto-numbers begin.
 - **Validation:** Numeric only.
 - **Mandatory:** Conditional.
 - **Conditions:** Enabled **only if** Number Setup = *Numbers*. Disabled if *Dynamic Creation or Alphabet*.
- **Starting Alphabet**
 - **Type:** Text Input.
 - **Description:** Base alphabet from which auto-alphabet begin.
 - **Validation:** alphabets only.
 - **Mandatory:** Conditional.
 - **Conditions:** Enabled **only if** Number Setup = *Alphabet*. Disabled if *Dynamic Creation or Numbers*.
- **Is Active**
 - **Type:** Check Box.
 - **Description:** Marks the variant type as active.
 - **Default:** Checked.
- **Submit**
 - **Type:** Button.
 - **Description:** Saves the variant type configuration.
 - **Validation:** Validate all required fields.
- **Clear**
 - **Type:** Button.
 - **Description:** Clears all form fields.
- **Add Options Button**
 - **Type:** Button.
 - **Description:** Opens a popup to add dynamic variant options.



2.7 Popup Form: Add Dynamic Variant Options

The screenshot shows the SIONIQ.AI web application interface. The main page is titled "Design Code Setup" and contains several input fields: "Variant Type Name" (text input), "Prefix" (text input), "Number Setup" (dropdown menu), "Starting Number" (text input), and "Is Active" (checkbox). A pink "Add Dynamic Options" button is visible. Below this, a popup form is displayed, which is highlighted with a pink border. The popup form contains a "Type" dropdown menu, a "Variant Name" text input, and an "Is Active" checkbox. "Submit" and "Cancel" buttons are located at the bottom of the popup. The footer of the page includes "Sri Bhavani Gems & Jewels Pvt Ltd" and "2025 © SIONIQ.AI".

○ Type

- **Type:** Dropdown.
- **Description:** Select a Variant Type from master
- **Source:** Populated from *Variant Type Master*.
- **Filter Condition:** Only show types where **Number Setup = "Dynamic Creation"**.
- **Mandatory:** Yes.

○ Variant Name (Text Input)

- **Purpose:** To enter a variant name under the selected type.
- **Validation:** Cannot be empty, no special characters.
- **Mandatory:** Yes.

○ Is Active

- **Type:** Check Box.
- **Description:** Marks the variant type as active.
- **Default:** Checked.

○ Submit Button

- **Function:** Saves the variant record against the selected type.
- **Validation:** Ensure all required fields are filled and valid.

○ Cancel Button

- **Function:** Closes the popup without saving.