

# MP17043 Prosperity - Data Collection and Transformation Report

Date of Analysis: 06-Dec-2023



>2023

## Introduction

This analysis delves into the extensive data spanning piping, valves, bolts, and structural elements across the SBM and YARD scopes of our project. It highlights the quantitative and qualitative aspects of material usage, focusing on specific metrics like weight, quantity, and type.

## Overview of Scopes and Materials

This analysis of the Unity Project consists of two different scopes, including:

### a. SBM Scope

- Piping
- Special Piping
- Valve
- Bolt

### b. YARD Scope

- Piping
- Special Piping
- Structure
- Valve
- Bolt

Piping Analysis

General Piping Data: The project utilized a total of 107292.0 pieces of piping, covering 63821.13 meters, with a total net weight of 4160677.24 kg.

SBM Scope Piping: In the SBM scope, there were 15630.0 pieces of piping, totaling 12842.04 meters and weighing 1947249.15 kg.

YARD Scope Piping: The YARD scope accounted for 91662.0 pieces of piping, extending 50979.09 meters, with a net weight of 2213428.09 kg.

Valve Analysis

Valve Data: The total weight of valves used was 1079317.74 kg, with 7255.0 valves utilized across both SBM and YARD scopes.

Bolt Analysis

Bolt Data: The project required a total of 434240 bolts, with a net weight of 136521.81 kg.

Structure Analysis

Structure Data: The structural components totaled   Quantity UOM   ...   Total Gross Weight

0       PCS   ...       5.2

[1 rows x 9 columns] pieces, covering   Quantity UOM   ...   Total Gross Weight

0       m2   ...       1144.0

[1 rows x 9 columns] square meters and   Quantity UOM   ...   Total Gross Weight

0       m   ...       1188.0

[1 rows x 9 columns] meters, with a gross weight of 2337.20 kg.

Special Piping Components

Special Piping Data: The project used 7434.030000000001 meters of special piping, weighing 115093.37 kg.

## **Cost and Quantity Overview**

Project Expenditure and Manpower: The total project cost was approximately \$1128723021.00, with around 518904.59 man-hours spent.

## **Conclusion**

The detailed analysis of material usage and cost in the project provides valuable insights into the scale, complexity, and resource allocation. The significant quantities and weights of materials used in different scopes underline the project's vastness and the meticulous planning required for its successful execution.