RSC, Inc. Data Documentation

# **ERD**

**RSC Inc. Data Dictionary**

## **Known issues: Descriptions and examples could use enhancement / clarification; table needed for overall table descriptions, characteristics (like Sam’s & Dillard’s); also need a brief narrative about this fictitious firm and overall description of the data set (same for Sam’s & Dillard’s).**

## Batch\_Production\_Fact Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Batch\_Key | Batch Key | Batch key is a degenerated dimension in the fact table to identify groups of goods produced at one time in RSC’s batch manufacturing process | Batch key starts at 100. Possible values: 100, 101, 102 | Integer | N/A |
| Product\_Key | Product Key | surrogate key from Product\_Dimension  | Possible values: 3, 4, 20 | Integer | Foreign key references Product\_Key in Product Dimension |
| Plant\_Key | Plant Key | surrogate key from Plant\_Dimension | Possible values: 1, 2, 3 | Integer | Foreign key references Plant\_Key in Plant Dimension |
| Batch\_Num | Batch Number | Batch number is a combination of product key, plant key and batch key | Possible values: 3-1-100, 4-2-100, 20-3-100 | varchar(999) | N/A |
| Batch\_Molding\_Date\_Key | Batch Molding Date Key | Molding date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Batch\_Trimming\_Date\_Key | Batch Trimming Date Key | Trimming date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Batch\_Painting\_Date\_Key | Batch Painting Date Key | Painting date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Batch\_Packing\_Date\_Key | Batch Packing Date Key | Packing date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Batch\_Inventory\_Date\_Key | Batch Inventory Date Key | Inventory date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Last\_Update\_Date\_Key | Last Update Date Key | Most recent inventory update date | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Shrink | Shrink | Inventory shrinkage amount | Some inventory may be lost in the manufacturing process. Possible values: 74, 66, 65 | Integer | N/A |
| Qty | Quantity | Inventory amount | Possible values: 789, 829, 843 | Integer | N/A |

## Production\_Fact Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Plant\_Key | Plant Key | surrogate key from Plant\_Dimension | Possible values: 1, 2, 3 | Integer | Foreign key references Plant\_Key in Plant Dimension |
| Batch\_Key | Batch Key | Batch key is a degenerated dimension in the fact table to identify groups of goods produced at one time in RSC’s batch manufacturing process | Possible values: 100, 101, 102 | Integer | N/A |
| Department\_Key | Department Key | Surrogate key from Department\_Dimension | Possible values: 2, 3, 4 | Integer | Foreign key references Department\_Key in Department Dimension |
| Product\_Key | Product Key | Surrogate key from Product\_Dimension | Possible values: 3, 4, 5 | Integer | Foreign key references Product\_Key in Product Dimension |
| Date\_Key | Date Key | Date key from Date\_Dimension | Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Shift\_Key | Shift Key | Surrogate key from Shift\_Dimension | Possible values: 1, 2, 3 | Integer | Foreign key references Shift\_Key in Shift Dimension |
| Movement\_Key | Movement Key | Movement key from Movement\_Dimension | Possible values: 1, 2, 3 | Integer | Foreign key references Movement\_Key in Movement Dimension |
| Amount\_Moved | Amount Moved | Amount of inventory moved | Possible values: 863, 38, 825 | Integer | N/A |

## Month\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Month\_Key | Month Key |  Month\_Dimension surrogate key |  Possible values: 1, 2, 3 | Integer | Primary key |
| Month\_Desc | Month Description |  Month description in full name |  Possible values: January, February, March | varchar(99) | N/A |
| Month\_Num | Month Number |  Month in number |  Possible values: 1, 2, 3 | Integer | N/A |
| Quarter | Quarter |  Quarter of year in number |  Possible values: 1, 2, 3 | Integer | N/A |
| Month\_Year | year of month | corresponding year of the month |  Possible values: 2016, 2017, 2018 | Integer | N/A |
| Month\_YYYY\_MM | Year and Month |  corresponding year of the month and the month |  Possible values: 20160101, 20170101, 20180101 | Integer | N/A |

## Inventory\_Fact Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Department\_Key |  Department Key |  Surrogate key from Department\_Dimsneion | Possible values: 1, 2, 3 | Integer | Foreign key references Department\_Key in Department Dimension |
| Plant\_Key |  Plant Key |  Surrogate key from Plant\_Dimension |  Possible values: 1, 2, 3 | Integer | Foreign key references Plant\_Key in Plant Dimension |
| Month\_Key |  Month Key |  Surrogate key from Month\_Dimension |  Possible values: 50, 51, 52 | Integer | Foreign key references Month\_Key in Month Dimension |
| Beginning\_Inventory |  Beginning Inventory |  Beginning inventory of the month |  Possible values: 4774, 7111, 7378 | Integer | N/A |
| Ending\_Inventory |  Ending Inventory |  Ending inventory of the month |  Possible values: 6140, 9146, 9311 | Integer | N/A |

## Sales\_Fact Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Product\_Key |  Product Key |  Surrogate key |  Possible values: 1, 2, 3 | Integer | Foreign key references Product\_Key in Product Dimension |
| Date\_key |  Date Key |  Surrogate key |  Possible values: 1462, 1463, 1464 | Integer | Foreign key references Date\_Key in Date Dimension |
| Customer\_Key |  Customer Key |  Surrogate key |  Possible values: 10, 48, 93 | Integer | Foreign key references Customer\_Key in Customer Dimension |
| Amount\_Sold |  Amount Sold |  Amount of products sold |  Possible values: 2571, 5002, 2348 | Integer | N/A |
| Quantity\_Sold |  Quantity Sold |  Quantity of products sold |  Possible values: 989, 2084, 1677 | Integer | N/A |

## Date\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Date\_key |  Date Key |  Surrogate key |  Possible values: 1, 2, 3 | Integer | Primary key |
| Date\_Desc |  Date Description |  Full date description in numbers |  Possible values: 1/1/2018, Unknown Date, TBD (To be determined date) | varchar(99) | N/A |
| Day\_of\_Month |  Day of Month |  Day of month number |  Possible values: 1, 2, 3 | Integer | N/A |
| Month\_of\_Year |  Month of Year |  Month of year number |  Possible values: 1, 2, 3 | Integer | N/A |
| Year\_Number |  Year Number |  Year number |  Possible values: 2016, 2017, 2018 | Integer | N/A |
| Day\_of\_Year |  Day of Year |  Day of year number |  Possible values: 1, 2, 3 | Integer | N/A |
| Quarter\_of\_Year |  Quarter of Year |  Quarter of year number |  Possible values: 1, 2, 3 | Integer | N/A |
| Day\_of\_Week |  Day of Week |  Day of week in abbreviation |  Possible values: Mon, Tue, Wed | varchar(99) | N/A |
| Holiday\_Flag |  Holiday Flag |  Holiday flag indicator |  0 means it is not a holiday. Possible values: 0 and 1 only | Integer | N/A |
| Weekend\_Flag |  Weekend Flag |  Weekend flag indicator |  0 means it is not a weekend. Possible values: 0 and 1 only | Integer | N/A |
| Weekday\_Flag |  Weekday Flag |  Weekday flag indicator | 0 means it is not weekday (Monday-Friday). Possible values: 0 and 1 only | Integer | N/A |

## Product\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Product\_Key |  Product Key |  Surrogate key |  Possible values: 1, 2, 3 | Integer | Primary key |
| Product\_ID |  Product ID |  Unique identifier represents a product |  Possible values: 1, 2, 3 | Integer | N/A |
| Product\_Description |  Product Description |  Description of the color, type and brand of the product |  Possible values: Red Chicken Clear View, Orange Ball Quest Technologies, Yellow Chicken RSC | varchar(99) | N/A |
| Category\_Num |  Category Number |  Unique identifier represents the category of a product |  Possible values: 1-11 | varchar(99) | N/A |
| Category\_Description |  Category Description |  description of product category such as chicken and globe |  Possible values: Chicken, Bull, Globe | varchar(99) | N/A |
| Brand |  Brand |  brand of product is the same as the customer’s company name, except for Wallard’s Prime Stores and Amazin.com | Possible values: Amazin.com, Wallard’s Prime Superstores, Fine Foods Budget | Integer | N/A |
| Color |  Color |  Color description |  Possible values: Red, Yellow, Black | Integer | N/A |
| Size |  Size |  Size description |  Possible values: Small, Medium, Large | Integer | N/A |

## Customer\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Customer\_Key |  Customer Key |  Surrogate key |  Possible values: 1,2 ,3 | Integer | Primary key |
| Customer\_ID |  Customer ID |  Unique identifier for customer |  Possible values: 1, 2, 3 | Integer | N/A |
| Customer\_Name |  Customer Name |  Full business name of customer |  Possible values: Fine Foods Budget, Wallard’s Prime Stores, Amazin.com | varchar(99) | N/A |
| Customer\_Address |  Customer Address |  customer address |  Possible values: 979 San Juan Ave, 18 Jackson St., 932 Gartner Circle | varchar(99) | N/A |
| Customer\_Zip |  Customer Zip Code |  the 5 digit zip code of customer’s address |  Possible values: 72701, 22191, 53204 | varchar(99) | N/A |
| Customer\_City |  Customer City |  full name of customer city |  Possible values: Woodbridge, Milwaukee, Birmingham | varchar(99) | N/A |
| Customer\_State |  Customer State |  full name of customer state |  Possible values: Virginia, Arkansas, Wisconsin | varchar(99) | N/A |
| Customer\_Industry |  Customer Industry |  text description of customer industry |  Possible values: Agriculture, Construction, Manufacturing | varchar(99) | N/A |
| Customer\_Type |  Customer Type |  text description of customer type |  Possible values: Small-Medium business (SMB), Medium-sized business, (Large) Enterprise | varchar(99) | N/A |
| Salesperson\_Name |  Salesperson Name |  salesperson name |  Possible values: Jack Blair, Shane Craig, Alexis Bentley | varchar(99) | N/A |
| Salesperson\_Address |  Salesperson Address |  living address of salesperson |  Possible values: 8040 Walnutwood Avenue, 6 Warren Court, 528 Division Drive | varchar(99) | N/A |
| Salesperson\_City |  Salesperson City |  city of salesperson’s address |  Possible values: Nashville, Lancaster, Jersey City | varchar(99) | N/A |
| Salesperson\_State |  Salesperson State |  state of salesperson’s address |  Possible values: New Jersey, Arkansas, California | varchar(99) | N/A |
| Salesperson\_Zip |  Salesperson Zip Code |  5 digit zip code of salesperson’s address |  Possible values: 72701, 07302, 93534 | varchar(99) | N/A |
| SC\_Begin\_Date |  Sales Commission Begin Date |  begin date of sales commission contract | All begin date is 1/1/1900  | interval | N/A |
| SC\_End\_Date |  Sales Commission End Date |  end date of sales commission contract |  All end date is 1/1/2199 | interval | N/A |

## Department\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Department\_Key |  Department Key |  surrogate key |  Possible values: 1,2 3 | integer | Primary key |
| Department\_ID |  Department ID |  Unique identifier for department |  Possible values: 10644120, 10644121, 10644123 | integer | N/A |
| Department\_Name |  Department Name |  full name description of department |  Possible values: Mixing Dept., Molding Dept., Trimming Dept. | varchar(99) | N/A |
| Department\_Description |  Department Description |  text description of department function |  Possible values: shape rubber by heating, paint items, pack items | varchar(99) | N/A |

## Movement\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Movement\_Key |  Plant ID |  surrogate key |  Possible values: 1, 2, 3 | integer | Primary key |
| Movement\_Types |  Movement Types |  text description of movement types |  Possible values: Batch In, Batch Out, Shrinkage | varchar(99) | N/A |

## Shift\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Shift\_Key |  Shift Key |  surrogate key |  Possible values: 1, 2, 3 | integer | Primary key |
| Shift\_Description |  Shift Description |  text description of work shift |  Possible values: Day Shift, Night Shift, Midnight Shift | varchar(99) | N/A |
| Start\_time |  Start Time |  start time of shift |  Possible values: 8:00:00 AM, 4:00:01 PM, 12:00:01 AM | time | N/A |
| End\_Time |  End Time |  end time of shift |  Possible values: 4:00:00 PM, 12:00:00 AM, 7:59:00 AM | time | N/A |

## Plant\_Dimension Table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Column Abbreviated Name**  | **Column Long Name** | **Short Description** | **Long Description & Example Data** | **Data Type** | **Constraint** |
| Plant\_Key |  Plant Key |  surrogate key |  Possible values: 1, 2, 3 | integer | Primary key |
| Plant\_ID |  Plant ID |  unique identifier of plant |  Possible values: 1, 2, 3 | integer | N/A |
| Plant\_City |  Plant City |  the city where the plant is located |  Possible values: Fayetteville, Springdale, Irvine | varchar(99) | N/A |
| Plant\_State |  Plant State |  the state where the plant is located |  Possible values: Arkansas, Missouri, California | varchar(99) | N/A |
| Plant\_Description |  Plant Description |  description of the city and function of the plant |  Possible values: Fayetteville Manufacturing Plant, Springfield Manufacturing Plant, Irvine Manufacturing Plant | varchar(99) | N/A |