**Physical Data Modeling - Diagram Report**

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# BMT [Physical Data Model]

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## Table: Customer

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Customer

**Business Description:** An entity that is not employeed by the company, but is associated with it through a financial transaction.

**Primary Keys:**

Customer\_ID

**Foreign Keys:**

**Non-Key Columns:**

Phone\_Number

City

State

Zip

Company\_Name

**Column:** City

**Description:** The city in which the customer lives.

**Database Name:**

**Table Name:** Customer

**Data Type:** character

**Type Qualifier:** 20

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Company\_Name

**Description:** The name of the customer.

**Database Name:**

**Table Name:** Customer

**Data Type:** character

**Type Qualifier:** 20

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Customer\_ID

**This column is a primary key**

**Description:** The ID that uniquely identifies a customer.

**Database Name:**

**Table Name:** Customer

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Phone\_Number

**Description:** The customer's phone number.

**Database Name:**

**Table Name:** Customer

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** State

**Description:** The state in which the customer lives.

**Database Name:**

**Table Name:** Customer

**Data Type:** character

**Type Qualifier:** 2

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Zip

**Description:** The code that uniquely identifies where a customer lives.

**Database Name:**

**Table Name:** Customer

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** places\_order

**Cardinality:** One Customer places\_order Zero, One or Many Z\_Bill

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

## Table: Employee

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Employee

**Business Description:** An employee that may or may not have many different jobs within the company.

**Primary Keys:**

Employee\_ID

**Foreign Keys:**

**Non-Key Columns:**

Employee\_Name

**Column:** Employee\_ID

**This column is a primary key**

**Description:** An ID that uniquely identifies an employee.

**Database Name:**

**Table Name:** Employee

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Employee\_Name

**Description:** The first and last name of the employee.

**Database Name:**

**Table Name:** Employee

**Data Type:** character

**Type Qualifier:** 20

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** works\_on

**Cardinality:** One Employee works\_on Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

**Constraint line:** turned\_into

**Cardinality:** One Employee turned\_into Zero, One or Many Z\_Bill

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Employee\_ID

**Role Name:**

## Table: Job\_Order

**Database Name:**

**Database Comment:**

**Source Entity:** Enterprice model"."Job Order

**Business Description:** A document that contains detailed information concerning a specific job.

**Primary Keys:**

Job\_Number

Z\_Bill\_Number

Customer\_ID

Employee\_ID

**Foreign Keys:**

Z\_Bill\_Number

Customer\_ID

Employee\_ID

**Non-Key Columns:**

Tire\_Size

Details

Location

Ticket\_Date

**Column:** Customer\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** The ID that uniquely identifies a customer.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Details

**Description:** The details of the job being worked on.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** varchar

**Type Qualifier:** 40

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Employee\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** An ID that uniquely identifies an employee.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Job\_Number

**This column is a primary key**

**Description:** The unique number that identifies a specific job order.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Location

**Description:** The location of where the piece is at.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** character

**Type Qualifier:** 15

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Ticket\_Date

**Description:** The start and end date of the work.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** datetime

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Tire\_Size

**Description:** The size of the tire.

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Z\_Bill\_Number

**This column is a primary key**

**This column is a foreign key**

**Description:** A number that uniquely identifies the Z-Bill

**Database Name:**

**Table Name:** Job\_Order

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** contains

**Cardinality:** One Z\_Bill contains Zero, One or Many Job\_Order

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

**Constraint line:** worked\_on

**Cardinality:** One Job\_Order worked\_on Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Job\_Number

**Role Name:**

## Table: Mold

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Mold

**Business Description:** A piece of equipment that is used to create different tire pieces depending on the size.

**Primary Keys:**

Tic\_Code

**Foreign Keys:**

**Non-Key Columns:**

Delivery\_Ticket\_Number

**Column:** Delivery\_Ticket\_Number

**Description:** A number identifying a delivery ticket.

**Database Name:**

**Table Name:** Mold

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Tic\_Code

**This column is a primary key**

**Description:** A 5 digit combination of numbers and alphabetical characters.

**Database Name:**

**Table Name:** Mold

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** contains

**Cardinality:** One Mold contains Zero, One or Many Piece

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Tic\_Code

**Role Name:**

## Table: Piece

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Piece

**Business Description:** The item that an employee has ordered.

**Primary Keys:**

Tic\_Code

Piece\_Number

**Foreign Keys:**

Tic\_Code

**Non-Key Columns:**

Mold\_Number

Mold\_Code

**Column:** Mold\_Code

**Description:** The size of the mold.

**Database Name:**

**Table Name:** Piece

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Mold\_Number

**Description:** A code identifying a specific mold.

**Database Name:**

**Table Name:** Piece

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Piece\_Number

**This column is a primary key**

**Description:** An identifier that uniquely identifies a piece.

**Database Name:**

**Table Name:** Piece

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Tic\_Code

**This column is a primary key**

**This column is a foreign key**

**Description:** A 5 digit combination of numbers and alphabetical characters that uniquely identify the Piece..

**Database Name:**

**Table Name:** Piece

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** contains

**Cardinality:** One Mold contains Zero, One or Many Piece

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Tic\_Code

**Role Name:**

**Constraint line:** has\_many

**Cardinality:** One Piece has\_many Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

## Table: Status

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Status

**Business Description:** Describes the current position of the work.

**Primary Keys:**

Employee\_ID

Job\_Number

Piece\_Number

Z\_Bill\_Number

Customer\_ID

Tic\_Code

**Foreign Keys:**

Employee\_ID

Job\_Number

Piece\_Number

Z\_Bill\_Number

Customer\_ID

Tic\_Code

**Non-Key Columns:**

Beginning\_Date

End\_Date

Ticket\_Number

**Column:** Beginning\_Date

**Description:** It displays the beginning date of the work.

**Database Name:**

**Table Name:** Status

**Data Type:** datetime

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Customer\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** The ID that uniquely identifies a customer.

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Employee\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** An ID that uniquely identifies an employee.

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** End\_Date

**Description:** It displays the end date of the work.

**Database Name:**

**Table Name:** Status

**Data Type:** datetime

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Job\_Number

**This column is a primary key**

**This column is a foreign key**

**Description:** The unique number that identifies a specific job order.

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Piece\_Number

**This column is a primary key**

**This column is a foreign key**

**Description:** An identifier that uniquely identifies a piece.

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Tic\_Code

**This column is a primary key**

**This column is a foreign key**

**Description:** A 5 digit combination of numbers and alphabetical characters.

**Database Name:**

**Table Name:** Status

**Data Type:** character

**Type Qualifier:** 10

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Ticket\_Number

**Description:**

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Z\_Bill\_Number

**This column is a primary key**

**This column is a foreign key**

**Description:** A number that uniquely identifies the Z-Bill

**Database Name:**

**Table Name:** Status

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** has\_many

**Cardinality:** One Piece has\_many Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

**Constraint line:** worked\_on

**Cardinality:** One Job\_Order worked\_on Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Job\_Number

**Role Name:**

**Constraint line:** works\_on

**Cardinality:** One Employee works\_on Zero, One or Many Status

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

## Table: Z\_Bill

**Database Name:**

**Database Comment:**

**Source Entity:** "Enterprice model".Z-Bill

**Business Description:** An order created by the customer detailing what item they need.

**Primary Keys:**

Z\_Bill\_Number

Customer\_ID

Employee\_ID

**Foreign Keys:**

Customer\_ID

Employee\_ID

**Non-Key Columns:**

Exp\_\_Number

Purchase\_Order\_Number

Services

Date

**Column:** Customer\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** The ID that uniquely identifies a customer.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Date

**Description:** The date that the job was ordered by the customer.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** datetime

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Employee\_ID

**This column is a primary key**

**This column is a foreign key**

**Description:** An ID that uniquely identifies an employee.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Exp\_\_Number

**Description:** A numerical value that identifies expenses.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Purchase\_Order\_Number

**Description:** A number that identifies a purchase by a customer.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Services

**Description:** A description of the services to be done.

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** varchar

**Type Qualifier:** 40

**Default Nullity:** T

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Column:** Z\_Bill\_Number

**This column is a primary key**

**Description:** A number that uniquely identifies the Z-Bill

**Database Name:**

**Table Name:** Z\_Bill

**Data Type:** integer

**Type Qualifier:**

**Default Nullity:** F

**Default Value:**

**Constraint Check Name:**

**Constraint Check:**

**Database Comment:**

**Constraint line:** turned\_into

**Cardinality:** One Employee turned\_into Zero, One or Many Z\_Bill

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**FK Primary Key Name:** Employee\_ID

**Role Name:**

**Constraint line:** places\_order

**Cardinality:** One Customer places\_order Zero, One or Many Z\_Bill

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>

**Constraint line:** contains

**Cardinality:** One Z\_Bill contains Zero, One or Many Job\_Order

**Identifying:** T

**Description:**

**Parent Update:** Cascade

**Parent Delete:** Restrict

**Child Insert:** Restrict

**Child Update:** Restrict

**Foreign Keys and Roles:** <none>