

Fault_tbl

```
CREATE TABLE Fault_tbl (
    Fault_ID INT NOT NULL AUTO_INCREMENT,
    Fault_Date DATETIME NOT NULL,
    Priority_Level VARCHAR(10) NOT NULL,
    Fault_Description VARCHAR(100) NOT NULL,
    PRIMARY KEY (Fault_ID)
);
```

Staff_tbl

```
CREATE TABLE Staff_tbl (
    Support_ID INT NOT NULL AUTO_INCREMENT,
    Staff_First_Name VARCHAR(100) NOT NULL,
    PRIMARY KEY (Support_ID)
);
```

Client_tbl

```
CREATE TABLE Client_tbl (
    Client_ID INT NOT NULL AUTO_INCREMENT,
    Client_Surname VARCHAR(100) NOT NULL,
    Client_Address VARCHAR(100) NOT NULL,
    Client_Postcode VARCHAR(10) NOT NULL,
    PRIMARY KEY (Client_ID)
);
```

Site_tbl

```
CREATE TABLE Site_tbl (
    Site_ID INT NOT NULL AUTO_INCREMENT,
    Site_Name VARCHAR(50) NOT NULL,
    Site_Capacity INT NOT NULL CHECK (Site_Capacity > 0),
    PRIMARY KEY (Site_ID)
);
```

Client_Fault_tbl

```
CREATE TABLE Client_Fault_tbl (
    Client_Fault_ID INT NOT NULL AUTO_INCREMENT,
    Fault_ID INT NOT NULL,
    Support_ID INT NOT NULL,
    Client_ID INT NOT NULL,
    Site_ID INT NOT NULL,
```

```
PRIMARY KEY (Client_Fault_ID),  
FOREIGN KEY (Fault_ID) REFERENCES Fault_tbl(Fault_ID),  
FOREIGN KEY (Support_ID) REFERENCES Staff_tbl(Support_ID),  
FOREIGN KEY (Client_ID) REFERENCES Client_tbl(Client_ID),  
FOREIGN KEY (Site_ID) REFERENCES Site_tbl(Site_ID)  
);
```

Example Inserts

```
INSERT INTO Fault_tbl (Fault_Date, Priority_Level, Fault_Description)
VALUES ('2025-01-10', 'High', 'Conveyor belt jam in packaging area');
```

```
INSERT INTO Fault_tbl (Fault_Date, Priority_Level, Fault_Description)
VALUES ('2025-01-12', 'Medium', 'Hydraulic leak near press machine');
```

Example Inserts

```
INSERT INTO Staff_tbl (Staff_First_Name)
VALUES ('Mariya');
```

```
INSERT INTO Staff_tbl (Staff_First_Name)
VALUES ('Aranos');
```

Example Inserts

```
INSERT INTO Client_tbl (Client_Surname, Client_Address, Client_Postcode)
VALUES ('Mitchell', '352 Cornwall Avenue', 'QI2 7YN');
```

```
INSERT INTO Client_tbl (Client_Surname, Client_Address, Client_Postcode)
VALUES ('Gilbert', '126 Vane Avenue', 'MW6 6KZ');
```

Example Inserts

```
INSERT INTO Site_tbl (Site_Name, Site_Capacity)
VALUES ('North Plant', 120);
```

```
INSERT INTO Site_tbl (Site_Name, Site_Capacity)
VALUES ('East Works', 200);
```


Example Selects

```
SELECT Fault_ID, Fault_Date, Priority_Level, Fault_Description
FROM Fault_tbl
WHERE Priority_Level = 'Critical';
```

Fault ID	Fault Date	Priority Level	Fault Description
4	15/01/2025	Critical	Overheating motor on Line 3
9	21/01/2025	Critical	Emergency shutdown triggered unexpectedly

Example Selects

```
SELECT Support_ID, Staff_First_Name
FROM Staff_tbl
WHERE Staff_First_Name = 'Mariya';
```

Support Staff ID	Staff First Name
1	Mariya

Example Selects

```
SELECT Client_ID, Client_Surname, Client_Postcode
FROM Client_tbl
WHERE Client_Postcode = 'MW6 6KZ';
```

Client ID	Client Surname	Client Address	Client Postcode
2	Gilbert	126 Vane Avenue	MW6 6KZ

Example Selects

```
SELECT Site_ID, Site_Name, Site_Capacity
FROM Site_tbl
WHERE Site_Capacity > 150;
```

Site ID	Site Name	Site Capacity
2	East Works	200

Example Selects

```
SELECT Client_Fault_ID, Fault_ID, Client_ID, Site_ID
FROM Client_Fault_tbl
WHERE Site_ID = 1;
```

Client Fault ID	Fault ID	Support Staff ID	Client ID	Site ID
1	1	3	1	1

+	+	-	+	-
3	3	3	3	1