

# PTJ Database

## About SQL database:

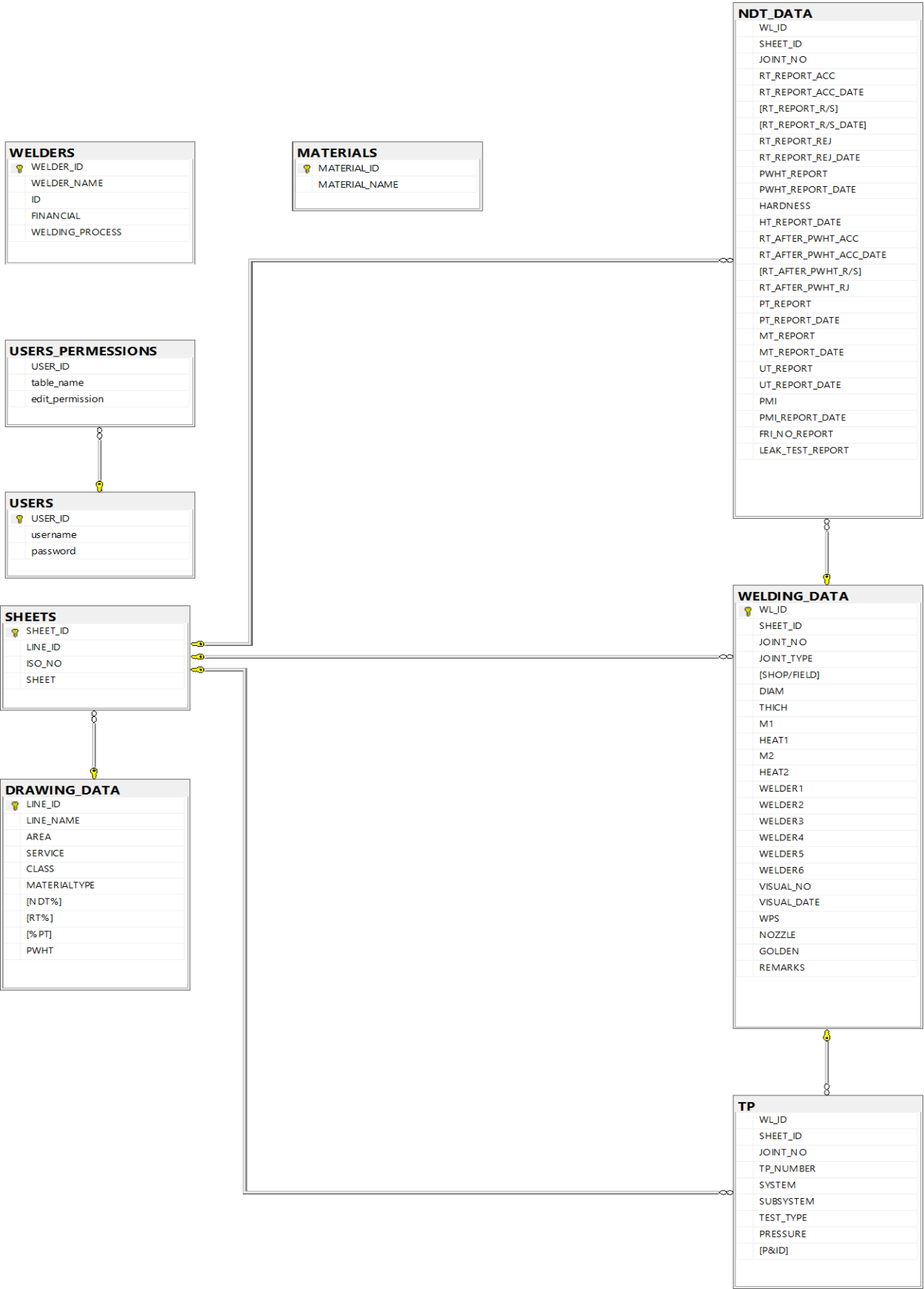
- Why we choose SQL database?

SQL database can hold a huge amount of data and handle large amount of users at same time and execute a lot of queries(Insert, update , delete and view records) at same time using queues.

- Database System: SQL Server 2019
- Maximum Server Memory: 2147483647 MB
- Difference between Access DB and SQL DB:

SQL DB	Access DB
MAX SIZE: 500,000 TB	MAX SIZE: 2GB
Can Hold Over 2,000,000,000 Object	Can Hold a little Over 32,000 Object
Can handle over 32,000 users at one time.	has a limitation of 255 simultaneous users

Database Diagram:



## **Relationships:**

- **DRAWING\_DATA --> SHEETS: Connected by LINE\_ID**
- **SHEETS --> WELDING\_DATA: Connected by SHEET\_ID**
- **NDT\_DATA --> (SHEETS,WELDING\_DATA): Connected by SHEET\_ID AND WL\_ID**
- **TP --> (SHEETS,WELDING\_DATA): Connected by SEET\_ID AND WL\_ID**

**USERS AND USERS\_PERMISSIONS Tables: these tables connected by USER\_ID column**

- **USERS table: hold information about user ("USER\_ID" ,"username" ,"password")**
- **USERS\_PERMISSIONS table: assign database tables to user to give him access to this table with "edit\_permission" (this permission define if user can delete/edit records or only insert new records).**