

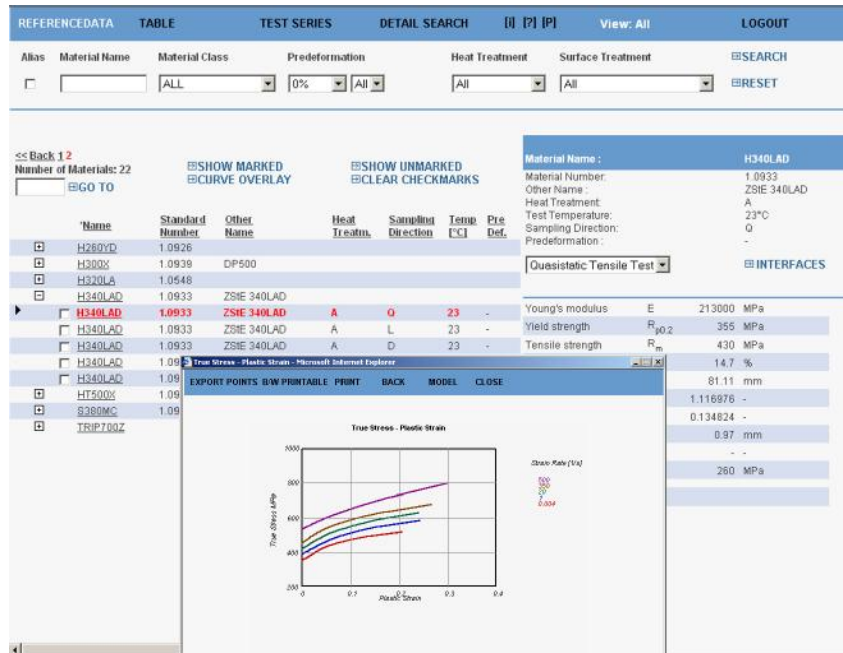
Based on the results of the comprehensive research project "Material and processing relevant material values for sheet steel of normal strength, high strength and stainless steels" executed in close cooperation by steel producers, automotive manufacturers, suppliers and research institutes, M-Base has developed a database system especially designed for the administration of the gained material data and their provision in CAE systems.

During this project a representative selection of steels were systematically tested. Great importance was attached to uniform test conditions and evaluation methods in order to achieve comparable results. The major aim of the project was to make reliable data available for the application in CAE systems. Important boundary conditions, such as anisotropies or pre-deformations are considered systematically.

Following the project, a consortium of five automotive manufacturers contracted M-Base to develop the material database system MARLIS, which serves the management and further maintenance of the project data. Meanwhile, the automotive manufacturers use this system in the second generation. The basic set of data, which was jointly defined, can be individually extended by each participant. All required modules for editing and administration are available and can be used to administer the complete set of material data, especially the CAE data.

Particularly the system can be used for following purposes:

- for the internal data management from OEMs of the automotive industry, suppliers and test institutions,
- for the provision of material data in CAE systems on the intra/internet,



The MARLIS CAE Database

- as product information system for material and semi-finished product suppliers,
- as aid to record, administer and document test data and in order to pass on test results, in standardized format, to customers.

Comfortable interfaces serve to provide CAE data. Interfaces to following leading CAE systems are available:

- ABAQUS
- Autoform
- FEMFAT
- FEMSITE
- FALANCS
- INDEED
- LS-DYNA
- NASTRAN
- PAM-CRASH
- PAM-STAMP
- PERMAS

Due to the high software flexibility MARLIS can easily be extended by individual interfaces to other CAE systems.

Characteristic feature from MARLIS

is the extensive access authorization management. Thus, it is possible to present standard users only the choice of data which are relevant for them. This allows fast and effective working. At the same time, the system offers skilled administrators the complete range of functions and data, thus the flexibility which is necessary for maintaining data.

The system is based on up-to-date intranet and internet technologies.

The user only needs a common web browser. Supported are:

- Internet Explorer 5 and higher
- Netscape 4.7, Netscape 6 and higher
- Firefox

On server side a standardized Oracle database (version 8.17 or higher) and an application server (e.g. JBoss, Websphere, Weblogic, Oracle iAs) is required.

MARLIS is internationally marketed by M-Base and is available in German and English. Further languages will follow.