

Information Management:

Interactive Electronic Technical Documentation, IETD

Requirements

Technology should be understandable!
Machines and devices must be useable.
For this, we need appropriate instructions, i.e. technical documentation.

This technical documentation can be very extensive if it has to contain all the information required by the mechanic. Up to now, this could mean that the poor man had to carry around several kilos of paper, drawings, troubleshooting plans, etc. If a description was missing or if the definitions were incorrect, the consequences were fatal when, as an outside

service mechanic, he had to undertake repairs at a distant site.

That costs time and money!

Or, are there solutions which are more reliable? Solutions which don't require you to carry around documentation, maintenance instructions, repair manuals, spare parts catalogues? Solutions which help you to reduce machine down-time to an absolute minimum? Solutions which help your customers to cut costs. Solutions which guarantee higher customer satisfaction?

Are there solutions? Yes!

Using Interactive Electronic Technical Documentation (IETD),

- the technical documentation of simple devices,
 - the technical documentation of more complex devices and systems and
 - software descriptions
- can be collected and viewed.

The possibilities for Interactive Electronic Technical Documentation are almost unlimited.

The components of an Interactive Electronic Technical Documentation might be:

- Set-up and installation instructions
- Operating manuals and instructions
- Repair and maintenance handbooks
- Computer Based Training (CBT)
- Spare parts catalogues with online ordering systems and interfaces for merchandising
- Troubleshooting systems
- Diagnostic systems
- Standard time or job value catalogues
- Product and company presentations
- and much more.

An example

Today, most complex machines and systems are linked to a PC control system. What could be more sensible than to also install the operating manuals and instructions right on the computer, all in a single Interactive Electronic Technical Documentation?

The operators can call up the necessary information using a keyword, without having to go through a lengthy search procedure. Even the most complex topics or operating steps can be displayed audio-visually in a way which cannot be misunderstood. The installation of the machine is optimized. The degree of availability is increased.

The core of IETD is made up of logical associations. Links and cross-references of all types are possible within the individual applications of an IETD, and overall between all modules. For example, it allows you to quickly find particular passages in the technical documentation when search terms are entered. There's no more time spent leafing through reams of paper documentation. In the past, the user needed to take voluminous documentation along with him; today all he needs is a CD, a Notebook, or the Internet.

IETD with SGML

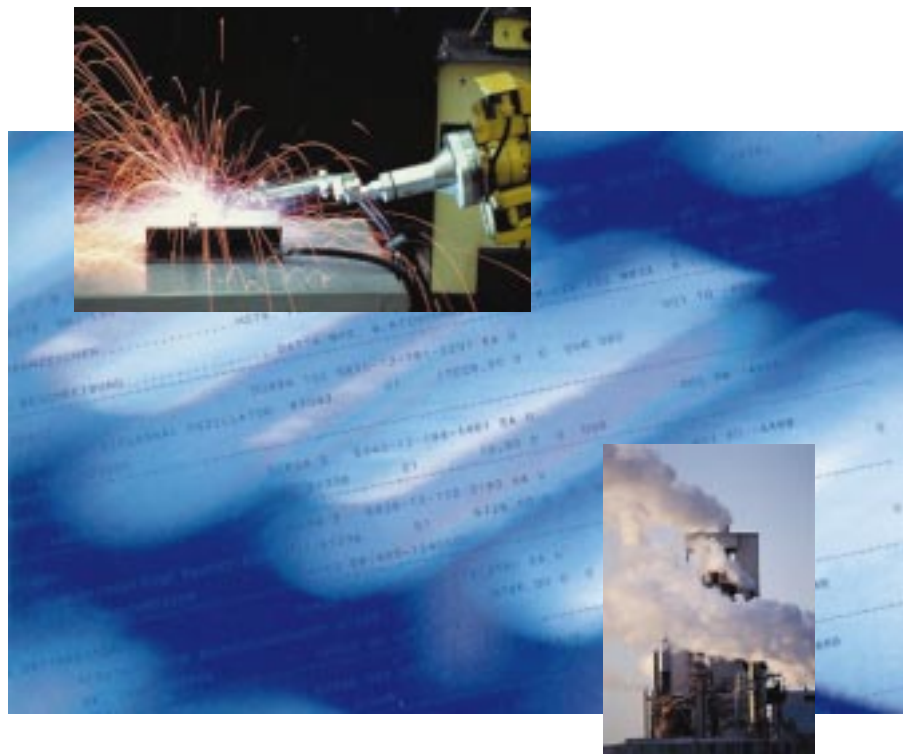
If the data of an Interactive Electronic Technical Documentation is compiled according to the conventions of the document description language SGML and stored in a database, there are additional synergistic effects. How often are components from different documentations, technical descriptions, marketing write-ups and product descriptions identical? When modifications are made, how much effort does it involve to create consistent documents?



When SGML is used, many things can be automated and optimized. Identical text passages are created only once. These can then be integrated in any number of descriptions.

Changes in a text element are made only once and in one place in the database. From here on out, they flow automatically and consistently into all documents in which the text element appears. Why? Because the text as such is not included in each document; instead there is a reference to the text element stored in

the database. The same is true for photos, graphics, films, audio texts and much more.





IETD in practice

If the user of an electronic troubleshooting program finds an error in a machine, he can use the links within the IETD to be taken automatically to other areas of the technical documentation. The following options are available:

- a link to repair instructions, which highlights the error correction,
- a link to a spare parts catalogue if a spare part is needed for the repair,
- a link to a standard time or job value catalogue for determination of the repair time for cost planning and time calculation,
- or a link to a list of the spare parts needed for the repair, special tools etc. which are necessary to correct the problem.

Integrated troubleshooting and diagnostic systems can usually be directly connected to the system to be checked. Thus, with minimal effort, the errors can be read out or recognized using the values read out.

Computer Based Training included?

One more important component of an Interactive Electronic Technical Documentation can be Computer Based Training (CBT).

Data already available (from documentation, repair instructions etc.) can be used again for employee training.

The greatest advantage of CBT is apart from its being independent of suitable instructors its permanent availability. Computer Based Training can be carried out at the exact time when it is needed by the operators at any time and on any computer. Just in time and just in place.

Your customers will thank you (and happily pay), when you provide them with such a CBT application. The investment pays itself off quickly. Even when operators of a system are changed, the training of new employees is no longer a problem. When problems occur, the correct operating step can be immediately called up.

In this way, it can be ascertained where which error was made. The workload of the service personnel is lessened and they can attend to more important matters.

Perspectives

In the near future, teleservice will help to optimize the service offerings of the machine and systems manufacturers. Teleservice offers numerous possibilities

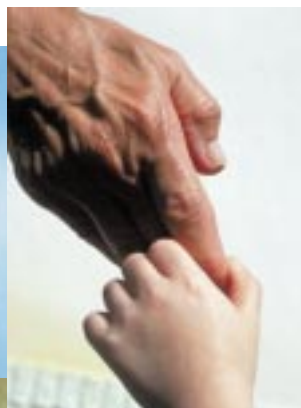
- assistance with startup,
- distance diagnosis,
- troubleshooting,
- commencement of repair operations.

In central Call Centers, specialists can assist and instruct the service personnel on site with the help of digitally transmitted data and information and with online video transmissions. Lengthy travel time is eliminated. Help can be given as quickly as possible.

**Are your customers ready to pay for lower machine and system downtime?
And is your company ready to invest in increased customer satisfaction?**

If you think so, then take advantage of the options for an Interactive Electronic Technical Documentation!

We are at your service to answer any additional questions or make a personal presentation.





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