MEMO

SINTEF

www.sintef.no

Address:
SINTEF group, MARINTEK,
Structural Engineering
Box 4125, Valentinlyst
7450 Trondheim
Norway

Location: Otto Nielsens vei 10

Tel :+47 7359 5611
Fax :+47 7359 2660

MEMO CONCERNS	FOR YOUR ATTENTION	COMMENTS ARE INVITED	FOR YOUR INFORMATION	AS AGREED
Release Notes **USFOS Version 8-0**				

DISTRIBUTION				
Members of USFOS user group			x	

FILE CODE	CLASSIFICATION
	Open

ELECTRONIC FILE CODE

PROJECT NO.	DATE	PERSON RESPONSIBLE/AUTHOR	NUMBER OF PAGES
700030	2003-07-01	Tore Holmås	4

Release notes
USFOS 8-0, July 2003

Contents:

1. Introduction

The current version of USFOS is version 8-0 with release date 2003-07-01, and the release contains following:

❑ CD-ROM
❑ Release Notes (this MEMO)

Except for this MEMO, no "paper information" will be distributed in connection with this release. All information is stored on the CD.

USFOS runs on both Windows (NT, 2000 and XP) and Linux (RedHat 7.2 ->), and both versions are distributed on the CD.
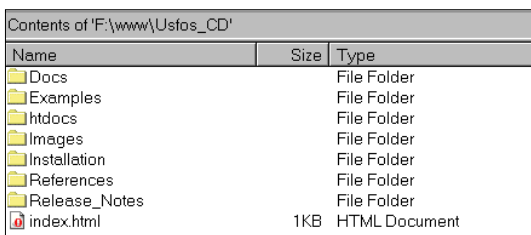
2. Contents of CD-ROM

2.1. Introduction

All USFOS information is available from HTML documents, which are read by standard WEB browsers (Netscape, Opera, Internet Explorer etc), and the information is stored as pdf documents , HTML text, or plain ASCII text.

2.2. Overview

The contents of the current CD-ROM are easiest found using either a file browser, (windows-explorer) or a WEB browser. However, some information about the contents will be given in this MEMO.

Figure 2.2-1 describes the files/folders on the top level of the CD-ROM, and the HTML document main page is accessed through the *"index.html"*, (double click from explorer).

Figure 2.2-1 Contents of Usfos 8-0 CD-ROM

The "*Docs*" folder contains general information, all described in PDF format (the free Acrobat Reader could be used).

The HTML document contains two main branches (see Figure 2.2-2):
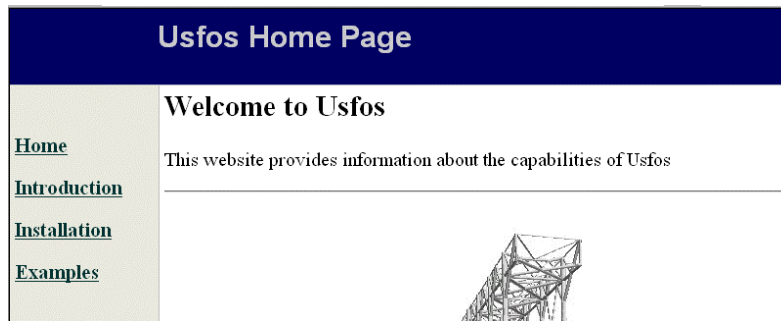
- ❑ Installation
- ❑ Examples

Figure 2.2-2 Main Page of USFOS 8-0 HTML document

3. News in USFOS version 8-0.

3.1. Extended Graphical User Interface

The USFOS 8-0 release contains.

The Graphical Interface should cover following functions:

- ❑ Preparing USFOS input files
- ❑ Starting USFOS analyses
- ❑ Inspecting USFOS analysis results

The interface is a "**USFOS control centre**".

Step by step, the analysis is prepared:

- ❑ Open structural model prior to the simulation ("Open Model file")
- ❑ Use the Set Up Wizard for definition of USFOS commands
- ❑ Edit existing input files using the special USFOS editor (context sensitive)
- ❑ Run USFOS and check the results
- ❑ Etc…

The Graphical User Interface is described in detail in a separate manual (XACT_um.pdf), which is available on the CD-ROM and online from the interface.

It is highly recommended to take a look in the manual to get an idea of the possibilities in USFOS 8-0.

3.2.   Model Import / Genie Compatibility

Models generated by SESAM GENIE will be utilised better by USFOS 8-0 than earlier versions. In addition to the standard FE-data, following information is interpreted by USFOS:

- ❑ Yield stress (defined in the extended MISOSEL record)
- ❑ Sets (or groups) including their names
- ❑ Load Labels (text explaining the different load cases)

The information is also available in XACT prior to the USFOS simulation.

3.3.   Redefine Boundary Conditions

With the new CHG_BOUN command, the user may change the structural boundary conditions without modifying the original structural file. The boundary conditions are assigned for all nodes in once or node by node. A later definition will override earlier definitions in the input file.

Example:

CHG_BOUN   Free Free Free   Free Free Free All
CHG_BOUN   Fix Fix Fix   Free Free Free Node   1001 1002 1003

The first command releases all degrees of freedom (unaffected of what is defined in the model file), and the second command is fixing the translation degrees of freedom for nodes 1001, 1002 and 1003.

If the commands were given in opposite order, all degree of freedom would have been released.

4.   New/modified input identifiers

Since last main release (7-9), following input identifiers are added/extended:

CHG_BOUN :   Override boundary conditions specified in the structural model file