7. HSC INSTALLATION

7.1 System Requirements

Operating system: Windows 2000, XP, Vista or Windows 7 (32- and 64 bit)

Note: Excel Addins may not work within 64-bit Excel.

Processor: Pentium 400 MHz or faster

Memory: 256 MB or more

Disk space: about 500 MB

Monitor: VGA or better

Mouse: Windows compatible

The system requirements for HSC are very typical of all Windows programs.

7.2 HSC 7.1 Installation

HSC is installed in the same way as most other Windows programs.

Preliminary Requirements:

These preliminary steps are not always needed, but in some cases these are very important to take into account.

1. Log on to the computer with Installation privileges (usually Administrator).

2. Close all other Windows programs just in case.

3. You must uninstall old HSC 7.x versions like HSC 6.20, 6.3, 7.0, 7.08, etc. using Windows Control Panel Add/Remove Programs Dialog. The Excel Add-Ins may not work properly if old HSC 7.x versions are not removed.

4. It is not necessary to remove the old HSC 1.0 - 6.10 versions if you want to upgrade to HSC 7. These can still be used if the new 7 will be installed in a different directory. A different directory \HSC7\ is proposed as default.

Note that you can keep the old HSC versions in the same computer than you install HSC 7.0. However, do not install old HSC version after HSC 7 installation, because old HSC versions may replace the new TTF16.OCX file with the old one in the Windows System 32 folder. Then you will get "Runtime Error '438’" when you run HSC 7. Old HSC version work with the new TTF16.OCX but the new HSC do not work with the old TTF16.OCX.

HSC 7.1 Installation:

1. Insert the HSC CD in your drive.

2. Select SETUP.EXE from the HSC CD. Answer the questions. If you have any problems, please see the notes below and Chapter 7.6. It is recomended to install HSC 7.1 to default folder \HSC7\.

Note that in Windows 7 you must run SETUP.EXE using option "Run as Administrator", otherwise you may get "Error 1721" at the end of the installation. See details from Chapter 7.8.
7.3 Important Notes

The HSC user must also have full permission for the HSC7 folder! You may check the access permissions by clicking the HSC7 folder in My Computer with the right mouse button and selecting the Properties dialog and Security tab. See Figure 1.

The installation routine saves the "Downloaded Installations" folder HSC Chemistry 7.00.msi file in Windows. Windows uses this file, for example, when a new Windows user opens the HSC for the first time or when the installation needs some repair. Normally this file is not needed.

Figure 1. HSC7 folder Properties dialog of Windows My Computer. The HSC user must have full permissions for the HSC7 folder because HSC saves INI and other files into this folder.

Please verify from the Windows Printers and Faxes Dialog that the Default Windows Printer really exists and is operating properly, Figure 2. If the default printer status is "unable to connect" and/or "print spooler service is not running" then the HSC and Sim modules may run extremely slowly and sluggishly. Please check and change the default printer properties using the right mouse menu in the Printers and Faxes dialog, Figure 2.

Figure 2. Windows Printers and Faxes dialog.

Installation of HSC Excel Add-In Functions

See Chapter 27. Excel Add-In Functions for details.
7.4 Registration

Figure 3. HSC Chemistry activation message. Activate later option makes possible to run HSC 14 days without activation.
HSC must be registered and activated within 14 days from the first startup. Each computer requires an individual activation code. When you start the program, the following message will appear, Figure 3. To activate you need to take the following steps:

1. **Press Get the activation code… button.** Fill out the registration form from the “Get activation code…” button. Your Machine code and HSC version are automatically detected. Note that you have to fill only the mandatory rows, tool tip text will show you the mandatory rows.

2. **Send it to hsc@outotec.com or by fax.** We will send you your activation code which is based on your machine code. There are also instructions on the registration form.

3. **Copy the activation code to the field** and press the “Activate HSC” button. Then the program is activated and the activation window will not appear again.

4. You can use the program for 14 days before registration. Please note that this is not a demo or trial version. To use the program you always need a license.

5. **NOTE:** You must have full admin rights to your \HSC7-folder, otherwise the activation do not succeed! Note also that later on you must have full rights to your \HSC7-folder, otherwise HSC do not work properly, because HSC saves initial files into this folder.
7.5 Removing HSC from the computer (Uninstallation)

HSC is uninstalled in the same way as most other Windows programs:

1. Select Add/Remove Programs from the Windows Control Panel.
2. Select HSC Chemistry from the list.
3. Press Remove and follow the instructions.

You may also delete the following file from the Windows folder:
"C:\Users\User name\AppData\Local\Downloaded Installations\HSC Chemistry 7.00.msi"

If you have used HSC Add-Ins in Excel you can unselect them from Excel:
2. In the Add-Ins dialog unselect “HSC 7.0 Add-In.”

7.6 Making an image from the hard drive where HSC is installed

The Licensor grants the Licensee a non-exclusive license to use a copy of HSC Chemistry on the number of computers granted by this license. The number of terminals that have access to HSC Chemistry in a network, simultaneously or at different times, must be limited to the same number. The computers which have access to HSC Chemistry must be fixed, i.e. the HSC license is NOT a floating license. A non-exclusive license is also granted with the enclosed printed documentation.

The Licensee is not permitted to install HSC on a larger number of computers than specified in this license. However, Company/University HSC License entitles the licensee to install HSC 7 on all the computers within the same Company, Site, University or Department. However, activation is available up to the given number of computers. This number may easily be increased later on, if necessary. A Company/University Licensee may run HSC for 14 days without activation. A "Site" is defined as the physical address (single location) of the licensee.

Company/University HSC License may be installed on one computer and the hard drive image is copied to other computers. HSC can be installed in this way. The 14-day registration period starts when HSC is started for the first time. Because of this it is recommended either not to start HSC before the image is made or to register the HSC. This way a new user has that 14-day period to register the program.

When HSC is installed or copied to a new computer, it always needs registration. HSC uses the computer’s machine code to specify the computer and therefore the activation code works only in the computer that has the correct machine code.
7.7 HSC INI Files

The HSC installation program will put the HSC7.INI file in your HSC7 directory and will automatically update the path information of the HSC modules. HSC Chemistry updates this file automatically if you change the settings in HSC Chemistry. However, you can also edit this file with any ASCII editor such as Windows Notepad. When you start HSC, it always reads this HSC7.INI file, which gives the default settings to the program.

Figure 3 gives an example of possible HSC7.INI settings. Note that Own and Main databases can exist in any drive or directory. The order of rows must be the same as in this example.

```
[HSC Path]
Server=C:\HSC7\                     ' Path of HSC in your computer
Terminal=C:\HSC7\                     ' Path of HSC in server
OwnDB=C:\HSC7\DATABASES\OWNDB7.HSC   ' Path of Own Database
MainDB=C:\HSC7\DATABASES\MAINDB7.HSC   ' Path of Main Database
SolGasMix=C:\HSC7\SGM.EXE             ' Path of Solgasmix
UserName=Antti Roine                  ' HSC License: User Name
Organization=Outotec                   ' HSC License: Organization Name
LicenseNumber=60000                    ' HSC License: Serial Number

[Table Font]                          ' Default Table Font
Font=Courier New
Size=10
Bold=-1
Italic=0

[Diagram Font]                        ' Default Diagram Font
Font=Times New Roman
Size=10
Bold=-1
Italic=0

[Marginal]                            ' Default Printing Marginals
PaperSize=9
Top=2
Left=2

[Units]                               ' Default Units
Temperature=C                        ' Temperature Units
Energy=cal                           ' Energy Units
Warnings=0                            ' Warnings Off/On
```

Figure 3. Settings of HSC7.INI file in the Windows directory

If you reinstall HSC in the same directory, do not overwrite your old OwnDB7.HSC file if you have saved data on it, i.e. copy this file first to some other directory.

Please note also that selected fonts and sizes must be available in your printer. However, you can also change fonts later by pressing the Settings button in the HSC Main Menu. You can change the default printer using the Printers icon on the Control Panel.

The Sim module uses Sim_FlowSheet1.INI and Sim_FlowSheet2.INI files for saving user settings. You may recover the original settings by deleting these files from the HSC7 folder.
7.8 HSC 7 Installation to Windows 7

HSC 7 may be installed to Windows 7 (32 and 64 bit) using normal installation procedure, however, you must run Setup.exe of HSC 7 using Windows 7 Explorer "Run as Administrator" option, see enclosed image.

Ie. running Setup.exe as administrator is not enough under Windows 7! If you just double click the HSC Setup.exe, then you may get "Error 1721" at the end of the installation procedure, if you do not select "Run as Administrator" option.

Note: In some Windows 7 computers you may have to run HSC Setup.exe file under "Windows XP Compatibility mode". See details from: http://www.microsoft.com/windows/virtual-pc/default.aspx
7.9 HSC 7 Installation to Mac

HSC 7 is made for Windows 7 (32 and 64 bit), however, you may use HSC in Mac computer using Boot Camp software, see details from:

http://en.wikipedia.org/wiki/Boot_Camp_(software)

You must partitiate one part of the hard disk for the Windows 7. Then you can install HSC as described in chapter 7.8.

An other option is to install virtual PC running Windows on Mac, see details from:

http://en.wikipedia.org/wiki/VMware_Fusion

http://www.vmware.com/products/fusion/overview.html