

IBM-PC

32 versus 16 bit Systems

The distributed TART2002 system is designed to run on 32 bit systems (Windows'95 or Windows/NT), not 16 bit systems (Windows 3.x or DOS). On exactly the same IBM-PC a 32 bit system will run programs, such as TART2002, over twice as fast as on 16 bit systems. In addition the 32 bit systems are reasonably priced (less than \$ 1000). Therefore I highly recommend that if you are not using a 32 bit system, you update your system; this is a very inexpensive means of more than doubling the power of your IBM-PC.

Installation and Testing of Codes

- 1) Make sure you do not have a directory named TART2002, otherwise installation will overwrite it.
- 2) Using Windows, select the drive to install TART2002 on, i.e., drive C:, D:, etc.
- 3) Use your RIGHT mouse key to drag and drop **TARTZ.EXE** and **INSTALL.BAT** from the TART2002 CD **IBMPC** directory to your hard disk drive, i.e., drive C:, D:, etc.
- 4) To install everything double click on **INSTALL.BAT**. **WARNING - DO NOT** double click on **TARTZ.EXE** - if you do, the correct directory and file structure will **NOT** be installed - **ONLY** use **INSTALL.BAT** for installation. It will take a few minutes to install everything – WINZIP will ask you where you want to install TART2002 – the installation will put EVERYTHING into a directory named TART2002 – you are free to put this anyplace you want on your computer.
- 5) Once installation is finished you can delete **INSTALL.BAT** and **TARTZ.EXE**.
- 6) Copy the **DOCUMENT** directory from the TART2002 CD to the **TART2002** directory on your computer.

That's it - installation is complete.

Installed Directory Structure

You should now have a main directory named TART2002, and within this directory you should have the following sub-directories,

Documentation

DOCUMENT - On-line documentation in Microsoft Word format

Production Codes

TART2002 - TART2002 executable code
 UTILITY - A variety of useful utility executable codes
 EXAMPLES - Example TART2002 input parameters
 CRITS - Example critical assembly TART2002 input parameters

Graphics Codes

TARTCHEK - TARTCHEK executable code
TARТАID - TARТАID executable code
IMAGES - IMAGES executable code
EPICSHOW - EPICSHOW executable code
PLOTTAB - PLOTTAB executable code
EDITOR - FORTRAN executable editor

All of the codes are in executable form, so you can immediately start using the codes.

Verification

It is highly recommended that you not be in too much of a rush to start using the system, and instead spend the time to FIRST verify that TART2002 is producing reliable results.

The example problem is in the TART2002/TART2002 directory ready to be used with TART2002. It is HIGHLY RECOMMENDED that you take the time to first run this problem. To start the problem type,

```
tart02-4
```

The execution time will be somewhere between 100 and 18,000 seconds, (about 2 minutes to 5 hours), depending on the speed of your computer. When the problem ends, copy the utility code, critedit, from the utility directory to the current directory and execute critedit by typing,

```
critedit
```

This will give you a summary of the results of the problems run. The important things to check are at the bottom of the output listing, on your screen, and in the file CRITEDIT.LST.

First check the running time, which will give you a good indication of the relative power of your computer - see TART2002.DOC for a list of expected times on a wide variety of computers.

Next check the calculated Average K-eff - this should be about 0.999... to 1.001...