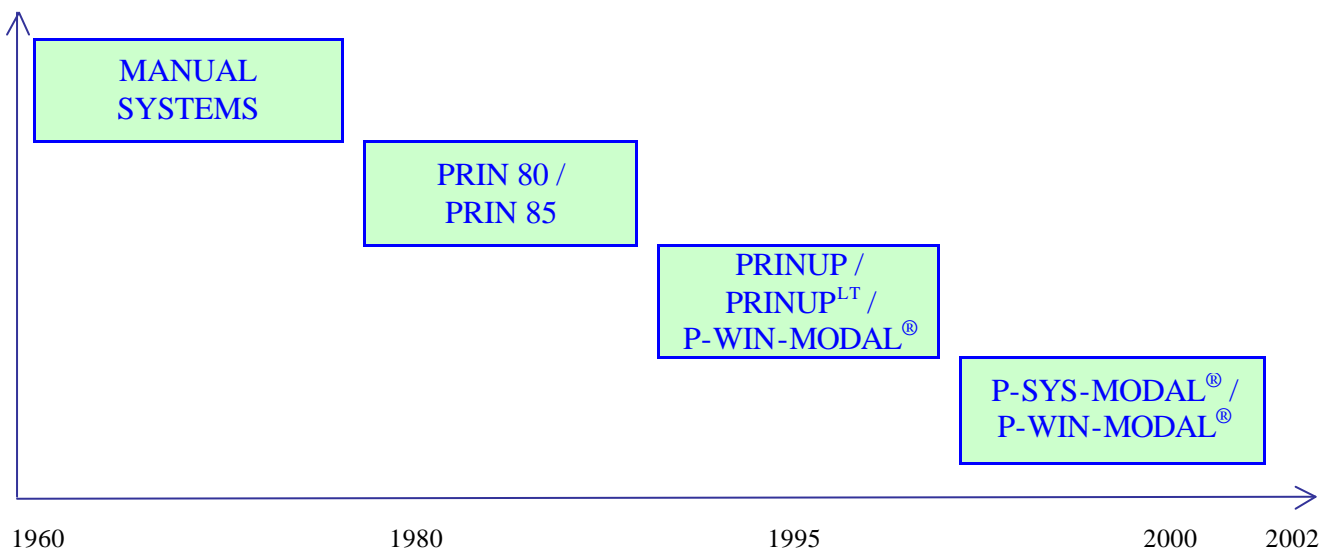




PRODERA

Modal Analysis Systems

EVOLUTION OF PRODERA SYSTEMS IN THE COURSE OF TIME



Since the sixties, PRODERA has been manufacturing and marketing world-wide complete systems aimed at **Modal Analysis**. PRODERA was the first company in the world to use microprocessors in its modal analysis systems. PRODERA has always emphasized the modularity of its systems. The advantage of the first systems controlled via microprocessors was the possibility to drive them either manually or automatically.

The growing power of the PCs available on the market has conducted PRODERA to replace the computers of the brand name INTERTECHNIQUE IN-110 present until then in its PRIN 80 and PRIN 85 systems. The PRINUP system was born.

The software represents an important part in the price of a complete modal analysis system. With a view to keeping the systems as modular as possible, a modal analysis software able to dialog with the PRINUP system (update of the systems PRIN 80 and PRIN 85) and the P-SYS-MODAL system (new system extremely compact using the last developed technologies of surface mounting components) was designed.

POSSIBLE EVOLUTIONS FROM THE SYSTEMS PRIN 80 AND PRIN 85

PRINUP^{LT} Modernization of the PRIN 80 and PRIN 85 systems.

The whole of the PRODERA system, generation, appropriation and acquisition units including the modules GN 484, CG 511, AP 512, CA 532, M 525, ML 457 and FA 540 is kept. One programming parallel interface and one sophisticated acquisition board are integrated in a PC PENTIUM to allow the direct dialog with the PRODERA manual systems.

In this version, only the DLL are supplied. They allow:

- frequencies' display and control
- forces' display and control
- acquisition channels' display and control

The user carries out the calculations from the files data located in the hard disk.

PRINUP This version makes possible the complete dialogue with the PRODERA manual equipment and executes the modal calculations. Thanks to user-friendly menus all along the test, the dialogue is extremely easy and disciplined.

The latest version of the **P-WIN-MODAL[®]** software is compatible with the PRINUP and the new **P-SYS-MODAL[®]** systems.

P-SYS-MODAL[®] The **P-SYS-MODAL[®]** system has been developed to replace the earlier manual PRODERA systems.

The unit, integrated in a 7U rack (height: 310 mm), is equipped with the last generation of multi-layer printed circuits with surface mounting components.

P-SYS-MODAL[®] is controlled by the **P-WIN-MODAL[®]** software extremely easy to use with a minimum of menus offering an organised test progress. With the basic version, 16 exciters can be controlled and 256 measurement channels be acquired. The remote control with the earlier delivered power amplifiers and gain / filter control of the charge amplifiers is taken care of by **P-SYS-MODAL[®]**.

Different functions can be added to **P-WIN-MODAL**[®] due to direct interfaces with:

DynaWorks[®] Software package for managing and analyzing environmental data. It includes a database and a wide range of analysis and display tools.

FEMtools Special application program that includes tools for CAE integration, FE dynamic analysis, test-analysis correlation analysis, sensitivity analysis and automated updating of finite element models. The software is designed to solve all sizes of finite element models for a wide range of industrial applications.

Structural Dynamics Toolbox The Structural Dynamics Toolbox offers general purpose tools for frequency domain parametric identification, test analysis correlation, finite element modeling and model updating.