



ANNEXE 3

Analytical X-Ray Equipment ISO-DEBYEFLEX 3003



1 RADIATION PROTECTION INFORMATION

Some Remarks Concerning Protection against X-Radiation Damage

Dear customer,

You received equipment for X-ray generation from our company. It contains the radiating unit with the built-in X-ray tube wich constitutes the actual X-ray generating source.

In case the design of this radiating unit has been officially approved, you will find attached a photocopy of the respective certificate in duplicate.

If so required, you will also receive proof of a routine test that this radiating unit underwent.

As the user of this radiating unit you are responsible for keeping the certificate together with the operating manual within easy reach of the X-ray equipment.

The design approval certificate enables so-called « Operation without Licence ». This fact, however, does not exempt you from the responsibility to report the intended operation and to adhere to the respective rules and regulations.

Our company is legally obliged to point out to the customer those measures that serve radiation protection; therefore, we recommend the following steps to you:

- 1. Carefully read the operating manual, in particular the descriptions pertaining to functions of the control units and display units.
- 2. Take advantage of equipment-specific protective devices, e.g. door switches and light barriers that can guard off-limit areas.
- 3. Never choose a beam cone angle in excess of what is obsolutely necessary for an economic inspection. Not only is the operator's radiation dose kept to a minimum this way; the quality of the test results is improved as well.
 - In practical terms means that the beam cone should amways be restricted to the film format of the fluorescent screen format by applying a ray limiting diaphragm of a highly absorbent material such as lead in sufficient thickness; this diaphragm can be either provided by the supplier or by the customer.
- 4. Frequently, the cheapest and most convenient radiation protection is achieved by keeping the distance from the radiation source as large as possible.
 - All automated SEIFERT control units render operator-guided monitoring of the operating values unnecessary during radiation time. This benefit is enhanced by the fact that the high voltage is slowly increased up to the preselected value once the equipment has been switched on.
- 5. Always remember that X-radiation is generating as long as the amber pilot light in the control unit is on or flashing and the optional warning blinker lamp or the optional warning flash lamp is active.
- 6. Never forget to remove the key from the control unit during non-operational intervals; keep it in a safe place to prevent its use by unauthorized personnel.
- 7. Always exploit existent shielding facilities. Often structural features can be used to great advantage.
- 8. Mark danger areas off-limit; put up respective signs clearly visible.