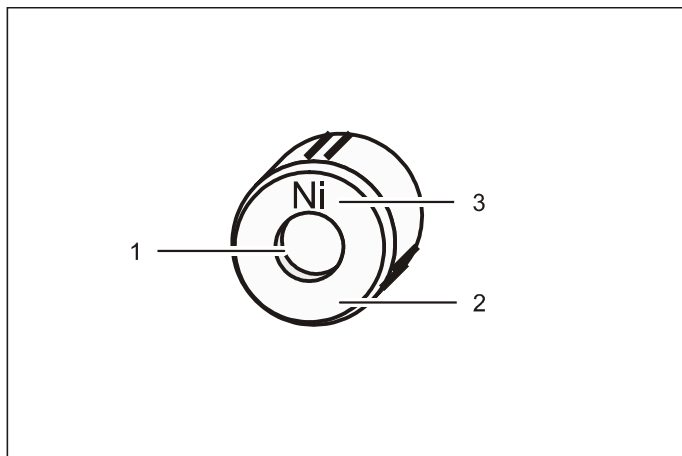


09/01-W97-Sel



Instruction sheet 554 833

Ni-Filter (554 833)

- 1 Foil
- 2 Foil holder
- 3 Symbol of element

1 Description

The Ni-Filter serves as monochromator for the characteristic radiation of the X-ray tube (554 85). As complement to the set of Absorber foils (554 832) it can also be used for experiments on Moseley's law and on λ^3 and Z^4 dependency of the coefficient of attenuation.

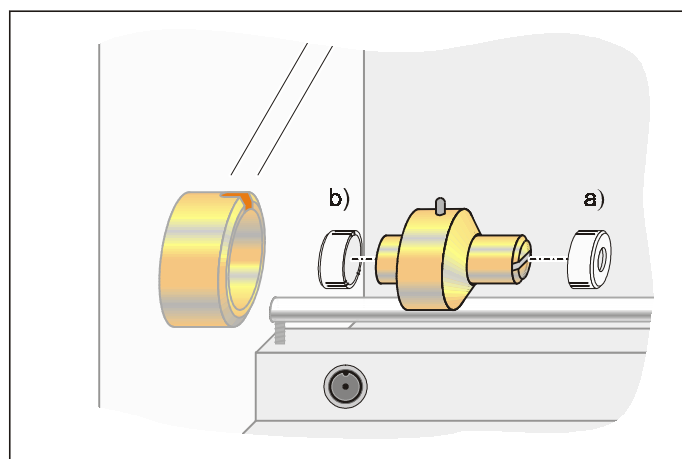
The Ni-filter can be attached to the collimator of the X-ray apparatus (554 81) or to the sensor seat of the goniometer (554 83). When attached to the collimator, it filters the polychromatic X-rays. When mounted on the sensor seat it is possible to determine the wavelength-dependent attenuation of the monochromatic X-rays, which have been produced through Bragg reflection. The transmission curves (the ratio of spectra with absorber to the reference spectrum without absorber) can be used to find the absorption edges and determine the functional attenuation curve outside the absorption edges.

2 Technical data

Foil thickness:	0.015 mm
Foil diameter:	10 mm
Holder:	∅ 24 mm × 11 mm

3 Mounting

3.1 Mounting at collimator of the X-ray apparatus:



3.2 Mounting at sensor seat of the goniometer:

