

**Diagnostic System of the Eindhoven Linac-
Racetrack Microtron Combination,**

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5600MB Eindhoven, The Netherlands - For the
electron storage ring EUTERPE a 10 MeV linac and a
10-75 MeV racetrack microtron will serve as injectors.
For commissioning, that will take place in two stages,
an elaborate diagnostic system is under construction.
First, proper injection into the microtron will be
ensured. For that purpose the properties of the linac
beam will be characterised along the connecting
transfer line by means of OTR, beam position and
current measurements. Hence the beam can be
matched to the calculated acceptance of the microtron.
Second, the microtron itself will be commissioned. 12
x 2 Beam position monitors will be used to fulfil the
twelve closed orbit conditions. A phase-probe in the
microtron drift space will be used to verify the
isochronism-conditions. As a special feature one of the
microtron magnets will be used as spectrometer to
determine accurately the energy of the injected beam
and the voltage and phase of the accelerating cavity.