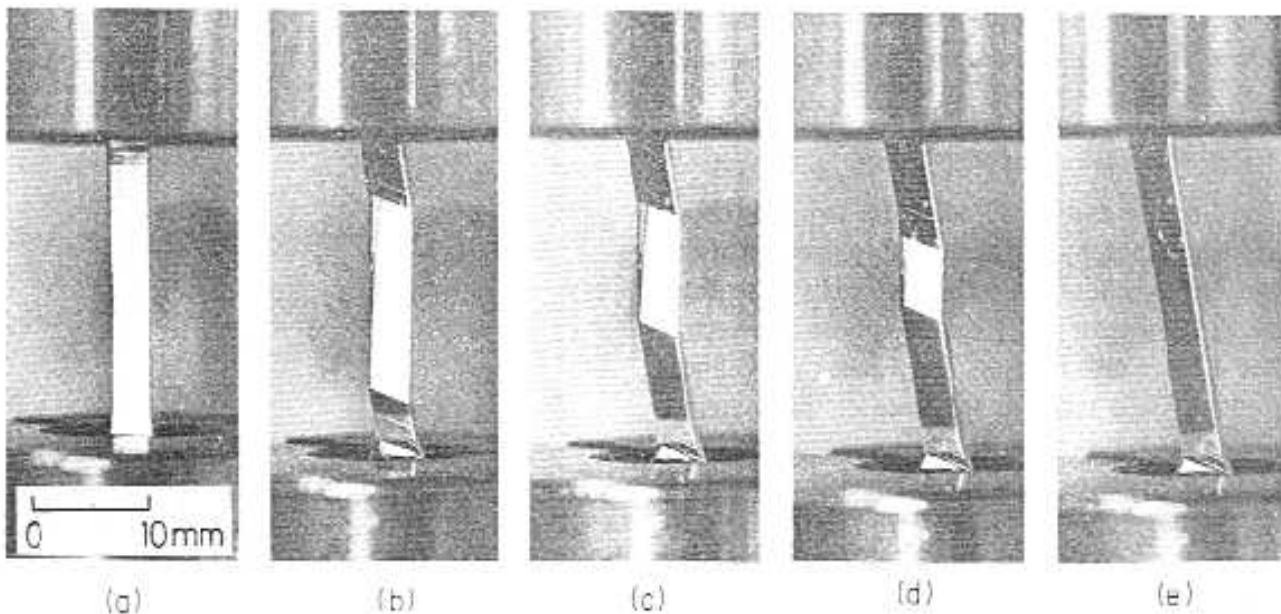


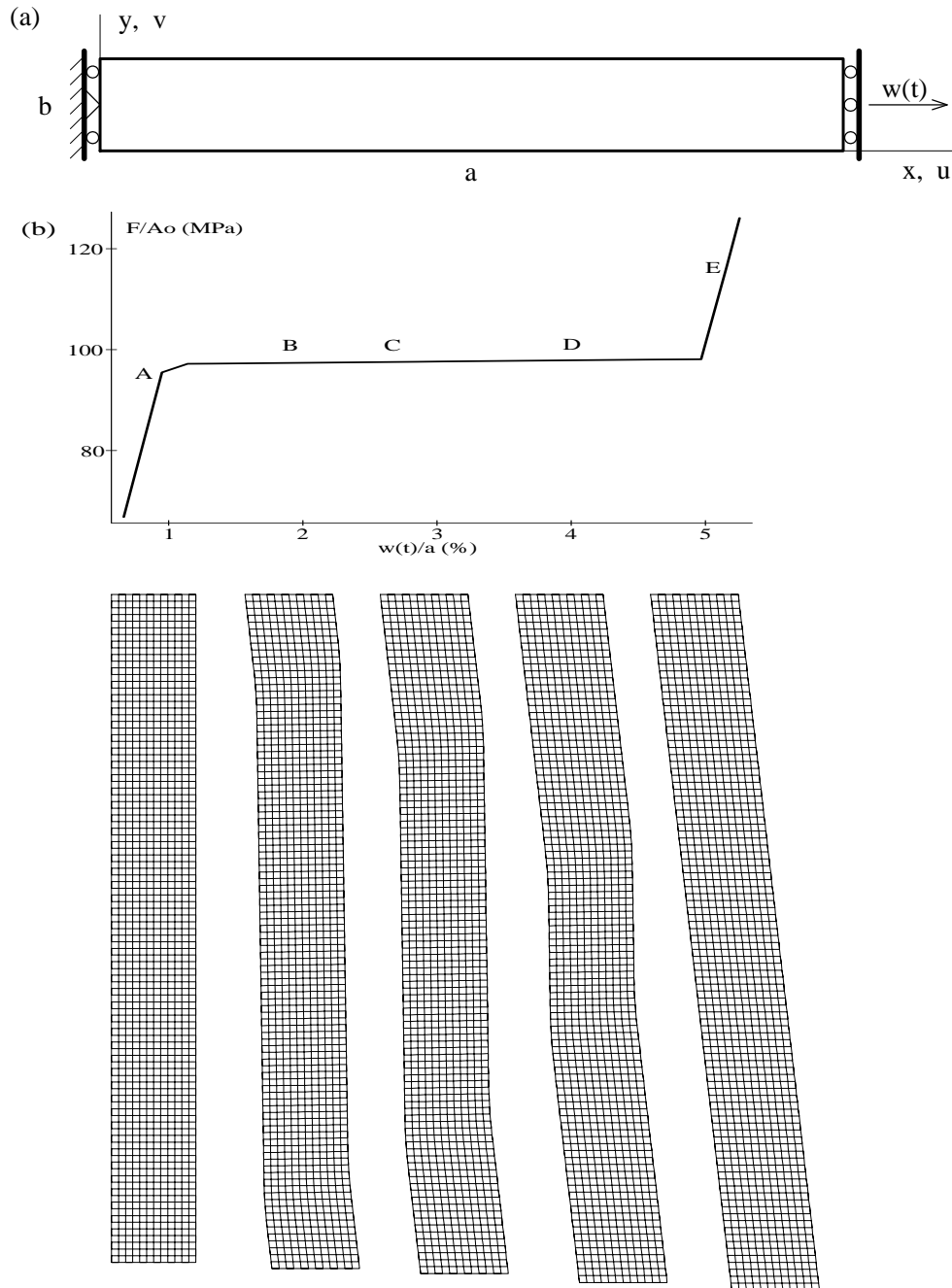
Experimental results of Ichinose, Funatsu & Otsuka
Acta metall., **33**(9): 1615–1620, 1985



A series of macrographs (a) – (e) taken in the experiments by ICHINOSE, FUNATSU & OTSUKA. The propagation of phase transformation fronts (black region) induced by elongation of the specimen can be seen.

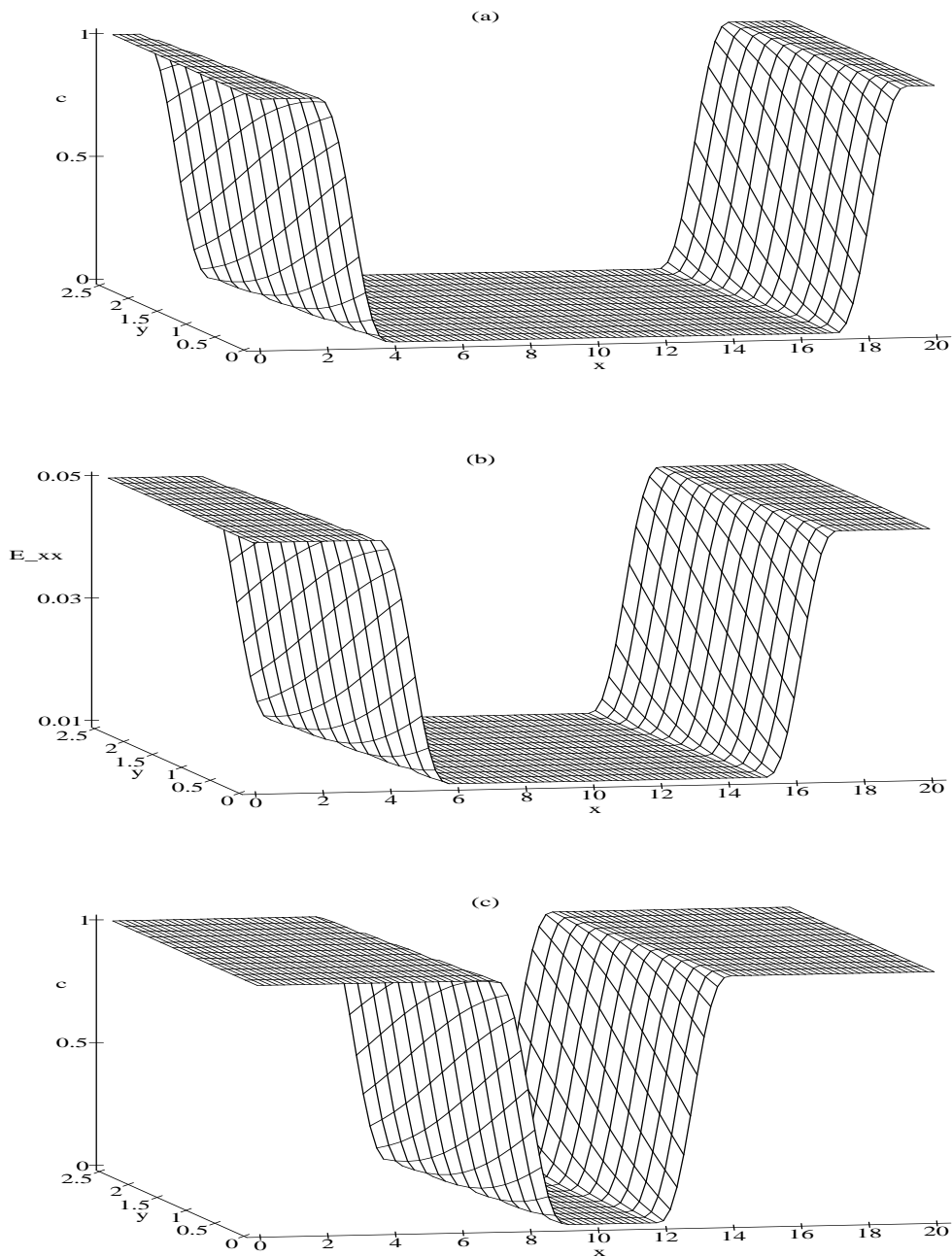
Observe the resulting transverse movement of the lower grip as a result of the elongation of the specimen !!!

Numerical simulation of the experimental results
of ICHINOSE, FUNATSU & OTSUKA, *Acta metall.*, **33**: 1615-20, 1985,
as the two-well martensitic phase transformation problem



(a) The strip of length $a = 20.00$ mm, width $b = 2.50$ mm, under uniaxial tension $w(t)$ and imposed boundary conditions. (b) The diagram of scaled force (F/A_0) vs. scaled elongation ($w(t)/a$), and the shape of the deformed strip at selected states:

A = (0.950, 95.479), B = (1.907, 97.370), C = (2.672, 97.557), D = (4.011, 97.885),
E = (5.159, 116.454)



The distribution of volume fraction c at state B, (a), and state D, (c), and that of strain E_{xx} at state C, (b).

Farther details are given in the habilitation thesis on the address

<http://www.uz.zgora.pl/~mkuczma/hab352.pdf>, or
<http://www.uz.zgora.pl/~mkuczma/hab352.ps>