

Numbers and Operations: Manufacturing Technician

Micron Technology, Inc.

Problem:

If the total number of "die" (memory chips before assembly and packaging) on an 8-inch wafer is 714, and 370 of those die fail, what is the "yield" (the percent of good die) on the wafer?

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Solution:

$714 \text{ total} - 370 \text{ failed} = \text{yield} = \text{good die} \div \text{total die} = 344 \div 714 = .4817$ or
48.2% yield on 1st wafer

$714 \text{ total} \times 67\% \text{ yield} = 478 \text{ good die}$

$714 \text{ total} - 478 \text{ good die} = 236 \text{ failed die/second wafer}$