



KATS M & E, LLC

VALUATION & CONSULTING SERVICES

Normal Useful Life Comments

Personal Property

The following comments are provided by KATS M & E, LLC and are based on experience within the industry and specific techniques and methodologies currently promoted within the primary professional appraisal organizations, including the *American Society of Appraisers*.

Normal Useful Life (NUL) is determined via discussions with the OEM (and / or dealers) and the appraiser's unique research, judgement and experience. Additionally, the following sources are utilized as a guide to arrive at a consensus of reasonable NULs for each asset category:

- ASA – MTS Estimated Normal Useful Life Study ¹
- IRS Useful Life Tables ²
- IRS Publication 946 ³

To determine an appropriate total depreciation and obsolescence amount within the Cost Approach, an Age / Life computation is used to account for physical, functional and technological obsolescence. It should be noted, and is hereby acknowledged, that an extensive analysis focused on one classification of an item could result in differing ranges of lives, depending upon the type of item and its use.

1. A machine may have more damage due to abnormal use, less preventable maintenance than expected, adaptations, or the like, creating a different effective age than is reflected by the tables. Thus, to use the tables properly, a well estimated effective age is an absolute necessity.
2. A machine may be much older than the average estimated NUL provided in the tables and, therefore, would have a different effective age. This is usually the result of an overhaul/adaptation, in which case both curable physical and functional factors could allow a lower effective age. In many such cases, the machine would still have the same NUL but would have a lower effective age.

¹ Machinery & Technical Specialties Committee - American Society of Appraisers. "Estimated Normal Useful Life Study." Reference all. (2010): Print

² Internal Revenue Service. "IRM 1.35.6 Property and Equipment Accounting." Property & Equipment Capitalization – Useful Life. Section 1.35.6.10. (2014): Print

³ Internal Revenue Service. "Publication 946 - How to Depreciate Property." Appendix B — Table of Class Lives and Recovery Periods. (2014): Page 100. Print



Age/Life Formula

A useful tool in the derivation of physical depreciation or total depreciation and obsolescence is the age/life formula. An opinion of physical depreciation can be derived using the NUL of an asset in conjunction with the effective age of an asset in the age/life formula. This is represented mathematically by the following accepted formula:

Age/Life Formula

Physical Depreciation = Effective Age ÷ NUL

Remaining Useful Life = NUL - Effective Age

When the effective age is divided by the NUL, the result is an analytical or objective calculation of depreciation. Effective age is the composite age considering normal construction, expansions, replacements, maintenance, and modifications. It reflects the age-related condition (or level of deterioration) of the asset in service and its capability to meet the operating demand for which it was intended and designed. Further, effective age is the age indicated by the current condition of the asset and, therefore, recognizes the partial renewal due to maintenance, rebuilds, and replacements to the original asset.

Consider the following example. The effective age of an asset is 10 years and its NUL is 40 years; using the age/life formula, physical depreciation would be estimated as follows:

Physical Depreciation Estimate

Physical Depreciation = Effective Age ÷ NUL

= 10 years ÷ 40 years

= 25%

The NUL tables are intended to be used as a starting point; additional adjustments may be required in order to establish value. Note that value does not always reduce or increase in a linear fashion with age.
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For further information, or to discuss questions regarding your project, please contact our Senior Appraiser directly:

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⁴ Machinery & Technical Specialties Committee - American Society of Appraisers. "Estimated Normal Useful Life Study." Understanding and Using the Normal Useful Life Tables. (2010): Page 3. Print