
MR1963893 (2003m:62275) 62N05 (62N02)**Gärtner, Matthias****Estimation in a general repair model based on left-truncated data. (English summary)***Scand. J. Statist.* **30** (2003), *no. 1*, 61–73.

The estimation of the life-time distribution of a technical item is an important issue in reliability. Since the assumption of i.i.d. failure cycles is questionable if the item is subject to a repair rather than a renewal at failure time, considerable efforts have been made to develop a flexible general repair model. A repairable system with general repairs introduced by Last and Szekli (1998) is considered. Apart from simple special cases, this model leads to a strong dependency among the observed failure times. The aim of this paper is to estimate the underlying failure time distribution and its cumulative hazard given that the failure process has been observed up to the n th failure. Non-parametric estimators of Kaplan-Meier and Nelson-Aalen type are used. Strong uniform consistency of the estimators is proved as n tends to infinity. Further results on weak convergence are derived. Neither stationarity nor mixing conditions are required.

Reviewed by *P. Rochus* (Liège)

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Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.

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