

Fig. 381. Creep rupture strength data of centrifugally cast 25Cr-20Ni steel tubes. n indicates the total number of data points.

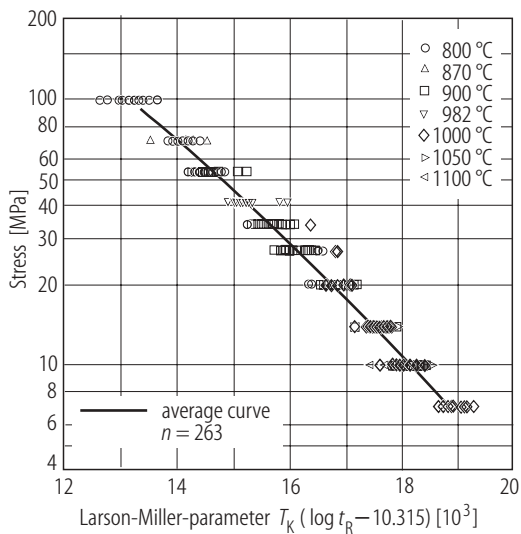


Fig. 382. Master rupture curve obtained by the Larson-Miller parameter method for centrifugally cast 25Cr-20Ni steel tubes; [1]. n indicates the total number of data points.

Table 167. A set of Larson-Miller parameters fitted to all creep-rupture data in [1] according to

$$\log t_R = (T + 273.15)^{-1} [b_0 + b_1 \log S + b_2 (\log S)^2] - C$$

n	C	b_0	b_1	b_2
263	1.031462×10	2.204935×10^4	-3.439566×10^3	-4.937139×10^2

2.4.15.3.3 Elongation and reduction of area of ruptured specimens

Elongation and reduction of area of ruptured specimens tested at 800, 900 and 1000 °C as a function of time to rupture are shown in Fig. 383. The ductility of the specimens tested at 800 °C and 900 °C is almost constant and not high, approximately some percent. The ductility of the specimens tested at 1000 °C up to 10^4 h has a similar tendency as those tested at lower temperatures, however, it increases with increasing time for rupture times longer than 10^3 h.