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Damage mo	del.	Ξ
The damage (2008).	model used is the shear-extended Gurson model by Nahshon and Hutchinson	
	$\dot{f} = (1 - f)G^{ij}\dot{\eta}^{p}_{ij} + k_{cs}f\omega_{0}\frac{s^{ij}\dot{\eta}^{p}_{ij}}{\sigma_{e}}$	
	$\omega_0 = \omega(\sigma) = 1 - \left(\frac{27J_3}{2\sigma_e^3}\right)^2, \qquad J_3 = \frac{1}{3} G^{\#} s_{kj} s_{kl} s^{lk}$	
Nielsen and	Tvergaard (2009) suggested:	
ω_0	$= o(\sigma) \Omega(T) \text{, with} \Omega(T) = \begin{cases} 1 & T < T_1 \\ (T - T_2)/(T_1 - T_2) & T_1 \le T \le T_2 \\ 0 & T > T_2 \end{cases}$	
where, $T_1 <$	T_2 . The stress triaxiality is $T = \sigma_t^J / (3\sigma_e)$. We use $T_1 = 0.0$ and $T_2 = 0.5$.	
	$\Phi = \frac{\sigma_s^2}{\sigma_M^2} + 2q_1 f^* \cosh\!\left(\frac{q_2}{2} \frac{\sigma_k^k}{\sigma_M}\right) - \left[1 + \left(q_1 f^*\right)^2\right] = 0$	
	$f^{*}(f) = \begin{cases} f & \text{for } f \le f_{c} \\ f_{c} + \frac{1/q_{1} - f_{c}}{f_{f} - f_{c}} (f - f_{c}) & \text{for } f \le f_{c} \\ for & f > f_{c} \end{cases}$	
The constant	$q_1 = 1.5, q_2 = 1$ and $f_c = 0.2, f_f = 0.4$ are used.	















