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syms t c lambda
f = (348*t) + (13.5*c);
g = t*((t+c).^(1/3)) - 5.274 == 0; % constraint Eqn for Elastic Indentation
L = f - lambda * lhs(g); % Lagrangian
dL_dt = diff(L,t) == 0; % derivative of L with respect to t
dL_dc = diff(L,c) == 0; % derivative of L with respect to c
dL_dlambda = diff(L,lambda) == 0; % derivative of L with respect to lambda
system = [dL_dt; dL_dc; dL_dlambda]; % system of equations
[t_val, c_val, lambda_val] = solve(system, [t c lambda], 'Real', true) % solve the
system of equations and display the results
results_numeric = double([t_val, c_val, lambda_val]) % show results in a vector of
data type double

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%Eqn for Micro-Buckling : t*((t+c)) - 21.428

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