Combination of Specs

If we have specs for any combination of t_r, M_p, t_s , we can easily relate them to allowed pole locations:



The shape and size of the region for admissible pole locations will change depending on which specs are more severely constrained.

This is very appealing to engineers: easy to visualize things, no such crisp visualization in time domain.

But: not very rigorous, and also only valid for our prototype 2nd-order system, which has only 2 poles and no zeros ...