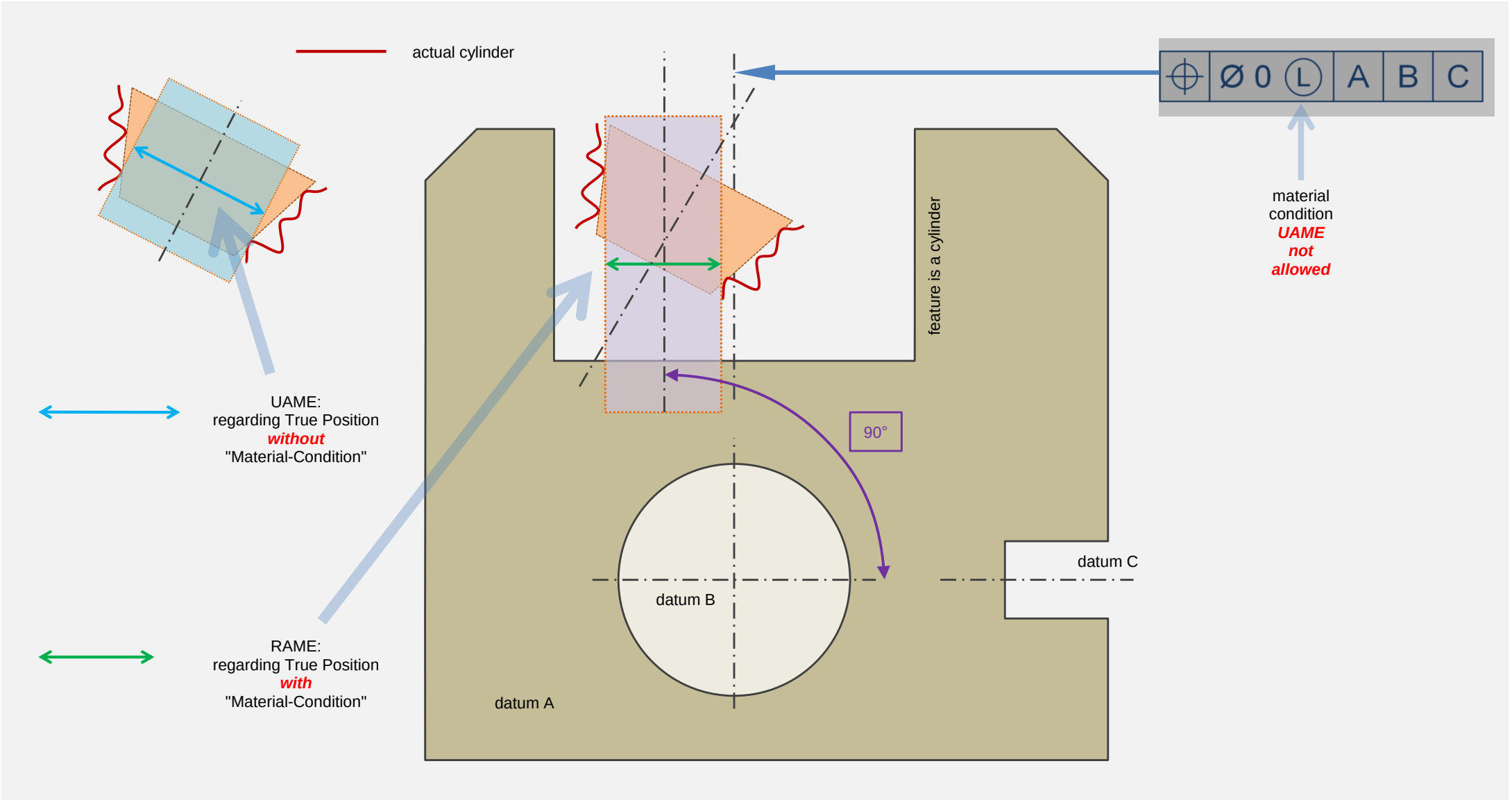

actual cylinder
Ø 0 L A B C
material condition
UAME not allowed
feature is a cylinder
UAME:
regarding True Position
without
"Material-Condition"
RAME:
regarding True Position
with
"Material-Condition"
90°
datum A
datum B
datum C

LMC Bonus

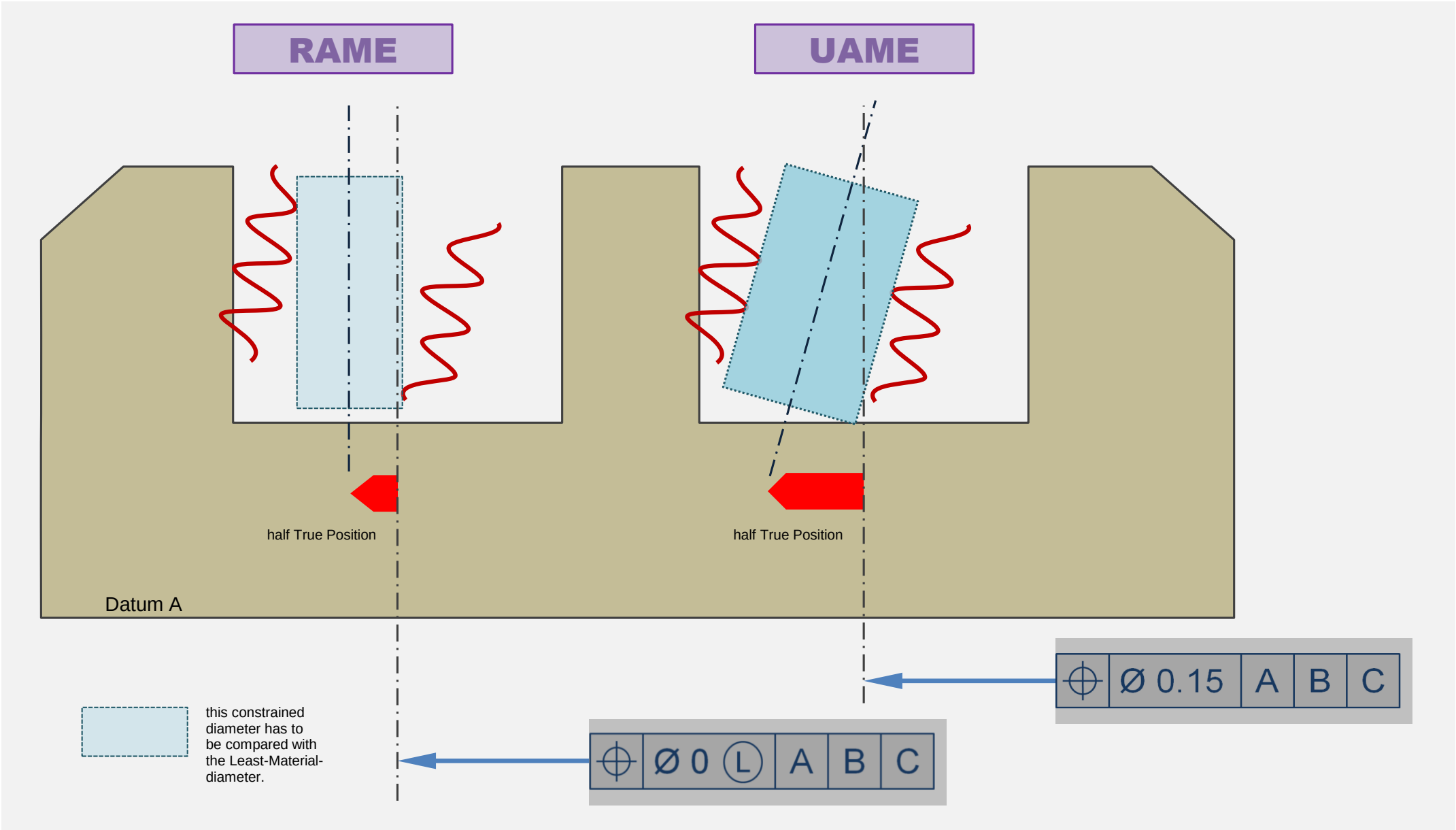
You should be using Inner Tangential for LMC. The reason we always use Outer Tangential for everything is because by default, all size tolerances (per Y14.5) have an envelope of perfect form at MMC. When we use Outer Tangential, this best reflects what the standard defines as the *Unrelated Actual Mating Envelope* or UAME. This is necessary for evaluating a position tolerance at MMC or RFS.

With LMC, things get a bit trickier. First, the size tolerance no longer has an envelope of perfect form at MMC; It has an envelope of perfect form at LMC. So a better functional check here is going to be using Inner tangential. Additionally, Y14.5 para 2.8.4 states: "Where a geometric tolerance is applied on an LMC basis, the allowed tolerance is dependent on the *unrelated actual minimum material envelope* of the considered feature."

So for a position tolerance at LMC, we do not use the UAME, but rather the *Unrelated Actual Minimum Material Envelope*. To do this will require the Inner Tangential Evaluation.

to be using Inner tangential. Additionally, Y14.5 para 2.8.4 states: "Where a geometric tolerance is applied on an LMC basis, the allowed tolerance is dependent on the *related actual minimum material envelope* of the considered feature."

Folgende Benutzer bedankten sich für den Beitrag:
Samantha Bergeron


RAME
UAME
half True Position
half True Position
Datum A
this constrained diameter has to be compared with the Least-Material-diameter.
Ø 0.15 A B C
Ø 0 L A B C