

Position or Plus-Minus?

Mechanical Engineering

The round tolerance zone against the square one, and what each really means.

Plus and minus

- Simple, and everyone reads it
- Square tolerance zone for a hole
- Meaning depends on the dimension chain
- No datum sequence is stated

True position

- Round zone, 57% more area
- Datums stated, so setup repeats
- Bonus tolerance available at MMC
- Needs training to read and inspect

THE DIFFERENCE THAT MATTERS

For holes that must assemble, position with datums says what you actually mean.

The round zone circumscribes the square one, so more good parts pass for exactly the same fit.