



Digital Twin Identifiers: Naming Schemes

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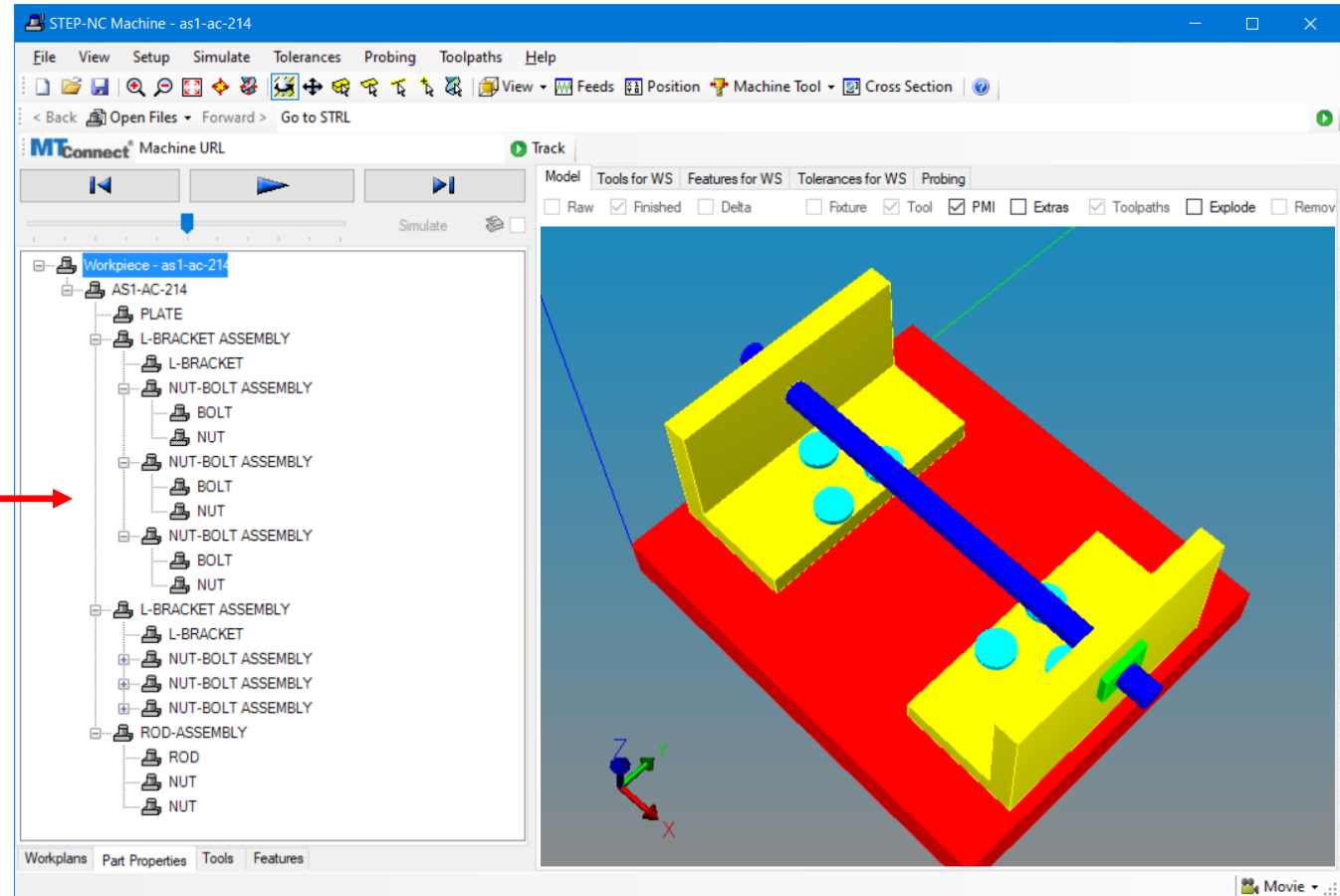
Convenor WG15

Test Case

5 designed items have engineering requirements (plate, L-Bracket, nut, bolt, rod)

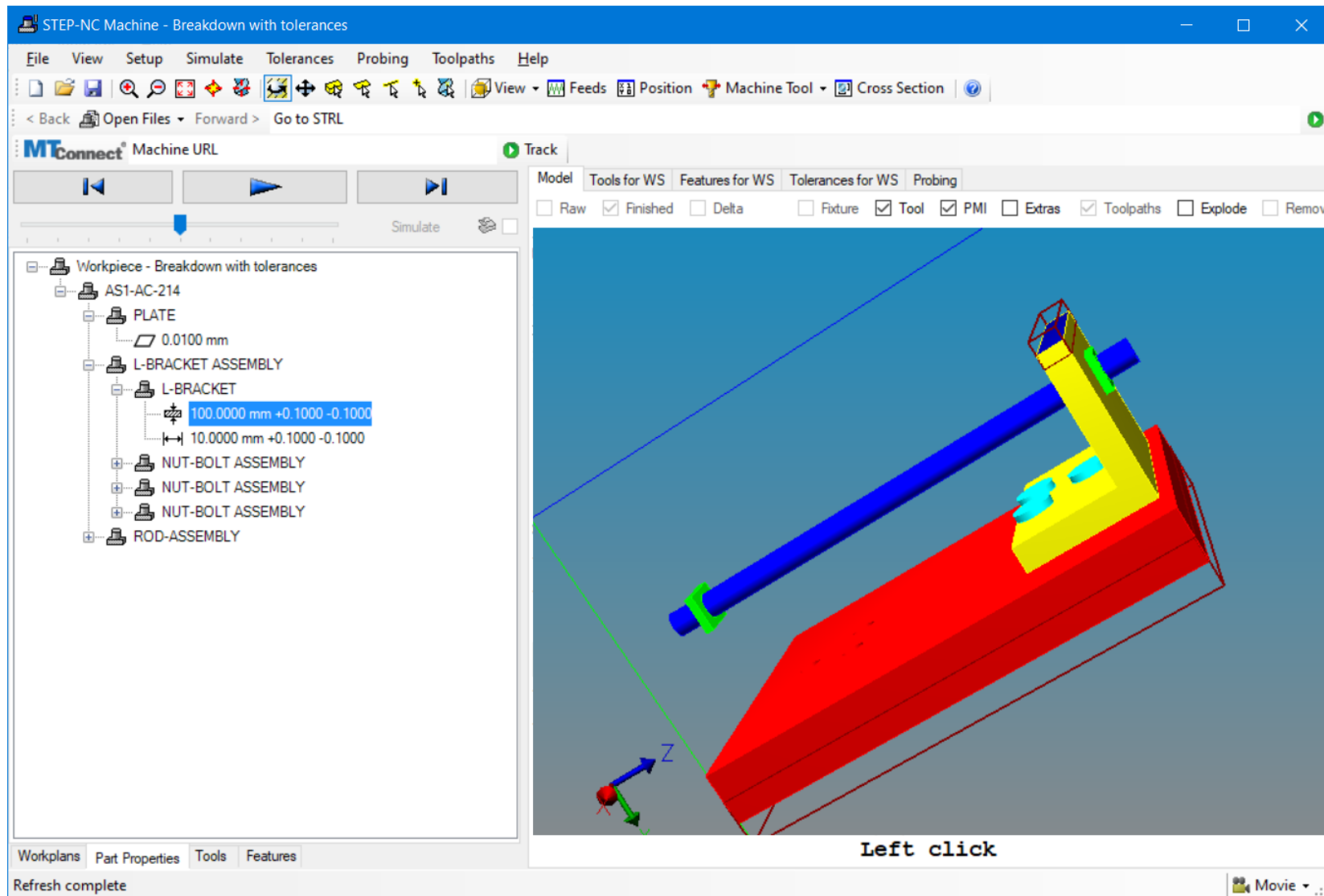
28 nodes in assembly tree

18 machined items (8 nuts, 6 bolt, 2 brackets, 1 plate, 1 rod)





Assembly breakdown



Tolerances specific to this stage of the manufacturing.



Solutions

One big master file

- All data in one place
- Include many views
- Additions and exceptions
- PLCS describes relationships
- Hard to tolerance
- Fragile

Network of connected files

- Unknown linking to get all data
- UUID's for what is explicit
- UUID's for what is implicit
- Links describe relationships
- Easy to tolerance
- Robust