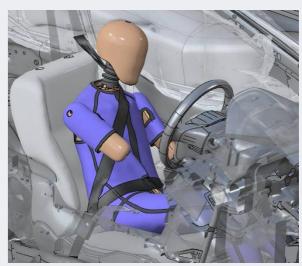
March 2023 HUMANETICS CAE UPDATES

WSID-5F

- WSID-5F model v2.6 represents latest SBL-D hardware design (SBL-C plus Mod Kit)
- State-of-the-art meshing standards and modeling approaches
- Validation based on qualification tests for the neck component and full dummy thorax
- The model is further validated based on several new full dummy pendulum tests impacting the pelvis and thorax area
- On sled level two different sled configurations have been used for validation of the model



Q6

- Q6 model v2.5 covers various improvements
- Refined mesh for the neck shield, arms, legs and loadcells
- Upper torso kinematics is further validated based on sled test
- Improved chin to chest contact predictions
- Material updates for key dummy soft parts based on new component validation tests



Q3s

- Q3s represents a 3-year-old child and used in FMVSS No. 213 to improve protection of children during the side impact crashes
- Q3s model v1.2 corresponds to Humanetics Q3s hardware which meets the latest geometry specifications and certification corridor limits specified by the NHTSA 2020 final ruling
- Head, neck, lumbar spine and thorax are validated with the
 latest test data.
- Model kinematics and signals are verified using a generic side impact sled



