

Quantities test

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References

Table 1 References

Data module/Technical publication	Title
None	

Description

1 General

This data module contains the examples from Chap 3.9.6.2.1.10 of the S1000D Issue 4.2 specification, and is used for testing the display of quantities.

2 Examples

Example 1: Quantity group and is a simple quantity with value and unit of measure:

```
<para>The windshield assembly weighs approximately
<quantity>
<quantityGroup quantityGroupType="nominal">
<quantityValue quantityUnitOfMeasure="kg">40</quantityValue>
</quantityGroup>
</quantity>
and requires two persons ...
</para>
```

The display of this markup can be as follows:

"The windshield assembly weighs approximately 40 kg and requires two persons ..."

Example 2: Quantity where value and tolerance have the same unit of measure:

```
<para>If hole tolerance of
<quantity>
<quantityGroup quantityGroupType="nominal"
quantityUnitOfMeasure="mm">
<quantityValue>0.700</quantityValue>
<quantityTolerance
quantityToleranceType="plus">0.010</quantityTolerance>
<quantityTolerance
quantityToleranceType="minus">0.000</quantityTolerance>
</quantityGroup>
</quantity>
has been exceeded ...
</para>
```

The display of this markup can be as follows:

"If hole tolerance of 0,700 +0,010 -0,000 mm has been exceeded ..."

Example 3: Quantity with minimum/maximum values:

```
<para>Tighten fasteners
<quantity quantityType="qty05">
<quantityGroup quantityGroupType="minimum">
<quantityValue quantityUnitOfMeasure="N.m">18.0</quantityValue>
</quantityGroup>
<quantityGroup quantityGroupType="maximum">
<quantityValue quantityUnitOfMeasure="N.m">22.0</quantityValue>
</quantityGroup>
</quantity>
using torque wrench ...
</para>
```

The display of this markup can be as follows:

"Tighten fasteners from 18,0 Nm to 22,0 Nm using torque wrench ..."

Example 4: Quantity with type, value, tolerance, and unit of measure:

```
<para>Holding nut, torque bolt to
<quantity quantityType="qty05">
<quantityGroup quantityGroupType="nominal" quantityUnitOfMeasure="N.m">
<quantityValue>20</quantityValue>
<quantityTolerance
quantityToleranceType="plusorminus">2</quantityTolerance>
</quantityGroup>
</quantity>
```

.

The display of this markup can be as follows:

"Holding nut, torque bolt to 20 ± 2 Nm."

Example 5: Quantity with multiple value groups and value and tolerance with different units:

```
<para>Chamfer both sides of rib
<quantity>
<quantityGroup quantityGroupType="nominal">
<quantityValue>0.153</quantityValue>
<quantityTolerance
quantityToleranceType="plusorminus">0.005</quantityTolerance>
</quantityGroup>
x
<quantityGroup quantityGroupType="nominal">
<quantityValue quantityUnitOfMeasure="dega">45</quantityValue>
<quantityTolerance quantityToleranceType="plusorminus"
quantityUnitOfMeasure="mina">30
</quantityTolerance>
</quantityGroup>
</quantity>
.</para>
```

The display of this markup can be as follows:

"Chamfer both sides of rib $0,153 \pm 0,005$ x $45^\circ \pm 30'$."

Example 6: Quantity with tolerance only:

```
<para>Make sure that spacing is within
<quantity>
<quantityGroup quantityGroupType="nominal">
<quantityTolerance
quantityToleranceType="plusorminus">0.030</quantityTolerance>
</quantityGroup>
</quantity>
on each side ...
.</para>
```

The display of this markup can be as follows:

"Make sure that spacing is within $\pm 0,030$ on each side ..."