
Subject: Re: May I use z parameter for notch as engine tractiveEffort?

Posted by [yutaka.manchu](#) on Mon, 13 Oct 2014 22:23:47 GMT

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Dear J  rg,

Thank you very much to write back to me!

Best regards,
Utah (Yutaka Manchu)

Joerg von Lingen wrote:

>

> Dear Utah,

>

> your assumption is correct. The structure of ValueTable allows to define a
3D matrix of values. The effort curve is

> normally given as effort vs. speed but there might be another parameter like
notch position or line voltage etc to

> define a group of curves instead a single one.

>

> Best regards,

> J  rg von Lingen

>

> Yutaka Manchu wrote on 02.10.2014 09:40:

>> Dear All,

>>

>> Some engines have an acceleration/power control lever with several
>> notches.

>> Each notch limits the acceleration/power level of the engine.

>>

>> To express this notion, I'd like to confirm the correctness to use z
>> parameter of valueTable written in

>> " http://wiki.railml.org/index.php?title=RS:valueTable_tractiveEffort", as

>> "'z' is the additional parameter extending the dependency to $y = f(x,z)$ "

>> and "In case of several curves versus the x-coordinate there is the child
>> element <columnHeader>, which takes the values of the z-coordinate as
>> parameter for the array of curves".

>>

>> According to "<http://wiki.railml.org/index.php?title=RS:columnHeader>", it
>> could be expressed as followings;

>>

>> <vehicle id="ve_6000-Mc1" name="6000-Mc1" length="9.0" speed="60.0"
>> bruttoWeight="3145.8" bruttoAdhesionWeight="393.2">

>> <engine>

>> <propulsion id="peMotor" powerType="electric" power="1105000"

>> rotationMassFactor="1.0" description="Motor">

>> <tractiveEffort>

```

>>      <valueTable xValueName="Speed" xValueUnit="km/h"
>> yValueName="Tractive Effort" yValueUnit="N" zValueName="Notch"
>> zValueUnit="1">
>>      <columnHeader zValue="1">
>>      </columnHeader>
>>      <valueLine xValue="0.0">
>>      <values yValue="5950.1" />
>>      </valueLine>
>>      <valueLine xValue="36.5">
>>      <values yValue="4200.0" />
>>      </valueLine>
>>      ...
>>
>>      <columnHeader zValue="2">
>>      </columnHeader>
>>      <valueLine xValue="0.0">
>>      <values yValue="10016.1" />
>>      </valueLine>
>>      <valueLine xValue="35.0">
>>      <values yValue="8200.0" />
>>      </valueLine>
>>      ...
>>
>>      </valueTable>
>>      </tractiveEffort>
>>      </propulsion>
>>      </engine>
>>      </vehicle>
>>
>> May I ask you if my understanding is right?
>>
>> Best regards,
>> Utah (Yutaka Manchu)
>>
>
>
>

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----- posted via PHP Headliner -----