





HLA : Active length  
of the level probe

The maximum value 60.56% on the AMI was scaled to 100%

The Total Volume of the nitrogen Shield = 115.642 L

$x$  : The LN<sub>2</sub> percentage displays on the AMI

The nitrogen shield is not a homogenous shape. Therefore, the volume function is piecewise.

$$volume(x) = \begin{cases} 34.34 + 0.5423 x & 0 < x < 68.4 \\ -24.29 + 1.399x & 68.4 \leq x \leq 100 \end{cases}$$

The AMI percentage corresponds to the total volume of the nitrogen shield = 100%  $\pm$  error

