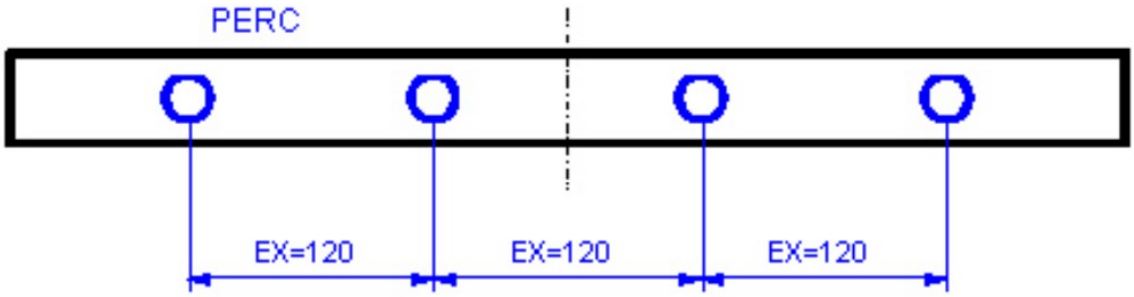
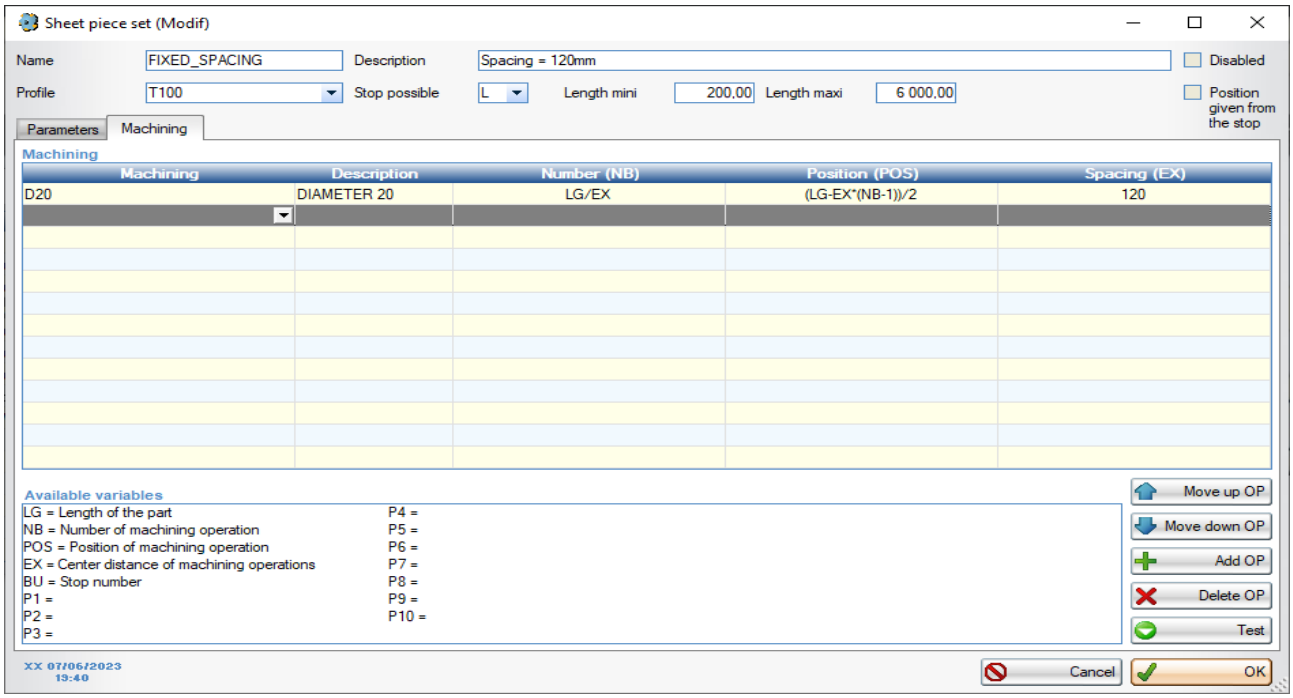
ASTER - Examples of classical parametrized parts.

Railing with fixed spacing

Holes centered, spacing = 120mm

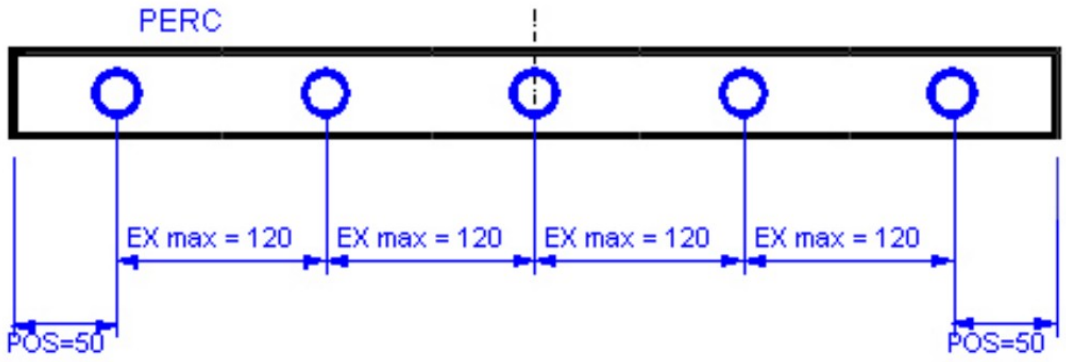


	Formula	Comment
Spacing	120	Fixed spacing
Number	LG/EX	Whole part of the length divided by the spacing
Position	(LG-EX*(NB-1))/2	Half the difference between the length and the number of intervals multiplied by the spacing. NB-1 is the number of intervals EX*(NB-1) is the number of intervals multiplied by the spacing

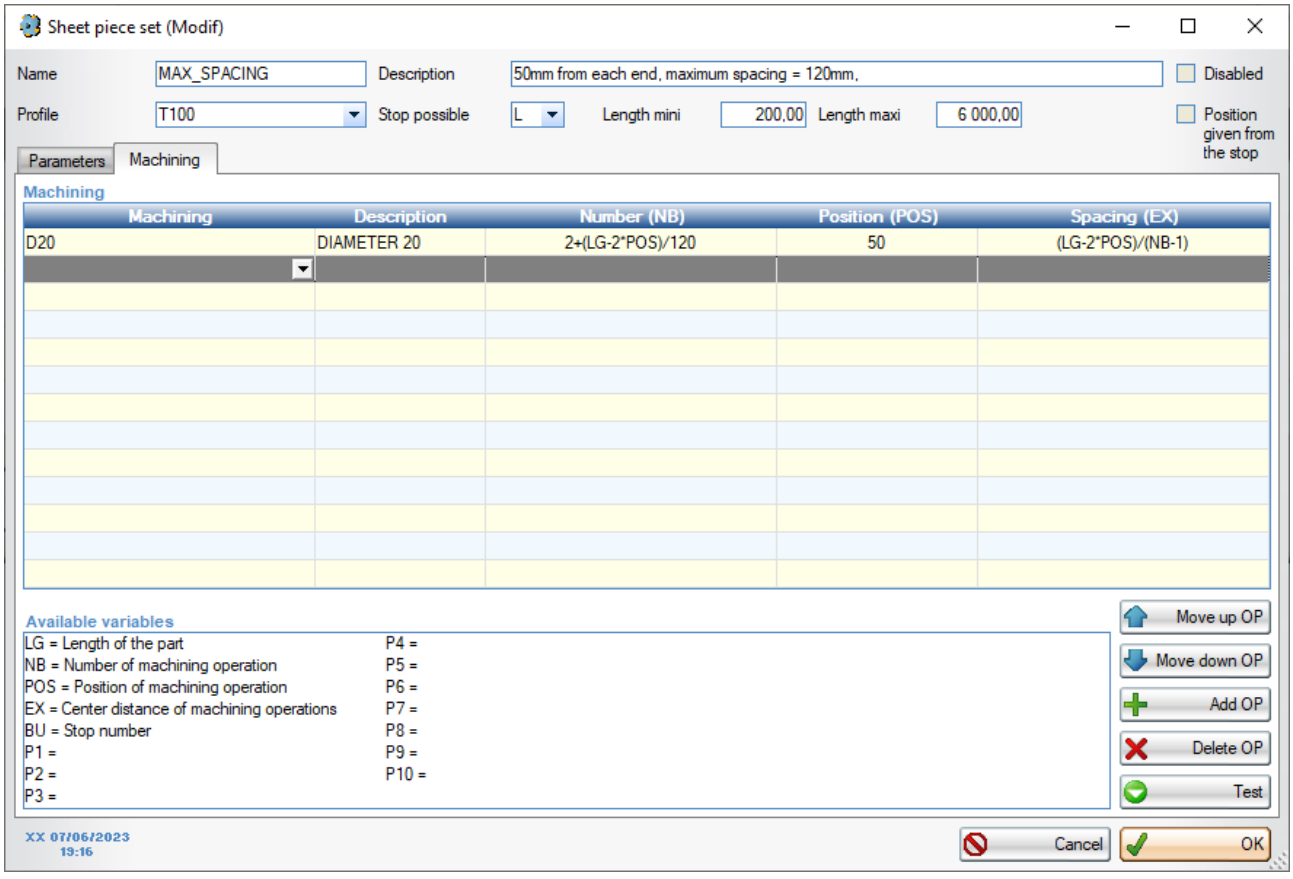


Railing with maximum spacing

Holes at 50mm from each end, maximum spacing = 120mm,



	Formula	Comment
Position	50	Fixed position of first hole
Number	2+(LG-2*POS)/120	Maximum spacing gives the number : Distance between the 2 end holes divided by the maximum spacing gives the number of intermediate holes To these must be added the 2 end holes
Spacing	(LG-2*POS)/(NB-1)	Distance between the 2 end holes divided by the number of intervals

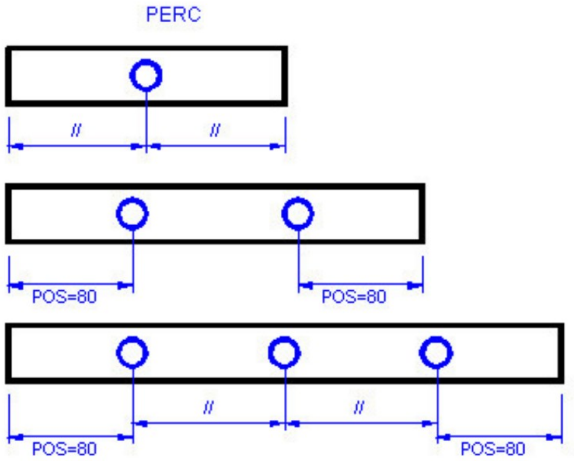


Positions given by rules

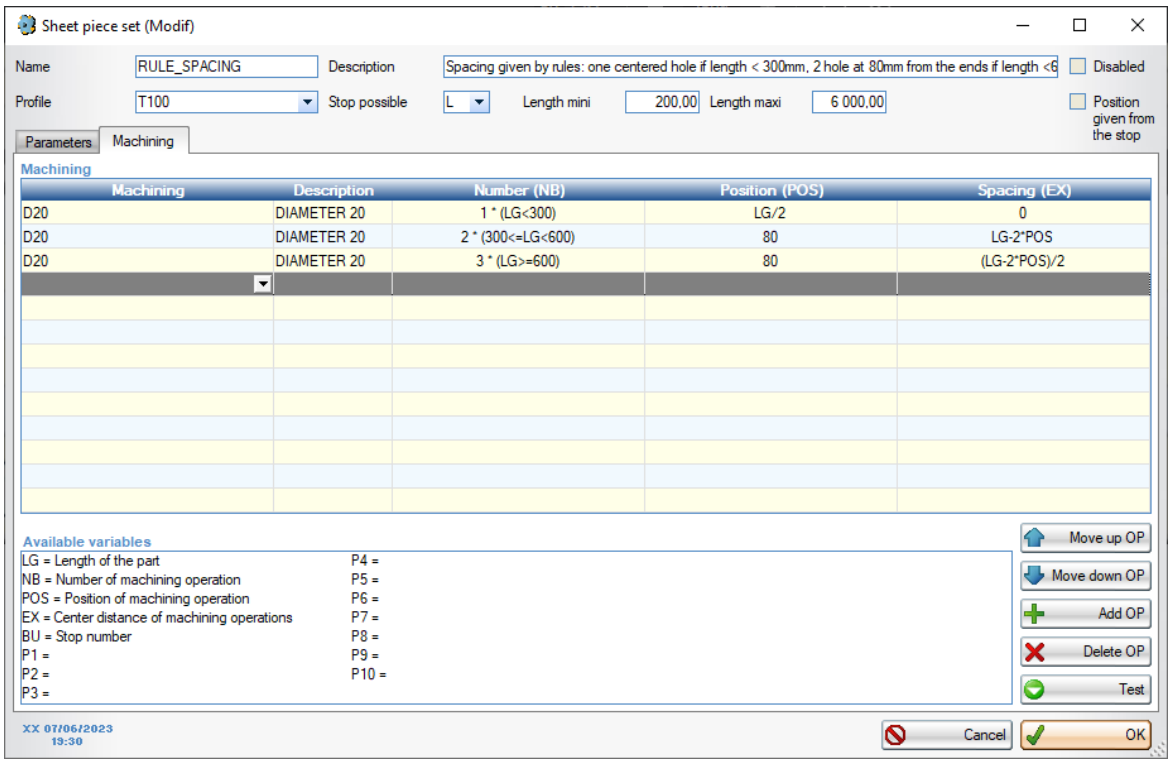
A hole in the center for parts less than 300mm

Two holes 80mm from each end for parts between 300 and 600mm

Two holes 80mm from each end and one hole in the center for parts over 600mm



	Formula	Comment
Number	1 * (LG<300)	Equal 1 if the lengh is smaller than 300mm Equal 0 otherwise Nota : (LG<300) is 1 if true, 0 if false
Position	LG/2	Middle of the part
Number	2 * (300<=LG<600)	Equal 2 if length is in in interval [300,600mm[Equal 0 otherwise Nota : (300<=LG<600) is 1 if true, 0 if false
Spacing	LG-2*POS	Distance between the 2 end holes
Number	3 * (LG>=600)	Equal 3 if length is bigger than 600 Equal 0 otherwise Nota : (LG>=600) is 1 if true, 0 if false
Spacing	(LG-2*POS)/2	Distance between the 2 end holes divided by the number of intervals



Syntax of formulas

The available functions and operators are described in the Windev help :
Arithmetic operators : https://doc.windev.com/en-US/?1512008&name=arithmetic_operators
Comparison operators : https://doc.windev.com/en-US/?1512006&name=comparison_operators
Math functions :https://doc.windev.com/en-US/?3050016