ICEM Mesh Creation

3D Smooth

Geometric parameters

GEOMETRIC PARAMETERS			SUPPORTED VARIANT
X-COORD	H	Total domain size	All
	h_i	Size of film inlet	All
	h_d	Size of distributor	All
	h_{eo}	Size of edge region of outlet for meshing	Outlet Variant 2
	h_{ro}	Size of recessed outlet	Outlet Variant 2
Y-COORD	L	Size of film wall	All
	l_{ag}	Size of additional gas space	Inlet Variant 2
	l_{ro}	Size of recessed outlet	Outlet Variant 2
Z-COORD	W	Total domain size	All
	w_c	Size of central section for meshing	All
	$w_{s1/2}$	Size of side sections 1 & 2	All

Meshing Zones

MESHING ZONES		COMMENT	SUPPORTED VARIANT
X-COORD	h_i	Film inlet	All
	h_d	Distributor	All
	h_g	Gas space	All
	h_{eo}	Edge region of outlet	Outlet Variant 2
	h_{ro}	Recessed outlet	Outlet Variant 2
Y-COORD	L	Film wall	All
	l_{ag}	Add. gas space	Inlet Variant 2
	l_{ro}	Recessed outlet	Outlet Variant 2
Z-COORD	w_{s1}	Side section 1	All
	w_c	Central section	All
	w_{s2}	Side section 2	All

Parts/Boundaries

PARTS/BOUNDRARIES	COLOR	SUPPORTED VARIANT
FILMINLET	RED	All
FILMWALL	GREEN	All
FILMOUTLET	VIOLET	All
GASWALL	LIGHT BLUE	All
GASTOP	ORANGE	All
DISTRIBUTOR	DARK BLUE	All
SIDES	PINK	All
GASBOTTOM	DARK RED	Outlet Variant 2
FILMOUTLETWALL	YELLOW	Outlet Variant 2

Available geometric variants

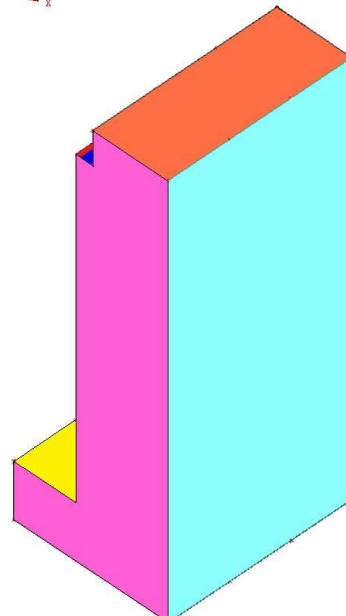| VARIANT	INLET TYPE	OUTLET TYPE
3D-HORIZONTAL-1	1: simple inlet	1: simple outlet
3D-HORIZONTAL-2	2: additional gas space	1: simple outlet
3D-HORIZONTAL-3	1: simple inlet	2: recessed outlet
3D-HORIZONTAL-4	2: additional gas space	2: recessed outlet
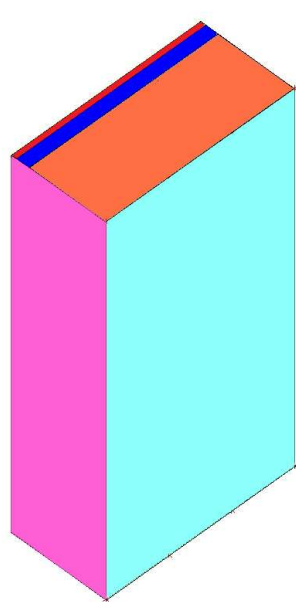
3D-smooth-1
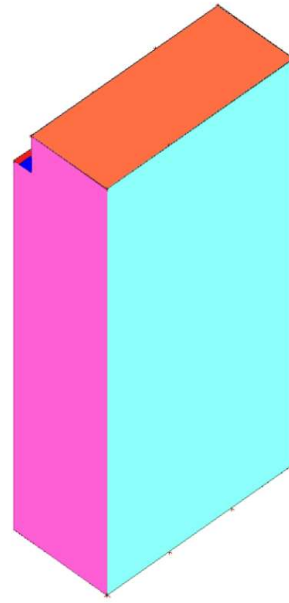
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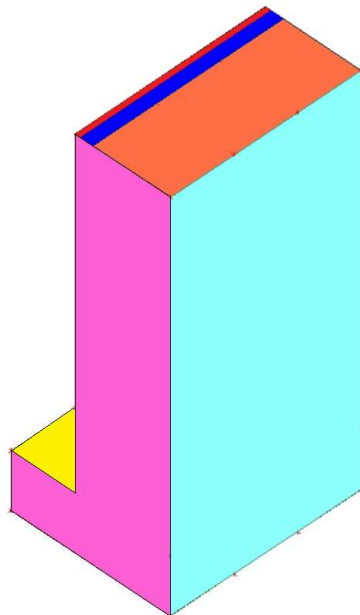
3D-smooth-3

3D-smooth-4

3D-smooth-1: inlet can be configured for periodic boundary conditions. The boundary "FILMINLET" then additionally extends across the boundaries "DISTRIBUTOR" and "GASTOP".
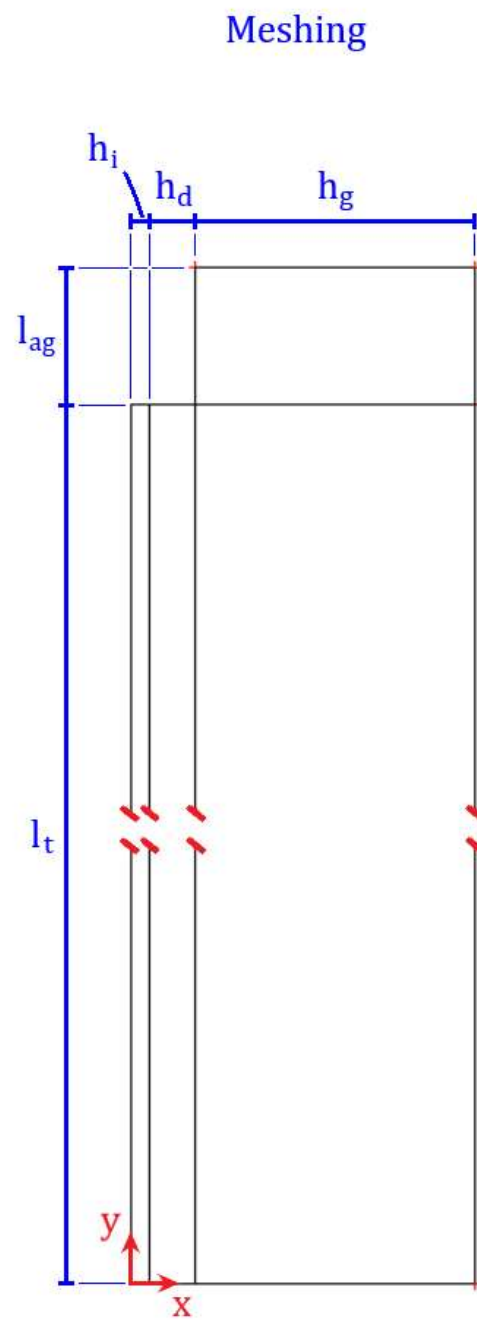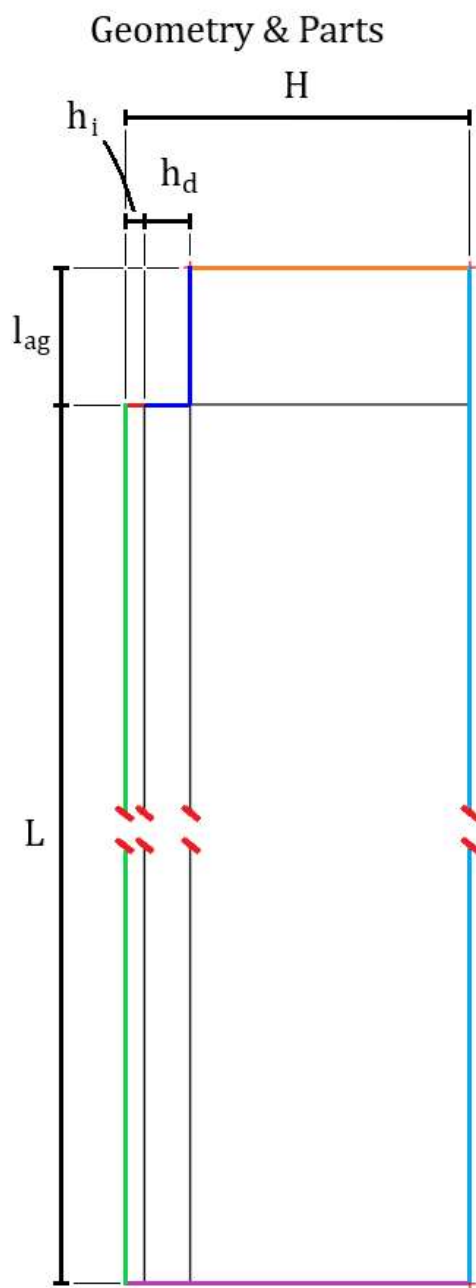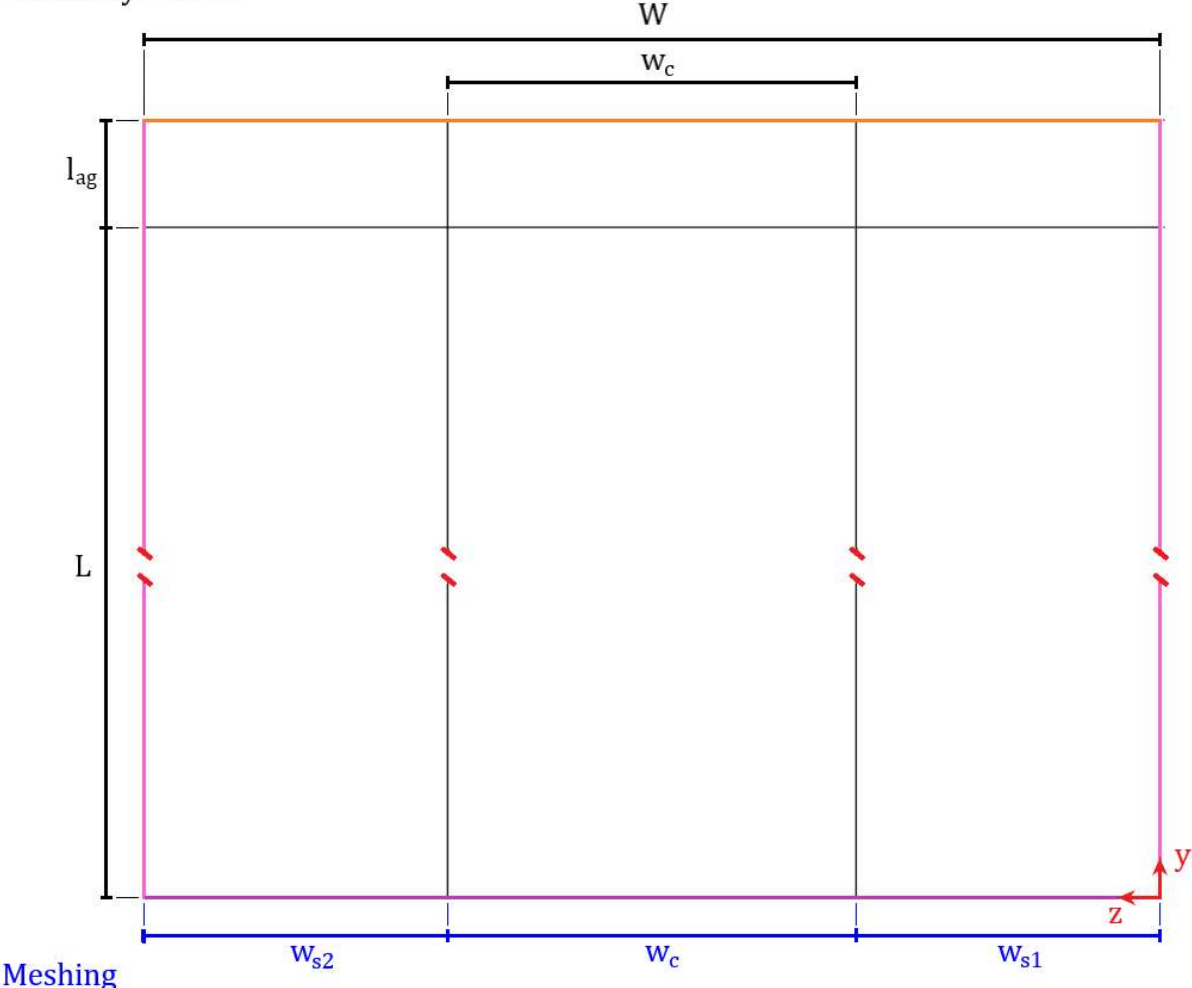
Variant 3D-smooth-1

xy-Plane

Geometry & Parts   Meshing
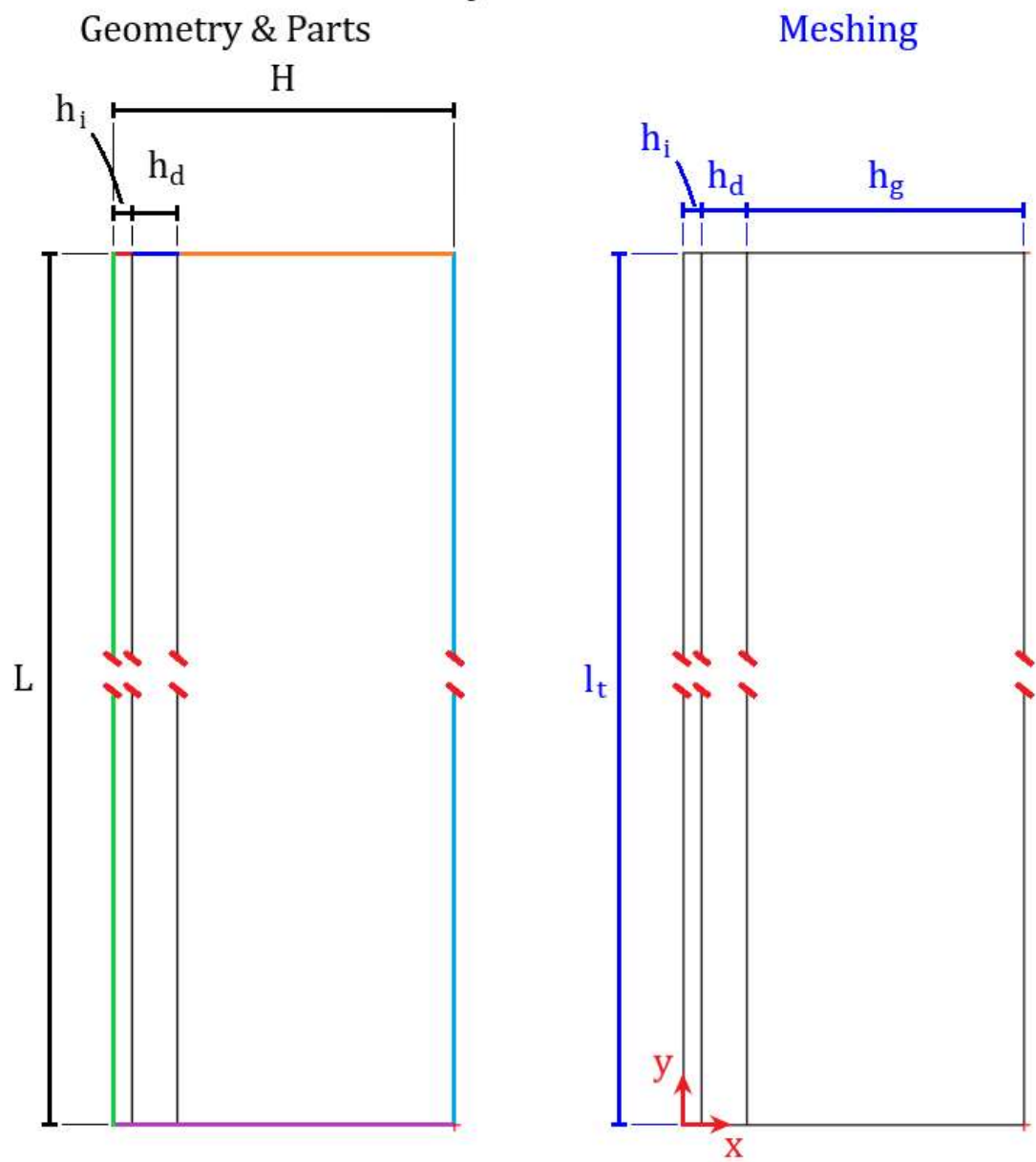
yz-Plane

Geometry & Parts
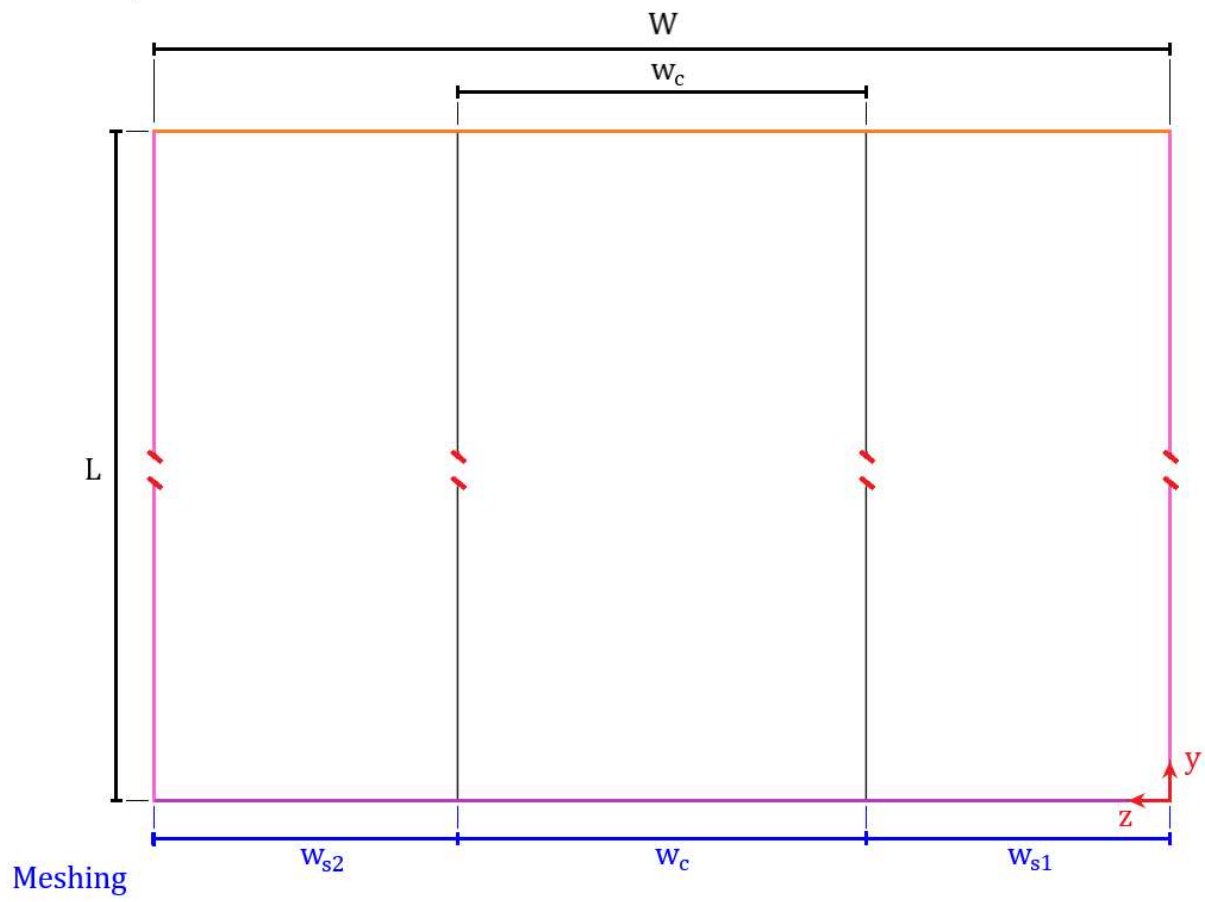
Meshing

Variant 3D-smooth-2

xy-Plane

Geometry & Parts

Meshing

yz-Plane

Geometry & Parts

Meshing

Variant 3D-smooth-3

Geometry & Parts
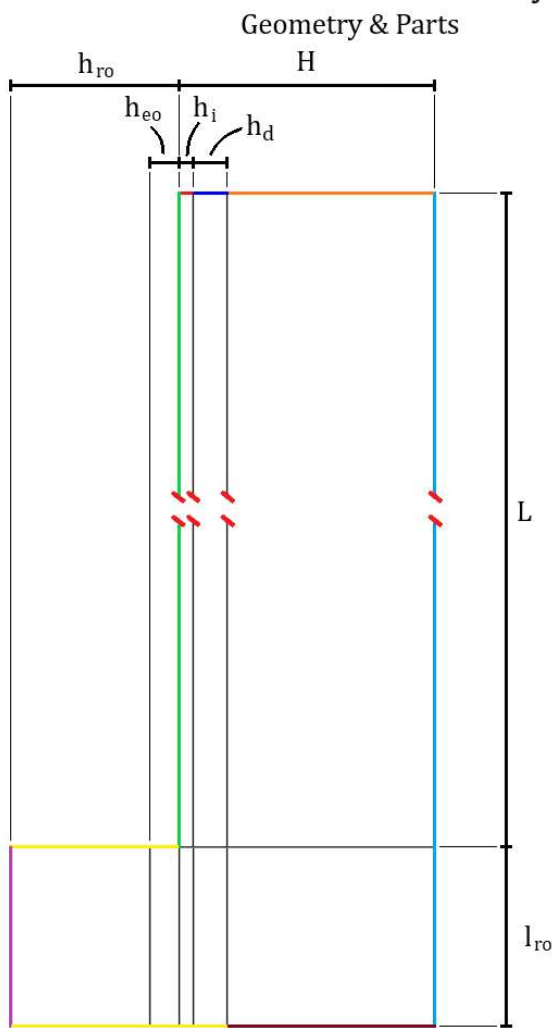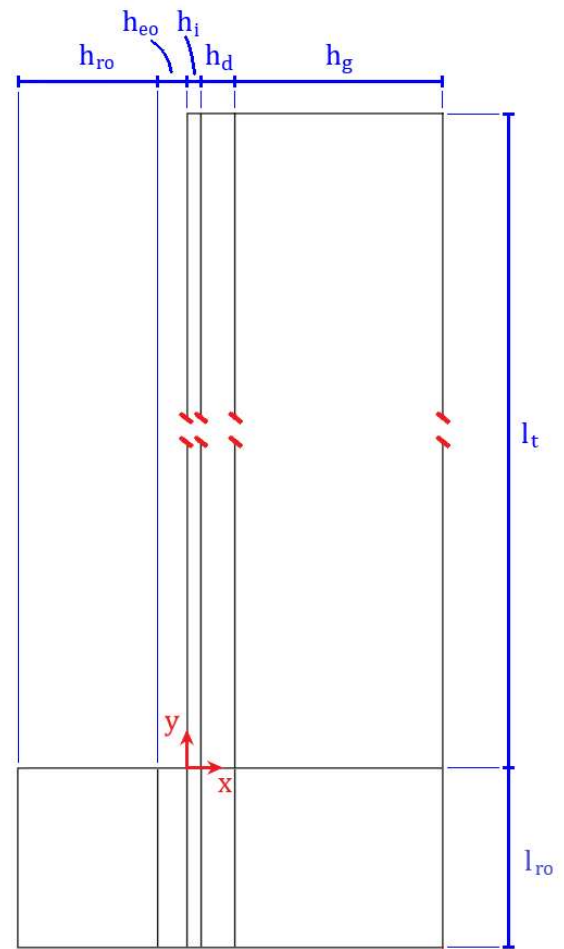
Meshing

yz-Plane

Geometry & Parts
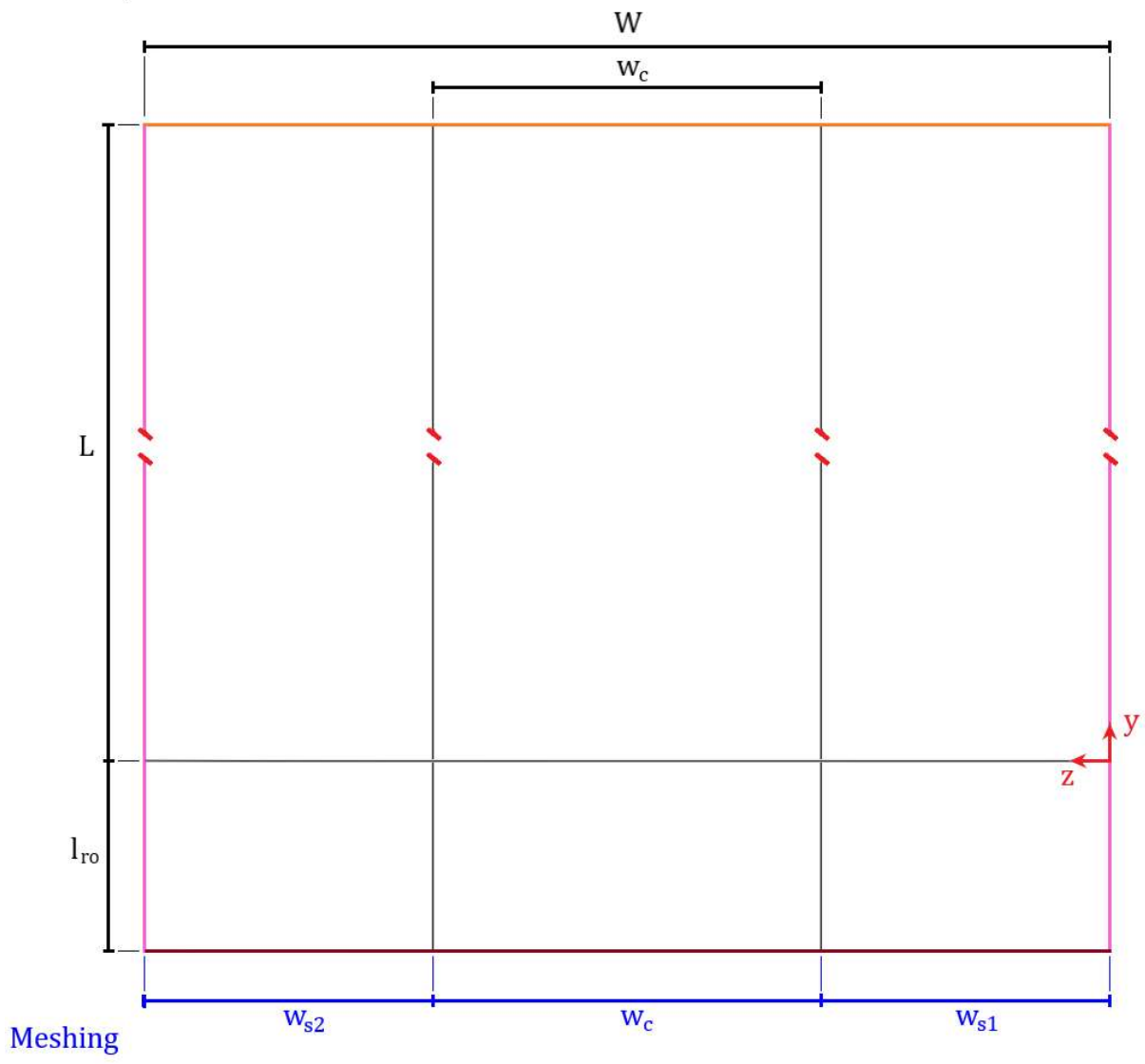
Meshing

Variant 3D-smooth-4

xy-Plane

Geometry & Parts

Meshing

yz-Plane

Geometry & Parts

Meshing