

















	At Ports (Nozzle_1)	At Ports (Nozzle_2)	
Casting Speed (m/min)	4.8	3.6	
Jet Speed (m/s)	3.25 (2.4 at 3.6 m/min casting speed)	1.14	
Vertical Jet Angle (degrees)	32	79.4	
Port-to-bore Ratio	1.24	1.62	
Back Flow Zone	<4%	<4%	















Funnel Mold Model				
 3.6 m/min casting speed Nozzle 2 results will be used as mold fluid inlet data 				
	Parameter/Property	Case 3.6		
	Mold Width (mm)	1450		
	Mold Thickness in top funnel region (mm)	170		
	Mold Thickness at narrow face (mm)	90		
	Mold Length (mm)	1200		
	Domain Width (mm)	1450 (top) 1414 (domain bottom)		
	Domain Thickness (mm)	90 (top) 50.84 (domain bottom)		
	Domain Length (mm)	2500		
	Nozzle Port Effective Height × Thickness (mm × mm)	201.53 × 28		
	SEN Submergence Depth (mm)	265		
	Casting Speed (m/min)	3.6		
	Fluid Kinematic Viscosity (m ² /s)	8.57 × 10 ⁻⁷		
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