Training chapters available for MPI 6.0

As of today, the chapters available are listed below with a brief description of the chapter content, Mesh types discussed and files necessary.

Table 1: Files Required for the Simulation Fundamentals Class

Chapter	Mesh types used	Description	Folder name	Translation and Study Files Needed	Results needed
			Extra	cover.sdy	
Basic Packing	Fusion and 3D	Has definitions, how to set a profile, how to interpret results for Fusion and 3D. Practice with Fusion and 3D	Basic_Packing	3d_3snap_cover_packing.sdy snap_cover_packing.sdy	
Creating Reports	Fusion	Updated to reflect new ways to create reports and the 3 formats supported.	Create_Reports	grabit_center_gate.sdy grabit_end_gate.sdy	Flow analysis on both parts.
Fiber Flow Analysis	Fusion and 3D	Describes some Fiber orientation theory, Uses Fusion and 3D models showing how to review results	Fiber_flow	cover_fiber.sdy manifold_fiber	Flow analysis on both parts.
Finite Element Overview	All 3 Discussed	Some new material, mostly a reorganization of chapters, covers, finite elements, mesh types, and basic solver assumptions	No Practice		
Flow analysis process settings	All 3 discussed	Discusses in detail all the advanced options for a flow analysis. Updated to reflect new 3D solvers and MP/Fusion capabilities.	No Practice.		
Flow Analysis steps	All 3 discussed	Discusses, Moldflow design philosophy, Design procedures, Uses flow charts to discuss optimization of Filling, Flow and Part	No Practice.		
Flow leaders and Deflectors	Fusion	All 3 mesh types discussed, but practice uses only Fusion.	Flow_Leaders	window_cover.sdy	
Gate and Runner Design	Fusion	Describes typical gate and runner designs, discusses how to model. Practice includes 8 cavity tool manually created, and Family tool created with wizard and runners balanced.	Gate_Runner_Design	box_lid.sdy snap_cover_runner_modeling.sdy	

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Gate Placement	Fusion	Discusses gate placement guidelines and uses the gate placement analysis.	Gate_placement	cover.sdy door_panel.sdy paper_holder.sdy phone.sdy	
Guided Project	Fusion	Steps through in more detail the entire Flow analysis process, from cleaning up a mesh, finding a gate location, solving flow issues, optimizing processing conditions, modeling and sizing the feed system and packing	Guided_Project	base_fixed.sdy base_mesh.sdy	
How to Use help	None discussed	Updated to show better how help is accessed and used	Uses Extra folder		
Injection Molding Overview	N/A	Some new material, mostly reorganization of chapters, covers injection molding machine and flow behavior.	No Practice		
Introduction to Moldflow Magics STL Expert	Fusion	Has several examples of using STL Expert fix STL files.	Magics_STLs	00 front.stl 01 FixWizard.stl 02 Normals.stl 03 Stitch.stl 04 Stitch + normals.stl 05 holes.stl 06 shells.stl 07 overlaps.stl 08 Fixing_test.stl 09 ChildCarSeat.stl 10 ChildCarSeat_result.stl Q-base.igs	
Introduction to Synergy	None specifically discussed	Updated to cover new UI, better organization of information	Uses Extra folder		

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Job Manager	None discussed	Shows capability and use of the job manager.			
Material Searching and comparing		Shows how to use the material searching capabilities of Synergy.	Material_Searching	cover.sdy	
Model Translation and Cleanup	All 3 discussed	Uses flow chart to show process, including all 3 mesh types. Re-organized to focus on the 3 mesh types, use of local Refinement and detailed description of meshing options. Discusses mesh diagnostics, mesh cleanup, (better examples) and when mesh is good enough. Practice has a new part where there are several regions that require different tools to fix. New practice for Fusion and 3D on meshing at different settings to see the effect.	Translation_Cleanup	cover.igs dustpan.stl housing.step housing_cleanup.sdy Manifold.igs snap_cover.igs snap_cover.prt snap_cover.step snap_cover.stl snap_cover.x_t snap_cover_rad.igs	
Modeling Tools	All 3 Used	Concentrates on modeling regions, but some work with beams, Uses LCS, has different practices for MP users and Fusion/3D users.	Modeling_Tools	speedo_fusion.sdy speedo_md.sdy	
Moldflow Communicator	None discussed	Shows capability of MC. Shows how to create MRF and criteria files in Synergy. Practice uses any available model, can be any mesh type.	No special folder needed.		
Moldflow Design Principles	None specifically discussed	Reorganization of unit to cover the flow concepts/design principles only	No Practice		
Molding Window analysis	Fusion	Describes the procedures for a molding window analysis. Has a flow chart describing the process. Concentrates on 2D zone plot and setting correct advanced parameters.	Molding_Window	cover.sdy door_panel_mw.sdy phone_mw_cent.sdy phone_mw_end.sdy	

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Quick Cool-Flow-Warp Analysis	Fusion, 3D	Now have choice of model to use, Fusion or 3D, report images created as results viewed.	QuickFCW	snap3_cover.igs snap_cover.igs	
Results Interpretation	All mesh types	Discusses results manipulation, general interpretation. Practice with Fusion or 3D models concentrating on display methods for each.	Results_Interpretation	door_panel.sdy manifold.sdy	Flow analysis on both parts.
Thermoplastics overview	None discussed	Discussion about polymer properties	No Practice.		
Using Valve Gates	Fusion and 3D discussed	Discusses valve gate control methods, and how to set up. Briefly discusses valve gates on 3D models.	Valve_Gates	tub.sdy	