





OUR TOOLING TECHNOLOGIES

We offer you solutions adapted to the production of your prototype parts in final material or mass production. We have an integrated tooling design office and more than 20 years of expertise in the field of thermoplastic injection.

	 3D MOLDING	 ECONOMIC MOLD Via our Chinese partner	 PM PROTOTYPE MOLDING	 SM SERIES MOLDING
	Study and design your parts	Produce and test your prototypes	Industrialize your project; Produce your pre-series	Produce your series parts
SUBMISSION OF OUR BID	1-2 DAYS	3-4 DAYS	5-7 DAYS	10 DAYS
PROJECT PHASE	<ul style="list-style-type: none"> Feasibility, concept, etc. Test initial solutions with users or in an operating situation. 	Validate the design before launching production resources.	Validate the design before launching production resources.	Production of your series parts.
REQUIREMENTS	<ul style="list-style-type: none"> Urgent need to have parts. Choose a concept and a solution. Requirement for the final material. No solution with additive manufacturing. 	<ul style="list-style-type: none"> Requirement for the final material to test the product's characteristics. Mechanical validation to be carried out: assembly, strength, operation, etc. 	<ul style="list-style-type: none"> Validation of the process production configuration. Start of production in the event of a delay in series production resources. 	<ul style="list-style-type: none"> Recurrence of production. Traceability of the injection process and manufacturing batches. Annual quantities ranging from a few hundred parts to approximately 100,000 parts.
FINAL MATERIAL	YES <ul style="list-style-type: none"> PPGF30, ABS, ABS PC, ASA, PEBD, PC, PBT, POM, PP, PEHD, TPE, SEBS. Plastics FDA (Food Grade) : POM, PP, PEHD, TPE, SEBS. Prototype injection moulding conditions.	YES All thermoplastics (Except PVC)	YES All thermoplastics (Except PVC)	YES All thermoplastics (Except PVC)
MECHANICAL VALIDATION	YES but with inferior mechanical characteristics in certain cases.	YES	YES	YES
PREREQUISITE	3D file	3D file	3D file	<ul style="list-style-type: none"> A 3D file. A 2D drawing. Production specifications. Quality requirements.
MOULD TYPOLOGY	<ul style="list-style-type: none"> Imprints produced by 3D printing. Touch-ups and fine-tuning possible if defined at the consultation. 	Metal imprint. No export mold.	Imprints blocks inserted in standard INITIAL casing or complete mold, steel or aluminum.	Imprints blocks inserted in a standard INITIAL carcass or complete steel mould.
SIZE OF PARTS	70 x 70 x 50 mm	According to analysis and technical validation. V (Volume) max = <200cm ³ S (Surface area) max = <300cm ²	According to analysis and technical validation. V (Volume) max = <200cm ³ S (Surface area) max = <300cm ²	According to analysis and technical validation. V (Volume) max = <200cm ³ S (Surface area) max = <300cm ²
TECHNICAL DETAILS	<ul style="list-style-type: none"> Appearance: The parts may exhibit flow marks, modelling marks at the parting line, sink marks. Traces of strata inherent to 3D-printed imprints. Overmolding of inserts possible (under conditions). 	Economic mold subcontracting Asia	Possibility to attend injection tests on our production site.	Possibility to attend injection tests on our production site.
DELIVERABLES	<ul style="list-style-type: none"> From 1 to 50 injection moulded thermoplastic parts. No supply. Archiving of the tools 6 months. 	<ul style="list-style-type: none"> From 1,000 to 10,000 parts injection moulded with the correct material. No supply. Archiving of the tools 6 months. 	<ul style="list-style-type: none"> From 100 to 5,000 parts injection moulded with the correct material, under series production conditions using our machines. On request: Process capability studies, process limits, injection moulding set-up sheets, thermal validation, rheology, SPC chart, etc. 	<ul style="list-style-type: none"> Batch of recurring parts in series mode. Tooling guarantee from 500 000 to 1 000 000 parts. Production file validated by Initial Samples. Definition of the inspection plan, packaging, etc. Production of parts in accordance with an annual schedule.
TOLERANCES	Tolerances NFT 58000. Normal class.	Tolerances NFT 58000. Normal class.	According to the 2D drawing provided.	According to the 2D drawing provided.
PRODUCTION LEAD TIMES*	Parts delivered within 15 calendar days.	4 to 6 weeks for the first parts.	4 to 6 weeks for the first parts.	To be defined according to the project.

Values given as an indication. Non contractual document. *Delivery times are given as an indication and are to be confirmed at the time of order.