

BID	3D MOLDING®	RAPID MOLDING	PROTOTYPE MOLDING	SERIES MOLDING
SUBMISSION OF OUR BID	1-2 days	3-4 days	5-7 days	10 days
SCOPE	Study and design your parts	Produce and test your prototypes	Take your project to the production stage Produce your pre-series parts	Produce your series parts
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.	Validation of the product and industrial process	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. Validation of the product with the series production configuration. Start of production in the event of a delay in series production resources. 	<ul style="list-style-type: none"> Product marketing. Annual quantities of between a few hundred and approximately 100,000 parts.
FINAL MATERIAL	YES 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 rigid PVC)	YES All thermoplastics (Except rigid PVC)	YES All thermoplastics (Except rigid PVC)
MECHANICAL VALIDATION	YES but with inferior mechanical characteristics in certain cases.	YES	YES	YES
PREREQUISITE	<ul style="list-style-type: none"> 3D file comprising the drafts and technical constraints for moulding and demoulding. 	<ul style="list-style-type: none"> 3D file comprising the drafts and technical constraints for moulding and demoulding. 	<ul style="list-style-type: none"> A 3D file. A 2D drawing comprising all the requirements. 	<ul style="list-style-type: none"> A 3D file. A 2D drawing. Production specifications. Quality requirements.
MOULD TYPOLOGY	Imprints produced by 3D printing.	Metal imprint	Die blocks inserted in a standard INITIAL carcass or a complete, steel or aluminium mould.	Complete steel mould.
DELIVERABLES	<ul style="list-style-type: none"> From 1 to 50 injection moulded thermoplastic parts. No supply or archiving of tooling. 	<ul style="list-style-type: none"> Approximately 50 to 1,000 parts injection moulded with the correct material. No supply of tooling. Tooling archived for 6 months. 	<ul style="list-style-type: none"> From 1,000 to 10,000 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"> From 1,000 to 100,000 parts injection moulded with the correct material with end-to-end configuration management using our machines. Tooling guarantee of 500,000 parts. Production file validated by Initial Samples. Definition of the inspection plan, packaging, etc. Production of parts in accordance with an annual schedule.
SIZE OF PARTS	Max. part size approximately 150x150x80 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"> Min. draft 1°. Min. thickness: 1mm - If < 1mm, contact us. Movement: Possible if demoulding to the outside. Overmoulding: Possible if 5° shut-off. Appearance: The parts may exhibit flow marks, modelling marks at the parting line, sink marks, traces of strata inherent to 3D-printed imprints. Transparent parts not possible. Overmolding of inserts possible (under conditions) 	According to the feasibility study.	According to the feasibility study.	According to the feasibility study.
TOLERANCES	Tolerances NFT 58000. Normal class with a minimum of ± 0.3mm.	Tolerances NFT 58000. Normal class.	According to the 2D drawing provided.	According to the 2D drawing provided.
ALTERATIONS ADJUSTMENT	Not possible.	Not possible.	Possible.	Possible.
PRODUCTION LEAD TIMES	From 1 to 20 pieces delivered within 8 working days. 1 extra day if needed more than 20 pieces.	Approximately 3 to 5 weeks for the parts.	4 to 6 weeks for the mould.	Depending on volumes.
BUDGET	€	€€	€€€	€€€ / €€€€