SHOT PEENING PROCESS TECHNOLOGY _ BLASTING BEADS

plasting purpose	ABRASIVE BLAST CLEANING																																				
	de-sanding, de-rusting, de-scaling, removal of deposits, removal of paints and coatings (varnish, paint, chromium, nickel, cadmium, copper, zinc, tin, rubber, plastic) instead of brushing, grinding, pickling, scraping, washing, removal of weld & solder deposits, removal of temper colors, surface preparation for metallic and non-metallic coatings																																				
application / size range	sand and die casting (FE and NE metals)	mould casting and centrifugal casting (FE and NE metals)	moulds and dies	injection casting and pressure die-casting for plastics	dies and moulds for rubber and PU	extruded forms and barrel extruders	guide rollers, transport and calender rollers	hollow glass shapes, baking moulds	wagons, containers, cableway cars (V2A and Al too)	solder and welding residue (V2A and Al too)	steam and gas turbine vane rings	engine blocks, cylinder heads, pistons, crankshafts	valves, manifolds, outlets	clutches, brakes, spark plugs	e-motors (oxide deposits, contact brushes, isolation residue)	fittings heavy	fittings light	pump bodies and parts	water meters	pneumatic and hydraulic parts	small profiles (V2A)	electonic parts	compressor parts	frames, handlebars, forks, metal furniture, lightweight constructions	dies, matrixes, stamps	stamping and press parts	drop-forged and drawn parts	precision castings	files, milling machines, reamers, drills, countersinks, cutting tools	carbide tools	other tools	outomotive bodies	aircraft skins	electric and electronic aircraft parts	gear wheels, pinions, spline shafts and other hardened parts
0 – 50µm				✓																		✓												✓		
40 – 70µm				✓							✓										✓	✓				✓			✓		✓		✓	✓		
50 – 105µm		✓	✓	✓							✓			✓	✓					✓	✓	✓	✓			✓			✓	✓	✓		✓	✓		
70 - 110µm	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓			✓			✓	✓	✓		✓	✓	✓	
80 – 125µm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓		✓			✓			✓	✓	✓	✓			✓	
90 – 150µm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓			✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	
100 – 200µm	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓		✓	✓		✓	✓	✓			✓	
150 – 250µm	✓	✓	✓		✓	✓			✓			✓		✓	✓	✓	✓	✓	✓				✓	✓	✓		✓	✓			✓	✓			✓	
200 – 300µm	✓	✓													✓	✓		✓	✓					✓	✓		✓	✓								
200 – 400µm	✓															✓		✓	✓								✓	✓								
300 – 400µm	✓																										✓								
400 – 600µm	✓																										✓								
400 – 800µm																											✓								
600 – 800µm																																			

SHOT PEENING PROCESS TECHNOLOGY _ BLASTING BEADS

plasting purpose	SURFACE FINISH SHOT PEENING																		SURFACE STRAIN HARDENING ABRASIVES (shot-peening)												
	blasting for deburring, smoothing, lapping and polishing (general finishing, antireflex finishing, decorating, designing, ornamenting, structuring, matting, satin finishing), exposure of surface defects																		increasing material endurance and stability, size retention, sealing and quiet running, improvement of lubricant film adhesion, reduction of notch sensitivity, prevention of stress crack corrosion, straightening and shaping												
application / size range	matting of stainless steel	smoothing of moulds from the rubber and plastics industry	smoothing of moulds from the foundry and glass industry	reflex free finishing of bumpers, trims, radiator grill	reflex free finishing of fittings, door handles	reflex free finishing of wiper arms, mirror and lamp sockets	reflex free finishing of phono, TV and camera parts	reflex free finishing of measuring and display devices	reflex free finishing of optical and acoustic parts	finishing and deburring of watch casings and watch parts	finishing of household devices and household appliances	finishing of ornaments	deburring and finishing of fine mechanical and precision parts	deburring and smoothing of precision-cast parts (V2A, Ti)	deburring and smoothing of precision-cast parts (SM, LM)	smoothing and finishing after assembly	deburring of sintered parts	finishing, ornaments, decor, jewellery, medals, coins	finishing of steel and LM strips and sheets	gear wheels, worms, worm wheels, intermediate gear	parts of office machines	precision chain parts	shafts, axles, bolts, cones, drillings, joints	weapon components	rolls, welding seams	valves, valve seats, pistons, cylinders, connecting rods, tappets	shovel systems for all rotating machinery	cutting, milling and broaching tools, cams	leaf, coil and spiral springs, stabilizers	wedges, groove, tongues	gauges, measuring tools
0 – 50µm		✓					✓			✓			✓					✓														
40 – 70µm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓			✓		✓										✓	✓		
50 – 105µm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓		✓										✓	✓		
70 - 110µm	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓								✓	✓	✓		✓
80 – 125µm	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓			✓					✓		✓	✓	✓		✓
90 – 150µm				✓	✓	✓					✓	✓		✓	✓	✓			✓		✓			✓		✓	✓	✓		✓
100 – 200µm				✓							✓	✓		✓	✓	✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
150 – 250µm											✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
200 – 300µm											✓			✓	✓		✓			✓		✓	✓	✓	✓			✓	✓		
200 – 400µm														✓			✓			✓		✓	✓	✓	✓			✓	✓		
300 – 400µm														✓			✓			✓		✓	✓		✓			✓			
400 – 600µm														✓			✓			✓			✓					✓			
400 – 800µm																												✓			
600 – 800µm																												✓			