HGH®

Microblasting

Highly precise. Reproducible.
Flexible in applications.

- Automotive industry
- Electronics industry
- Mold making
- Surface technology
- Optics industry
- Plastics industry
- Aviation industry
- Engine manufacturing
- Aerospace industry
- Textile industry
- Toolmaking
- Galvanotechnology

HGH®

HGH 6040

1-Stage-Cabin made by HGH

- Hinged front
- 90° opening lid
- 1 key switch
- Model 8060 incl. turntable and mobile base frame

Model	HGH 6040	HGH 7050	HGH 8060
Working area [mm]	560 x 350 x 250	680 x 450 x 300	780 x 550 x 310
Door dimensions [mm]	600 x 230	750 x 280	850 x 280
Cabin dimensions [mm]	705 x 720 x 1360	855 x 720 x 1360	955 x 935 x 1570
Workpiece weight [kg]	max. 100	max. 100	max. 300

HGH 6040 DUO

2-Stage-Cabin made by HGH

- Hinged front
- 90° opening lid
- 2 key switches
- Mobile base frame with adjustable feet and abrasive tray
- Model 7050 DUO incl. turntable

Model	HGH 6040 DUO	HGH 7050 DUO
Working area [mm]	560 x 350 x 250	680 x 450 x 300
Door dimensions [mm]	600 x 230	750 x 280
Cabin dimensions [mm]	1300 x 720 x 1500	1700 x 830 x 1550
Workpiece weight [kg]	max. 100	max. 100

Additional accessories

- optionally available

Zubehör	Model								
	6040	7050	8060	DUO	1100	1300	1700	2200	Tandem
Microblast 100	•	•	•						
Microblast 200				•					
Integrated micro lapping	•	•	•	•					
Height adjustment	•	•	•	•					
Mobile base frame	•	•	•						
Abrasive tray	•	•	•						
Door aperture	•	•	•	•	•	•	•	•	•
Screw intake					•	•	•	•	•

HGH Microblast 200

HGH Microblast 100

1-Stage-Cabin Large

- Version as an injector system
- Version as a ducted blast system *(details in italic)*

Model	HGH 1100	HGH 1300	HGH 1700	HGH 2200
Working area [mm]	1100 x 800 x 740 *1100 x 930 x 830*	1370 x 890 x 810 *1370 x 1020 x 890*	1700 x 1400 x 1100 *1700 x 1400 x 1100*	2200 x 1400 x 1100 *2200 x 1400 x 1100*
Door dimensions [mm]	690 x 620 *830 x 720*	790 x 690 *920 x 780*	1290 x 990 *1290 x 990*	1290 x 990 *1290 x 990*
Cabin dimensions [mm]	1250 x 1280 x 2000 *1250 x 1525 x 2100*	1520 x 1400 x 2080 *1520 x 1630 x 2170*	1750 x 2080 x 2350 *1750 x 2080 x 2350*	2350 x 2080 x 2350 *2350 x 2080 x 2350*
Workpiece weight [kg]	max. 350 *max. 350*	max. 350 *max. 350*	max. 1000 *max. 1000*	max. 1000 *max. 1000*

HGH 1100

2-Stage-Cabin Large

- Tandem injector system
  - Loading platform with 2 cabins
  - 1 turntable

Model	HGH 1100 Tandem
Working area [mm]	1100 x 800 x 740
Door dimensions [mm]	690 x 620
Cabin dimensions [mm]	1250 x 1280 x 2000
Workpiece weight [kg]	max. 350
Model	**HGH 1300 Tandem**
Working area [mm]	1370 x 890 x 810
Door dimensions [mm]	790 x 690
Cabin dimensions [mm]	1520 x 1400 x 2080
Workpiece weight [kg]	max. 350

HGH 1100 Tandem

Blasting abrasives by HGH

We have a vast selection of blasting abrasives that are precisely matched to your individual requirements.
You can find a small selection here:

SM 2002A	SM 2002G	SM 2552GT
Removal of the martensite layer. First stage of the two- or multi-stage blasting process. Grain size: 50 - 70 µm	Creates a silky finish on Duoplast, V2A- and aluminum tools. Grain size: 150 - 250 µm	Surface compaction. Non-stick compaction in a two- or multi-step blasting process. Grain size: 30 µm
SM 2490A	**SM 2915A**	**SM 2005K**
Descaling, structuring, derusting, matting. Primer preparation for painting work. Grain size: 0,1 - 0,4 mm	Primer preparation for galvanic coatings. Paint primer. Grain size: 90 µm	Cleaning of spirals, barrels and tools in injection molding and extruder machines. Grain size: 0,2 - 0,4 mm

For the highest precision & productivity

Microblasting by HGH

The microblasting process is a dry blasting process in which a defined nominal grain size of a certain medium quality is blasted onto the surface with the aid of compressed air and this energy influences the desired areas of the workpiece in a targeted and precise manner.

Lapping blasting after eroding has the following advantages:

- 100 percent removal of the hard martensite layer on eroded workpieces and erosion electrodes in seconds without edge rounding.
- Step-by-step fine machining to achieve defined surfaces. The surface geometries can be modified so that they are three-dimensionally concave or convex. This leads to a reduction in cold welding at movement and deflection points.
- Levelling and compacting of surface areas to reduce frictional wear and to optimize the mating properties on various materials.
- Primer preparation and surface cleaning for electroplating and coatings.
- Reconditioning of heavily soiled molds with subsequent compaction of the surface (increased service life and non-stick effect).
- Before polishing work, the surface roughness can be refined by blasting (approx. Ra 0.2 - 1.5 µm) so that the desired surface finish can be achieved in a much shorter time (cost saving).

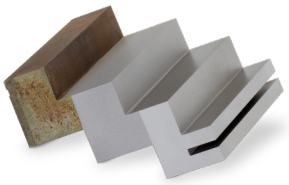
This process technology has set new standards as a supplement to the conventional, well-known finishing processes in production technology and to achieve a defined surface geometry.

Thanks to our many years of continuous development work on our lapping blast cabinets and blasting media, we have been able to transform conventional “sandblasting” and “slurry blasting” into a defined and reproducible surface treatment method.

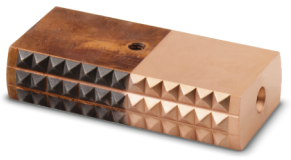
Wide range of applications

Precise and reproducible

It is known that a so-called white zone (martensite/ cementite) is created during both wire and die-sinking EDM. Various metallurgical studies have confirmed that the white zone can be influenced and can vary in thickness depending on the process, material and generator settings.

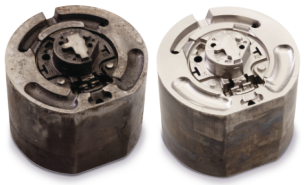


Blasting of an eroded surface in a 2-step process to remove the martensite layer and to increase the wear resistance.



Cleaning an electrode to extend the service life, check for surface damage and improve the sparking process

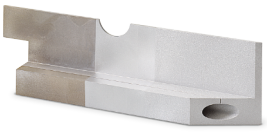
Surface treatment in preparation for coating



Cleaning of a zinc die-casting tool with subsequent surface compaction to solve demolding problems

Cleaning plastic molding screws for quick reuse in the injection molding machine

Removal of surface rust or other residues



Structuring of aluminum surfaces

Structuring of surfaces in molding tools

Processing and structuring of glass surfaces

Couldn't find your application here? Please contact us and we would be happy to find the right solution!

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