



DRG

DRAG FINISHING MACHINES

Get smooth and shiny surfaces on all kinds of metal and plastic parts with our Drag and Stream Finishing Machines and innovative surface treatment solutions.



DRG-Compact

Machine alternatives with different dimensions, bowl volume and number of holders specific to your applications.

Advantages of the DRG series

- Special processes for parts with different geometries with angled head option.
- User-friendly, fully automatic manageable software with Siemens HMI and PLC systems.
- User interface with 500 recipe memories, adaptable to your barcode and ERP systems.
- With the stream finishing option, you can combine technologies, discover the process speed provided by the rotary boiler and the preparation of homogeneous surfaces and corners.
- The chassis is placed on a robust sigma profile system.
- Recipes specific to special processes with independently adjustable table and spindle speeds provided by the 2nd speed motor option.
- Choose the most suitable system for you with collet, bush and chuck holder alternatives.
- You can combine different processes in one machine with the easily replaceable bowl system.



DRG-XL

PATENTED STREAM FINISHING SYSTEM®

During this process the clamped tools and the media container are turning.



With our DRG series Drag Finishing machines, we reduce every surface roughness (RA) down to 0.02 microns with rough finishing media and fine polishing media.

Where to use?

KAYAKOCVIB is your surface treatment solution partner in every field of mold, Automotive, Marine, Aerospace, Defense Industry etc. machining and additive manufacturing.



Patented angle head® options.



DRG series used for the top quality surfaces.

Special processes

On the life and performance of your products, at least as important as raw material and production quality; You can achieve homogeneity and quality by getting rid of the human factor with our fully automatic Drag Finishing and Stream Finishing machines in your corner preparation and surface polishing processes.





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You can perform deburring, polishing, surface cleaning or aging processes of all kinds of metal products in our Drag Finishing machines, which we will choose according to the production capacity, and you can achieve quality results.

The punches used in the producing of pharmaceutical tablets and their corresponding molds must be polished after each process. As a solution to be able to do this process easily, quickly and homogeneously; we developed the DRG-Pharma series.



DRG-Robot



DRG-Two Step

High-speed robotized

- High-speed robotized loading and unloading
- Fast processes due to the high processing forces
- Processes parameters for deburring, polishing, honing in a single-process operation
- Homogenous process on the full tool length
- High productivity: up to 144 tools/hour

Drag Finish in relation with PVD Coating:

- Improve surface roughness and remove droplets after coating to reduce the torque and give better chip flow
- Surface preparation before recoating tools

Two steps Drag Finish

The machine is equipped with two containers of media:

- To avoid changing the media container for the different requests of edge preparation and polishing.
- With one single clamping the tools can be operated in two different media deburring and fine polishing.



Tool holders

- Quick Tool Holder - proprietary tool holders for very fast tool change available for all shank diameters (metric and inch) 3 mm/1/8" to 25 mm/1"
- Screwholders with bushings - the economic solution for odd sizes available for all shank diameters (metric and inch)
- Special holders for non standard tools (e.g. inserts, drill heads, stick blades, etc.) are available on request

All heads are equipped with quick jig connect system to facilitate the loading of the tool holders.



Benefits of the DRG series

- No pecking cycles
- Maximum precision and stability
- Efficient chip evacuation
- Superior surface finish
- Increased speeds & feeds
- Best surface results



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Technical Features

DRG SERIES

HOW TO SELECT SUITABLE DRAG FINISHING MACHINES?

- DRG-COMPACT** : They are the small machines used for all cutting tools finishing.
- DRG-STANDARD** : They are the biggest machines than compact series used for all cutting tools finishing.
- DRG-TWO STEP** : They are used for polishing cutting tools and other products.
- DRG&STREAM FINISH**: They are used for polishing cutting tools and other products.
- DRG-XL** : Polishing machine for medical implants. It is used for deburring and surface polishing of large products. It is used for polishing molds up to 100 mm, cutting tools and surface roughness and polishing.
- DRG-PHARMA** : It is used for surface polishing of pharmaceutical punches.
- DRG-ROBOT** : Automated system for corner radius processing of large (mass production) cutting tools.

S: Spindle head, **H:** Holder, **A:** Angular head, **RC:** Rotary container, **ARC:** Rotary container+angular head, **D:** Drum, **P:** Pharmaceutical

DESCRIPTION	DRG-COMPACT	DRG-STANDARD		DRG-TWO STEP				DRG&STREAM FINISH		DRG-XL	DRG-PHARMA	
	4S16H	4S20H-A	6S30H	4S20H2D-A	4S20H2D-A-RC	6S30H2D	6S30H2D-RC	4S20H-A-RC	6S30H-RC	6S24H-1000	4S36H-P	6S72H-P
Power (kW) 380-510V/50-60Hz 16A	1,5	3	3	3	4,5	3	4,5	4,5	4,5	6	1,5	2
Control Unit Voltage (V)	24	24	24	24	24	24	24	24	24	24	24	24
Nominal Load (kVA)	1	2	2	2	3	2	3	3	3	4,5	1	1,5
Angular head	-	15°	-	15°	15°	-	-	15°	-	-	-	-
Heads	4	4	6	4	4	6	6	4	6	6	4	6
Quick Tool / Part Connectors	16	20	30	20	20	30	30	20	30	24	36	72
Container volume (lt)	50	80	80	100-100	80-100	100-100	80-100	80	80	240	50	80
Second speed motor	-	Included	Included	Included	Included	Included	Included	Included	Included	Included	-	Optional
Speed (RPM) Table/Head/Tool	50/100/200	45/180/360	45/180/360	45/180/360	45/180/360	45/180/360	45/180/360	45/180/360	45/180/360	40/200/400	45/90/-	45/90/-
Stream finishing RPM	-	-	-	-	45	-	45	45	45	-	-	-
Laser sensor for tool depth	Included	Included	Included	Included	Included	Included	Included	Included	Included	-	Optional	Optional
Max. Media depth (mm)	180	200	200	220	220	220	220	200	200	360	180	200
Body chasis / Plating	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Steel	Allu./Stainless	Allu./Stainless
Control unit	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC	Siemens PLC
Wet usage	-	-	-	Optional	-	Optional	-	-	-	Optional	-	-
Water filtration unit (Optional)	-	-	-	60 lt	-	60 lt	-	-	-	150 lt	-	-
Speed and direction cont.	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV	Danfoss INV
Lift movement direction	▲	▲	▲	▲	▲	▲	▲	▲	▲	▼	▲	▲ / 70
Media mixer	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Dimensions L/W/H (mm)	1190x890x1830	1200x900x2010	1200x900x2010	2065x900x2010	2065x900x2010	2065x900x2010	2065x900x2010	1200x900x2010	1200x900x2010	1625x1360x2280	1190x890x1830	1200x900x2010
Weight (kg)	320	420	420	600	650	600	650	480	480	950	280	380
Recipe storage HMI, USB	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Max. recipe number	500	500	500	500	500	500	500	500	500	500	500	500
Max. workpiece Ø (mm) Tool/ Shaft	110/25	160/40	160/40	160/40	160/40	160/40	160/40	160/40	160/40	280/42	1"/1,5"	1"/1,5"
Dust collector unit	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional