

Smooth and Quick Runner Removal with a Perfect Material Grind.



HARMO

EX-4
DUAL SHOCK ABSORBER SYSTEM

SERIES



GSL 200
BESIDE THE PRESS GRANULATOR



Blackhawk Machinery & Systems, Inc.

www.chillerconnect.com
847.427.0414

DUAL SHOCK ABSORBER SYSTEM

DUS SYSTEM



Brand New Pneumatic Swing Type Sprue Picker with Fully Updated Mechanism and Controller



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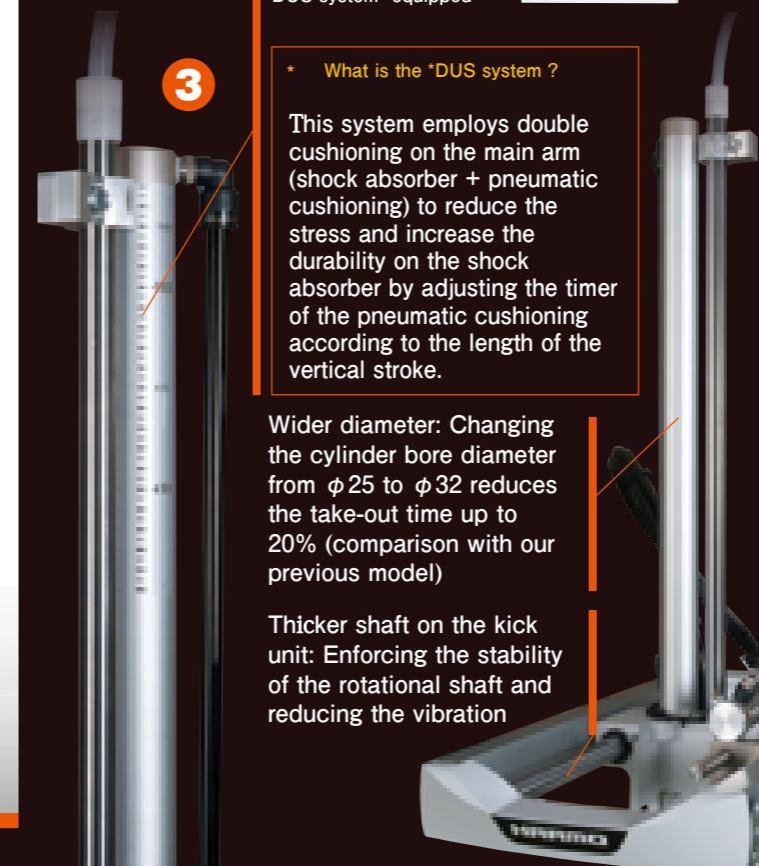
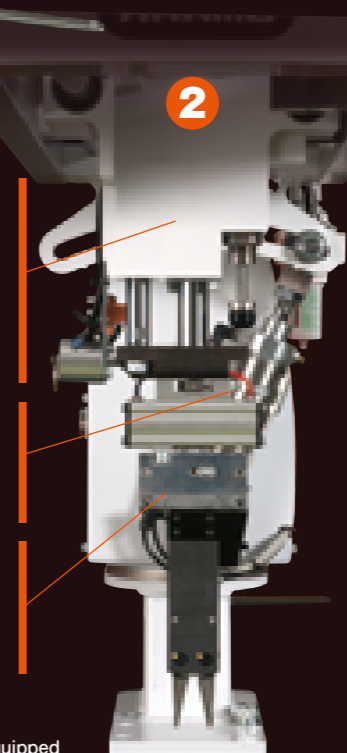
1 Newly designed body: The controller unit (controller and air valves) are built into the solid main body and the components are well-laid out to be insulated from the influence of surroundings.

Easy to reach: The "single-action" feature with the easy-to-reach ratchet position, provides smooth and speedy mold change-over.

Ball bushing on the side pipe slide: Combining the sliding unit and the cylinder terminal increases the durability and reduces vibration.

Fixing with set screws: employing the set screws makes it easy to lock the wrist rotation unit when it is not in use.

The wirings are tucked into the wrist unit to avoid unnecessary contact or breakage of the wirings.



DUS system* equipped

* What is the "DUS system" ?

This system employs double cushioning on the main arm (shock absorber + pneumatic cushioning) to reduce the stress and increase the durability on the shock absorber by adjusting the timer of the pneumatic cushioning according to the length of the vertical stroke.

Wider diameter: Changing the cylinder bore diameter from $\phi 25$ to $\phi 32$ reduces the take-out time up to 20% (comparison with our previous model)

Thicker shaft on the kick unit: Enforcing the stability of the rotational shaft and reducing the vibration

Controller

HRS-40



- Compact hand-held controller
- Easy-to-see display with icons
- EEPROM storage without the memory backup battery
- 50 mold memories
- Easy to identify the key switches function; setting or operational, to improve the operability

Standard

- Counter (Acceptable / Reject)
- Swing and Ready
- Reject Release
- Wrist Rotation (for F type)

Options

- Vertical Arm Extension (+100mm) (for 150 type)
- Kick Extension (ST = 100/125/150/175 type) (Standard ST=75)
- Vacuum Circuit
- On-the-Way-In Sprue Release
- Grip Nipper Circuit
- Primary / Secondary Nipper Circuit (with Nippers and Miniature Cylinder)
- Air Blow
- External Parts Verification
- Conveyor Signal Output
- Finger (From RCH-16 to RCH-10L)
- Low Ceiling Type
- Residual Pressure Release Valve
- Exhaust Cleaner
- Customized Color
- Euromap 12
- Euromap 67

ZERMA

THE HOME OF SIZE REDUCTION

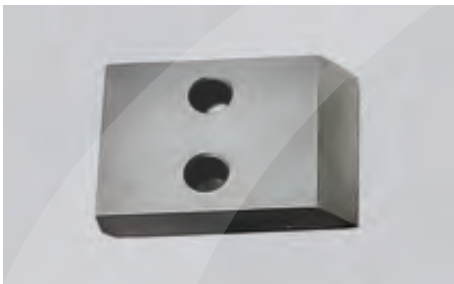
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The curvature of the specially profiled rotor knives ensures a constant cutting radius after re-sharpening thus maintaining the original cutting gap. Awkward knife adjustment is no longer necessary.



The staggered rotor design creates an individual blade cut. The aggressive open rotor of the 200 series GSL makes it well suited for bigger volume parts such as bottles.



The quick snap system makes access to the cutting chamber, suction trough and screen area fast and easy. The hinged screen holder simplifies screen installation.

GENERAL DESCRIPTION

The slow speed granulators in the GSL 200 range feature a staggered 200 mm diameter rotor with widths ranging from 180 to 500 mm. The rotor is directly driven by a geared motor. The low rotor speed reduces the noise level of the machine and creates less dust while grinding. The special design knives of the GSL series can be sharpened easily and do not need adjustment afterwards. The material is fed via a sound absorbing feed hopper that can be tailored to fit various applications and feeding ways. Depending on the requirements the machines can be fitted with a wide variety of hoppers, they are mounted on either low or high level base frames with matching suction bins or bag filling adapters. Quick snap fasteners and hand screws make access to the machine for cleaning and maintenance fast and easy.

APPLICATIONS

The GSL slow speed granulators of the 180 series are mainly used in injection and blow molding processes as beside the press machines to grind runners and sprues. The resulting granules are then immediately reintroduced into the production process. The GSL 200 series machines are more aggressive than the smaller 180 series and thus better suited for larger thin walled parts. The machines can be used for rejected products in the inline recycling process as well. Different hopper and base frame designs make it possible to integrate the machine with most types of injection molding machines and robots.

ADVANTAGES

- **Direct driven staggered rotor**
- **Special knife design makes adjustment unnecessary**
- **Easy access for maintenance and cleaning**
- **Slow rotor speed creates less noise and dust**
- **Easily customizable to suit different applications**

PLASTIC SIZE REDUCTION
RUBBER SIZE REDUCTION
WOOD SIZE REDUCTION
E-WASTE SIZE REDUCTION



ZERMA

GSL BESIDE THE PRESS GRANULATOR



PLASTIC
SIZE
REDUCTION

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HOME OF SIZE
REDUCTION

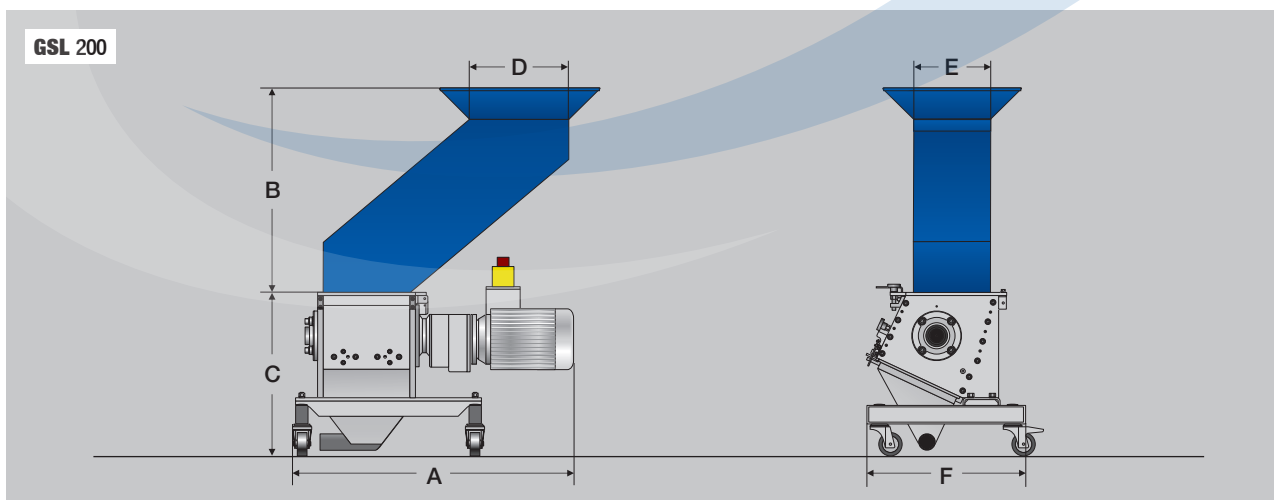


SPECIFICATIONS

Type GSL	200/180	200/270	200/360	200/500
Rotor diameter (mm)	200	200	200	200
Rotor width (mm)	180	270	360	500
Rotor speed (rpm)	150	150	150	150
Drive capacity (kW)	3	3	4	4
Rotor knives (pcs)	12	18	24	33
Stator blades (rows)	2	2	2	2
Screen size (mm)	>5	>5	>5	>5
A (mm)	985	1110	1255	1415
B (mm)	740	770	815	835
C (mm)	520	520	520	520
D (mm)	230	310	470	545
E (mm)	245	245	245	245
F (mm)	510	510	510	510

Subject to technical modification

DIMENSIONS



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