

# GRANULATORS

Reprocessing Plastic Scrap into  
Valuable Regrind

world of innovation



# BESIDE-THE-PRESS CONVENTIONAL BLADE GRANULATORS

NEW RANGE

## The G-Max Series Smart Engineering in Compact Granulators

Specifically designed for closed loop recycling of sprues/runners discharged from injection machines of up to 400 tons clamping force.

- » Combining energy saving, a compact footprint and a unique damper cutting chamber for significant noise reduction, ensuring a quiet and efficient operation.
- » Portable device, allowing greater versatility.
- » Eco-design feature: **G-Max Series IE2** High-Efficiency motor with noticeable power saving.
- » Compact footprint.

### A unique concept for today's market

A remote control pendant replaces the conventional electrical cabinet. This new concept allows standard functions not available on a conventional design.

- » Hour counter with digital display.
- » Display of status:
  - Belt breaking/sliding.
  - High level sensor.
  - Phase detector to make sure that the rotor direction is correct and not missing a phase.
- » Visual determination of the granulator with multicoloured **ambiLED**.
- » Electrical interface to stop the granulator when the IMM is turned off to save energy.
- » Two positions of the granulator's remote control box on the granulator to place the front panel in the right position for operator checks.
- » 3 meter cable allowing the placement outside a safety guard.

### Automatic pretensioning system for the belt

- » No maintenance.
- » Energy efficient.
- » No risk of oil leakage.

The **G-Max 12** features a staggered rotor, allowing faster processing, and also provide a powerful cutting force by concentrating the total granulation energy into one short knife at a time.

The **G-Max 23** and **33** have a hybrid staggered rotor with open spaces between the rotating knives and the center of the shaft, providing unrestricted air-flow through the cutting chamber. These models are well suited for granulating heat-sensitive resins or feedstocks that are still warm from processing.

The rotor is made from large components, adding mass in order to cut through the thickest scrap and also providing good stability in the transfer of high torque.

The **G-Max Series** features a screen with conical shaped holes, making it easier for soft tacky regrind to pass through the screen. This also helps to minimize screen hole plugging.



# G-Max Series: Technical Specifications

**Witmann**

## G-Max 12

- » Cutting chamber: 169 x 198 mm
- » Number of blades: 3 x 4
- » Throughput: 50 kg/h\*
- » Motor output: 1.5 kW
- » Rotor diameter: 180 mm
- » Regrind bin capacity: 10 liters



G-Max 12

## G-Max 23

- » Cutting chamber: 310 x 235 mm
- » Number of blades: 3 x 2
- » Throughput: 80 kg/h\*
- » Motor output: 2.2 kW
- » Rotor diameter: 220 mm
- » Regrind bin capacity: 13 liters



G-Max 23



## G-Max 33

- » Cutting chamber: 460 x 235 mm
- » Number of blades: 3 x 3
- » Throughput: 110 kg/h\*
- » Motor output: 3 kW
- » Rotor diameter: 220 mm
- » Regrind bin capacity: 16 liters



G-Max 33

### Standard features

- » Automatic tensioning system for the belt
- » High level sensor for regrind bin level
- » Screen with conical holes, diameter 5 mm.
- » Swivel outlet pipe.
- » Rotor direction and missing phase detection.
- » Stainless steel regrind collection bin.
- » Outlet pipe with adjustable airflow and front slanted cut for optimal emptying

### Additional features

- » Water cooling circuit.
- » Rotating paddle into regrind bin to prevent bridging around the take-off pipe.
- » Regrind size: 4, 6 or 8 mm.
- » Magnet along the hopper.
- » Rotor direction and missing phase detection with non-driven rotor/sliding of belt

\* Depending on material, shape, density of sprues/parts to be processed and regrind size. – Specifications subject to change without notice.

# BESIDE-THE-PRESS SCREENLESS GRANULATORS



- » Low speed (27 rpm @ 50 Hz) screenless technology for the most efficient and cost-effective grinding of engineered resins as well as styrenics, acrylics, and glass-fiber-reinforced materials.
- » Low speed single pass processing means less wear on cutting tools for reduced maintenance, low sound levels, and low power consumption.
- » Low speed/high torque for grinding hard and brittle plastics.
- » The helical cutting design also boosts energy savings, the hardened combs can be reversed to double their life-time and reduce maintenance costs.
- » Granulators operate below 70 to 75 dbA with most tough engineered materials.

## MINOR 2 The Economic Choice with a Compact Design

Ideal for the processor that has injection molding machines less than 110 tons.

A compact package designed to accommodate tight spaces and conveyor or robot drops.

The low speed decreases noise and fly back during operation and provides a better quality, consistent regrind.

Consistent size of regrind with fewer fines that melt more uniformly, resulting in fewer rejected parts and reduced costs.

- » Regrind size: 4 or 5 mm
- » Cutting chamber: 240 x 249 mm
- » Number of cutters: 2
- » Throughput: 12 kg/h\*
- » Motor output: 1.1 kW

### Standard features

- » Stainless steel regrind collection bin.
- » Stainless steel hopper properly sound-dampened.
- » Swivel outlet pipe.
- » High level sensor for regrind bin level.

### Optional features

- » **ARS Automatic Reversing System** to help avoid rotor blocking in case of jams, aiding the granulation of thicker-walled or tougher plastics
- » Magnet along the hopper.





Ideally suited for metered robot or conveyor feed beside injection molding machines up to 300 tons.

The small footprint accommodates tight spaces and the wide-mouth, flared in-feed hopper easily handles a range of robot or conveyor drops and sprue/runner sizes.

Quiet, energy efficient: the **JUNIOR Compact Series** conserves valuable floor space while producing quality regrind from robot-fed sprues, runners and small parts.



### JUNIOR 2 Compact

- » Cutting chamber: 240 x 346 mm
- » Number of cutters: 2
- » Throughput: 20 kg/h\*
- » Motor output: 1.5 kW
- » Regrind size: 4, 5 or 7 mm



### JUNIOR 3 Compact

- » Cutting chamber: 240 x 467 mm
- » Number of cutters: 3
- » Throughput: 30 kg/h\*
- » Motor output: 2.2 kW
- » Regrind size: 4, 5, 7 or 10 mm
- » Storage of cable cord

#### Standard features

- » Viewing window to provide visibility to the cutting chamber.
- » Stainless steel regrind collection bin.
- » Stainless steel hopper properly sound-dampened.
- » Swivel outlet pipe.
- » Enlarged hopper for large sprues.
- » High level sensor for regrind bin level.

#### Optional features

- » **ARS Automatic Reversing System** to help avoid rotor blocking in case of jams, aiding the granulation of thicker-walled or tougher plastics.
- » The second shaft (optional on **JUNIOR 3 Compact**) eliminates large runner bridging. It is a force feed system within the hopper, designed for large sprues into the multi-stage cutting area.
- » Magnet along the hopper.

\* Depending on material, shape, density of sprues/parts to be processed and regrind size. – Specifications subject to change without notice.

# SCREENLESS GRANULATORS

## for Central Scrap Reclamation

### JUNIOR DOUBLE Series

Equipped with two rotors in the cutting chamber for large sprues and parts, the **JUNIOR DOUBLE** is typically used offline, located away from the process.

Material is fed into the granulator by a belt conveyor belt or by dumping the content of a box directly into the feed hopper of the machine.

It features a rugged self-aligning gearbox that is able to transmit the heavy shock loads experienced while grinding tougher plastics.



#### JUNIOR DOUBLE 4

- » Cutting chamber: 530 x 346 mm
- » Number of cutters: 4
- » Throughput: 40 kg/h\*
- » Motor output: 2 x 2.2 kW
- » Regrind size: 5, 7 or 10 mm

#### JUNIOR DOUBLE 6

- » Cutting chamber: 530 x 467 mm
- » Number of cutters: 6
- » Throughput: 60 kg/h\*
- » Motor output: 2 x 2.2 kW
- » Regrind size: 5, 7 or 10 mm

#### JUNIOR DOUBLE 8

- » Cutting chamber: 530 x 588 mm
- » Number of cutters: 8
- » Throughput: 70 kg/h\*
- » Motor output: 2 x 2.2 kW
- » Regrind size: 7 or 10 mm



JUNIOR DOUBLE

#### Standard features

- » Swivel outlet pipe.
- » Viewing window to provide visibility to the cutting chamber.
- » Stainless steel regrind collection bin.
- » Stainless steel soundproof hopper.
- » High level sensor for regrind bin level.

#### Additional features

- » **ARS Automatic Reversing System** to help avoid rotor blocking in case of jams, aiding the granulation of thicker-walled or tougher plastics.
- » Doublewide with third shaft to pull in and pre-break large parts or nested sprues.
- » Motor output: 2 x 3 kW.
- » Magnet along the hopper.

# ML 33

## Medium-Sized Conventional Blade Granulator

**Wittmann**

### ML 33

Designed for efficient beside-the-press granulation of medium, bulky parts from injection molding and/or blow molding.

Very rugged unit and extremely versatile, can be used in robot fed, conveyor fed or hand fed applications.

A "slant-knife" arrangement that produces a scissor cutting action provides higher throughputs with less motor power, less noise, and reduced fines and dust.

3-blade open rotor allowing air to pass through the cutting chamber.

This design results in a cleaner more uniform granulate, reduced heat build-up in the granulate, reduced noise emissions and energy consumption.

All cutting knives are adjustable and pre-adjusted to the proper gap outside the granulator with the use of the knife gap pre-adjustment fixture.

Adjustable rotating and stationary knives allow for a constant cutting circle, minimally gapped knives, and longer knife life since knives do not have to be sharpened as a set.

Motor bearings positioned outside the cutting chamber keep grease from contaminating product and regrind from contaminating the bearings.

Both the hopper and screen cradle are easy to open and close, providing simple access for cleaning and maintenance.



- » Cutting chamber: 300 x 300 mm
- » Number of blades: 3
- » Throughput: 100–150 kg/h\*
- » Motor output: 5.5 kW
- » Rotor diameter: 260 mm
- » Regrind size: 5, 6, 8, 10 or 12 mm

#### Standard features

- » Stainless steel hopper properly sound-dampened.
- » Stainless steel regrind collection bin.

#### Optional features

- » Water cooling circuit around cutting chamber.
- » Mechanical high level sensor in the regrind collection bin.
- » Inertia flywheel for thicker cross-sectioned parts and minimizing motor amperage spikes.
- » Rear feeding for long parts.
- » Magnet along the hopper.



\* Depending on material, shape, density of sprues/parts to be processed and regrind size. – Specifications subject to change without notice.

# UNDER-THE-PRESS GRANULATORS

Scrap is gravity-fed directly from the processing machine, requiring no conveying or manual handling.

Available in conventional blade and screenless technology featuring a low-profile design.

Fully portable and automatic.

Low profile compact design fits under most presses.

Variable screw pitch to optimize sprue conveying and to avoid flyback.



## MINOR 2A

- » Screenless/low speed model for hard and brittle materials.
- » Low speed (27 rpm @ 50 Hz) screenless technology for the most efficient and cost effective grinding of glass-filled plastics.
- » Screenless technology allows for no "longs" and uniform regrind with minimal fines for efficient re-processing.
- » Low speed single pass processing means less wear on cutting tools for reduced maintenance, low sound levels, and low power consumption.



## MAS 2A

- » Conventional model for processing soft to medium hard materials.
- » 3-blade open rotor with adjustable rotating and stationary knives.
- » Scissor-type cutting action for efficient processing of thin, soft, flexible materials.
- » Open rotor allows for higher airflow through the cutting chamber for more efficient processing of hot scrap.

### Standard features

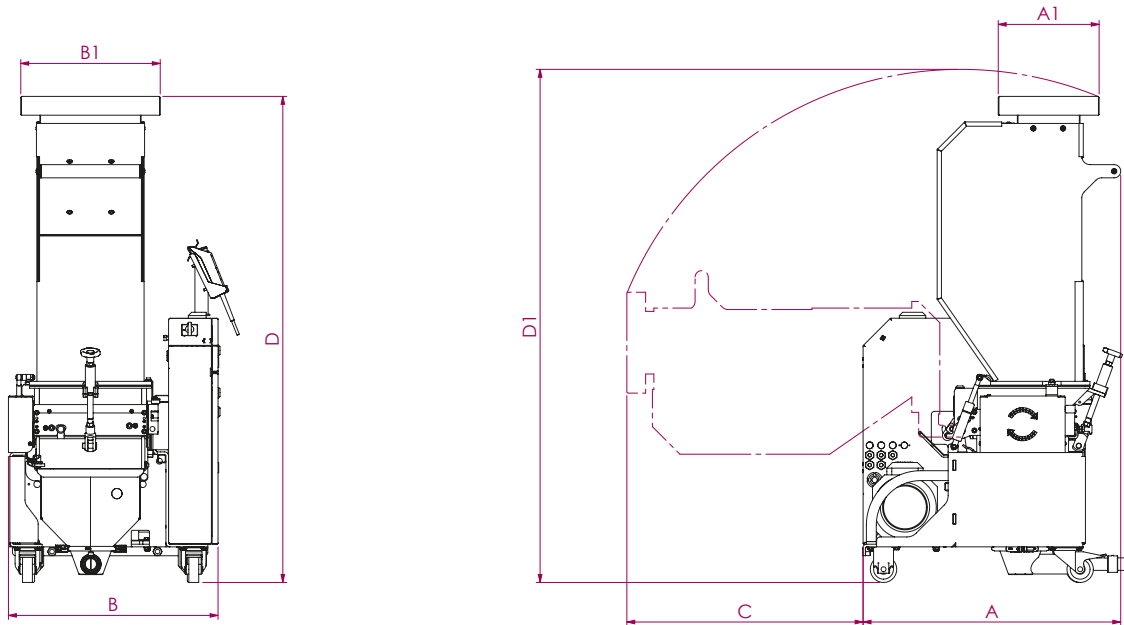
- » Swivel outlet pipe.
- » Stainless steel regrind collection bin.
- » Pre-cutting knife to avoid runners from wrapping around and jamming the feed screw.

### Optional features

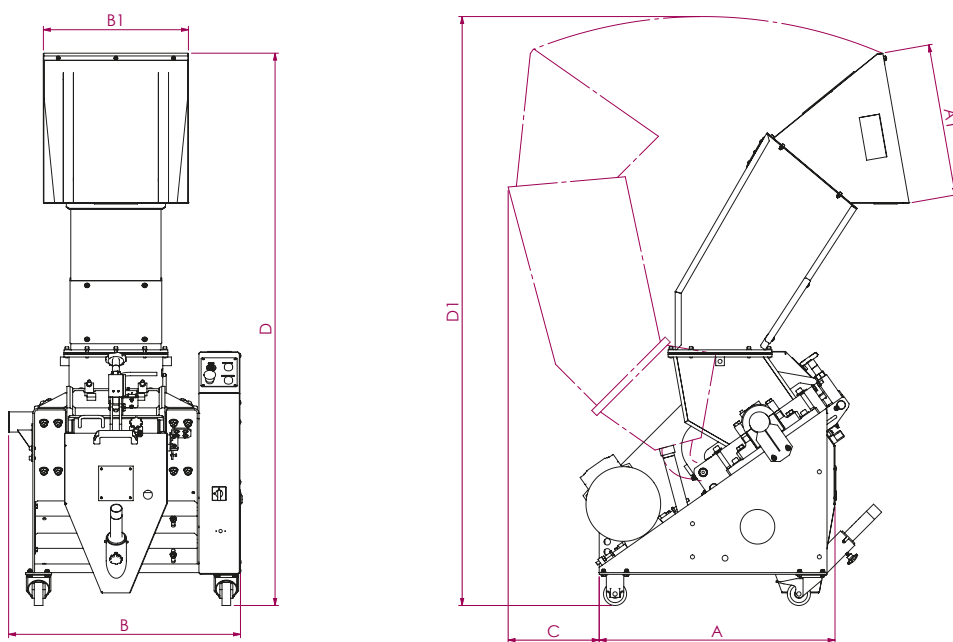
- » Metal detection in the auger by **METALSTOP**.
- » Water-cooled auger for processing hot materials
- » **ARS Automatic Reversing System** on auger rotor.
- » High level sensor for regrind bin level.



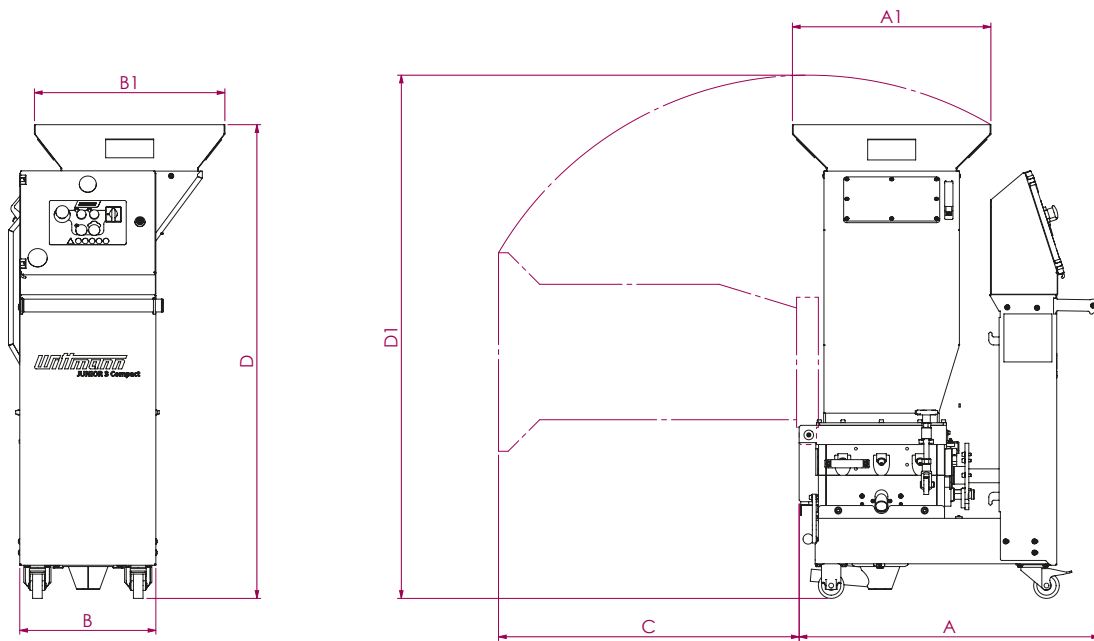
# Dimensions



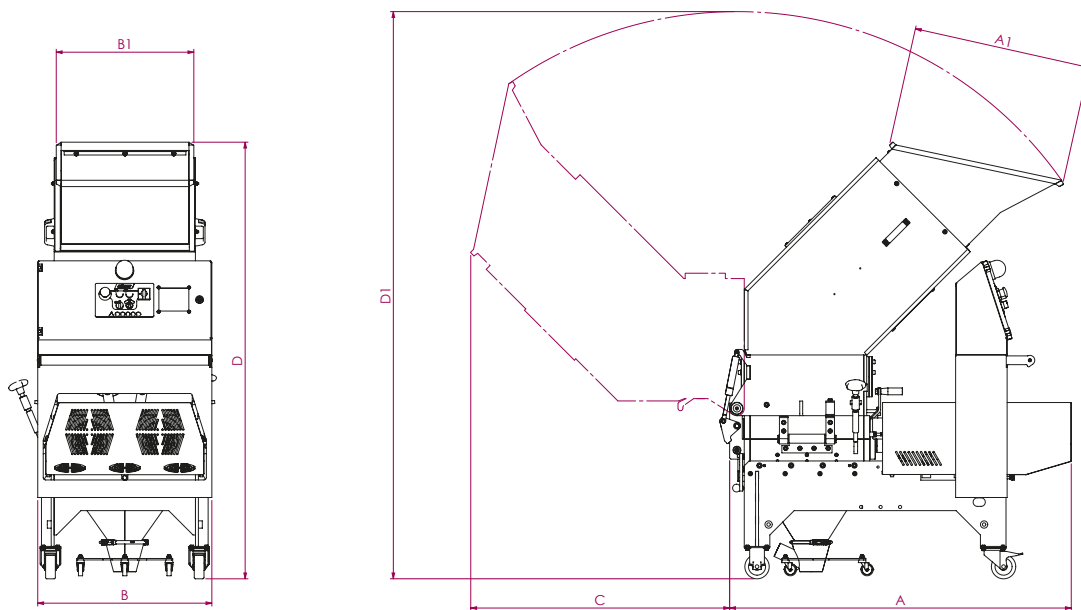
Model	Dimensions [mm]							Weight [kg]
	A	A1	B	B1	C	D	D1	
G-Max 12	770	275	542	372	622	1,417	1,488	250
G-Max 23	782	306	636	423	717	1,474	1,556	300
G-Max 33	811	306	782	573	687	1,474	1,556	335



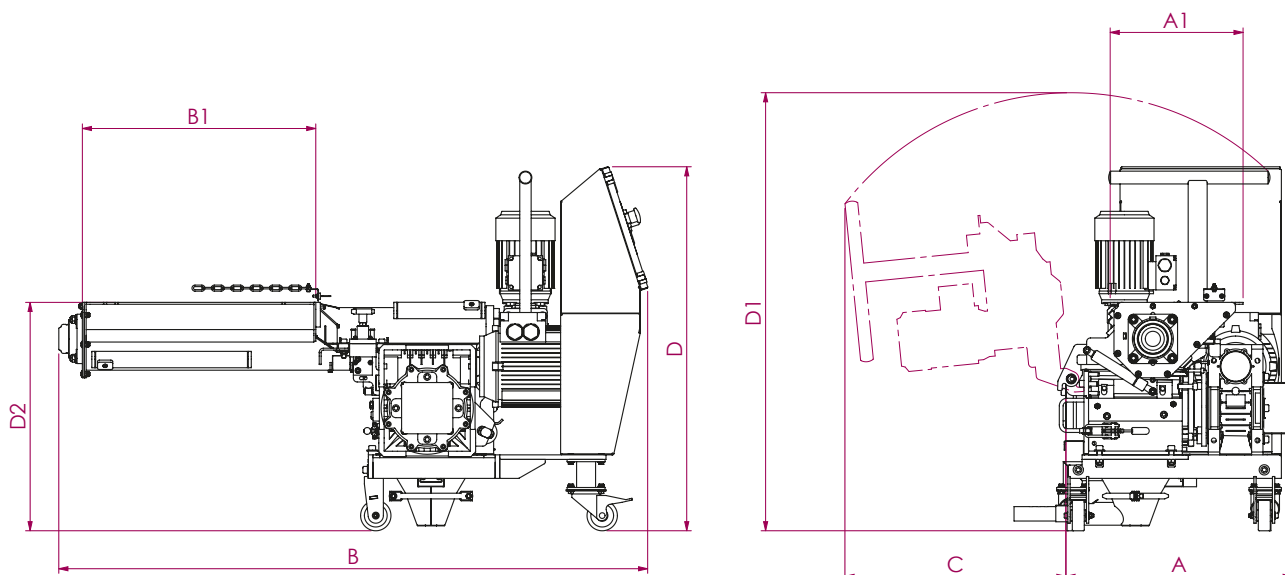
Model	Dimensions [mm]							Weight [kg]
	A	A1	B	B1	C	D	D1	
ML33	818	528	804	503	316	1,915	2,042	500



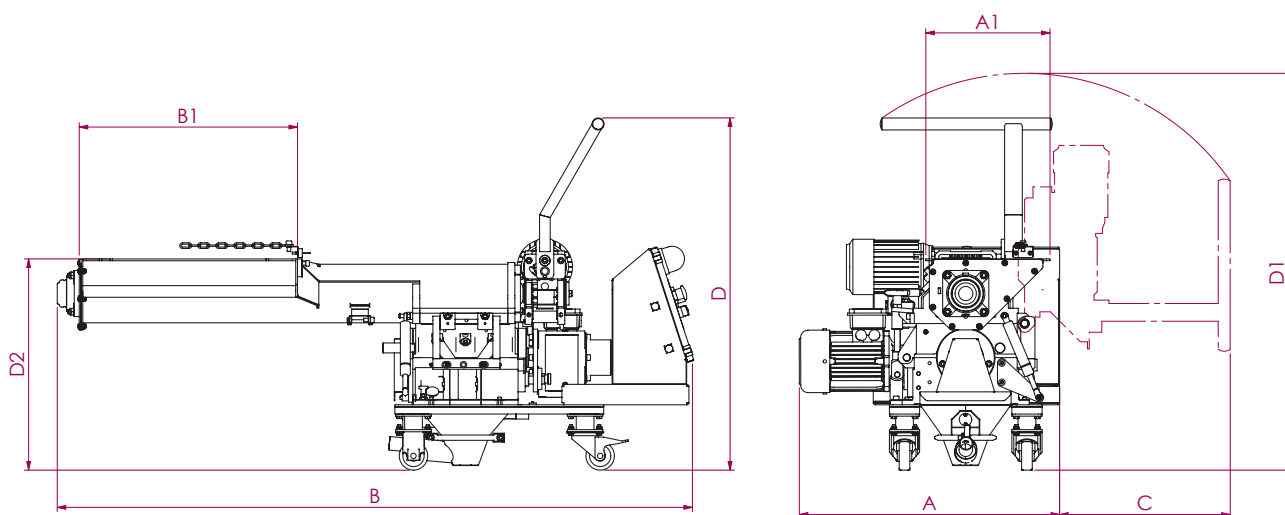
Model	Dimensions [mm]							Weight [kg]
	A	A1	B	B1	C	D	D1	
MINOR 2	777	460	425	422	767	1,264	1355	250
JUNIOR 2 Compact	938	620	425	595	939	1,480	1,634	330
JUNIOR 3 Compact	1,033	645	425	549	871	1,412	1,615	360



Model	Dimensions [mm]							Weight [kg]
	A	A1	B	B1	C	D	D1	
JUNIOR DOUBLE 4	1,283	552	715	565	987	1,721	2,137	650
JUNIOR DOUBLE 6	1,403	729	715	565	1,063	1,793	2,329	730
JUNIOR DOUBLE 8	1,679	819	886	565	1,102	1,841	2,490	850



Model	Dimensions (mm)								Weight (kg)
	A	A1	B	B1	C	D	D1	D2	
MAS 2A	596	350	1,551	615	582	959	1,154	600	320
MAS 2A Lower Frame	596	350	1,551	615	852	879	1,074	520	320



Model	Dimensions (mm)								Weight (kg)
	A	A1	B	B1	C	D	D1	D2	
MINOR 2A	733	350	1,790	615	481	992	1,118	600	275

The Wittmann logo is a stylized, italicized wordmark in a dark red color, set against a white background that is part of a red parallelogram shape.

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