

## CHIPPING MACHINES – PZ SERIES Increases the value of residues of "caring for green areas"



# PZ chipping machines at work...



... on the orchard.



... on the park.



... on the wood.



... on the nursery.



... on the street.



... on the growth.

# **Experience counts**

The thirty years experience of PEZZOLATO S.p.A. in primary conversion of wood has also consolidated a notable know how in the design and construction of machines for the disposal of pruning residues, as well as scrubs, brambles and anything else resulting from maintenance of the woodland, avenues, parks, gardens and cemeteries. This is to allow the reduction of volume of the material processed and re-use as fuel, in mulching and composting.

The Company manages three production lines in the two establishments at Envie (Cuneo): an area of 70,000 m<sup>2</sup> of which 28,000 m<sup>2</sup> covered and where 150 staff operate, among which the **GREENLINE** that designs and builds a wide range of professional chipping machines, chipping machines, shredders, shovelling devices and rotary sorting devices, in compliance with the Machinery Directive and CE marked.





#### PZ SERIES PROFESSION CHIPPING MACHINES

The PEZZOLATO range includes machines able to reduce the volume of large masses of green or dry material, including logs and branches with diameters that vary from 10 to 25 cm, without excluding any other residues of pruning, scrubs, brambles and anything else resulting from maintenance of the woodland, avenues, parks, gardens and cemeteries. The machines can be built to operate in static conditions, or enabled for attachment to the 3-point hitch to be towed by a tractor or mounted on a trailer for road transport (at low or high speed).



#### **Functioning**

The special features that distinguish PEZZOLATO chipping machines is the large size of the feeding hopper of the material to be chipped (photo 1), which are followed by two notched rollers which, with independent hydraulic activation, take the material to the cutting flywheel onto which the knives are attached (photo 2). Long experience has allowed to structure this flywheel in a way to assure the best cutting effectiveness through time, without requiring particular maintenance interventions.





A "no stress" electronic protection device (photo 3) automatically adjusts the feed flow of the material to be chipped, in relation to the power available, according to the force of the amount of material being chipped. This device lengthens the machine's life.

The chipped material is then expelled using the unloading conveyor, equipped with movable deflector that allows to direct the flow to the ground or towards a container (e.g. transport vehicle container).



#### Driving

PEZZOLATO chipping machines – backing the Customer's requirements – can be driven by tractor power-take-off (G), an autonomous petrol (MB), Diesel (M), or electric (E) motor.

#### The range

PEZZOLATO PZ series chipping machines distinguish themselves for their capacity to reduce large volumes of green or dry material in very short times. The range includes seven basic machines:

MODEL	Max. chipping Ø mm	Roller width mm	Feeding hopper mm
PZ 100	100	110	690×400
PZ 110	110	155	890×600
PZ 140	140	175	1000×640
PZ 150	150	220	1110×730
PZ 190	190	240	1220×700
PZ 210	210	300	1220×700
PZ 250	250	370	1305×886

### PZ 250 CHIPPING MACHINE **(€**

It is the largest model in the PEZZOLATO range, designed and built to satisfy the needs of agricultural and forestry companies; in particular, of large "contracting companies" that most notably reduce volumes of green and dry material, during seasonal maintenance activities. It is a professional chipping machine that can work branches and logs with diameters up to 250 mm, as well as foliage, bushes, scrubs and any other residue from maintenance of woodland, parks, avenues, vineyards, nurseries, gardens and cemeteries. The "G" version, driver by tractor PTO, is equipped (standard) with an attachment to the 3-point hitch of the tractor and with support feet.

On request, it can also be mounted on a trailer for low speed road transport. The motorised version has a Diesel engine (M) and trailer for low (or high) speed transport.

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PZ 250 G at work, mounted on trailer for low speed transport. This version has a 3-point hitch and support feet.

The PZ 250 E version, driven by 55 kW electric motor, trailer for low speed towing. On request it can be supplied to operate in static conditions.

#### **Increased production**

The PZ 250 model distinguishes itself for notable production ( $20/25 \text{ m}^3$  hour), also for the possibility to be fed with mechanical means.

This, thanks to the size of the feeding hopper and the

width of the two horizontal rollers: a feeding device that allows the introduction of very large materials, such as brushwood, waste wood, brambles, hedges and cemetery waste.



The lateral motor, as well as making the structure compact, simplifies inspection and maintenance activities.

*The PZ 250 M version, driven by 80 or 108 Hp IVECO engine, "tandem" trailer for 80 km/h with rotating platform and feeding belt.* 

MODEL PZ 250			
Max. chipping diameter	mm	250	
Roller width	mm	370	
Max. infeed width	mm	250×320	
Feeding hopper dimensions	mm	1305×886	
Chipping length adjustment	mm	5/30	
Flywheel diameter	mm	1050	
Flywheel thickness	mm	37	
Number of knives	No.	2	
Minimum tractor power	Нр	60	
Number of PTO revs.	rpm	540/1000	
Diesel engine power	Hp/kW	80/59 - 108/80	
Hourly production	m³	20/25	
PTO based machine weight	kg	1500	
PTO based machine dimensions	mm	$2840 \times 1760 \times 3300$	

### PZ 210 CHIPPING MACHINE **(€**

Medium-high level professional machine that can reduce logs and branches with diameters up to 210 mm into very small fragments, with a hourly production of 15/18 m<sup>3</sup>. Thanks to the peculiar size of the feeding hopper and the notable width of the notched rollers that convey the material to be chipped under the action of the flywheel knives, this machine allows to



*PZ 210 M chipping machine. The machine is driven by a silenced HATZ 52 Hp engine and mounted on trailer for 80 km/h. The lateral engine makes the structure extremely compact.* 

introduce large material directly (waste wood, brambles, hedges, etc.).

The G version (with tractor PTO) is as standard equipped with rubberised wheels and attachment to the 3-point hitch on the tractor.

The M version has a Diesel engine, mounted on the trailer for slow or fast transport.

MODEL PZ 210			
Max. chipping diameter	mm	210	
Roller width	mm	300	
Max. infeed width	mm	210×215	
Feeding hopper dimensions	mm	1220×700	
Chipping length adjustment	mm	5/20	
Flywheel diameter	mm	780	
Flywheel thickness	mm	35	
Number of knives	No.	2	
Minimum tractor power	Нр	50	
Number of PTO revs.	rpm	540	
Diesel engine power	Hp/kW	40/29 - 52/38	
Hourly production	m³	15/18	
PTO based machine weight	kg	1180	
PTO based machine dimensions	mm	$2600 \times 1600 \times 2650$	

The PZ 210 G version driven by PTO and attachment to the 3-point hitch of the tractor. By applying the removable bar, the machine can be towed at low speed.

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### PZ 190 CHIPPING MACHINE **(€**

It is the ideal machine for Municipality-owned companies, Municipalities and "Contracting Companies" that take care of the seasonal maintenance of green urban areas (decorative trees, gardens, ecological islands), as well as the periodical maintenance of cemeteries.

The hourly production of 12/14 m<sup>3</sup> is particularly interesting. The machine can chop logs and branches with diameters up to 190 mm.

The machine can be equipped with a feeding belt, located on the floor of the feeding hopper in order to ease feeding of short material or brushwood. The G version of this model (with tractor PTO) is supplied as a standard with attachment to the 3-point hitch of the tractor and is equipped with rubberised wheels that allow towing and simplify storage. The M version has a Diesel engine and trailer for low (or high) speed.



The PZ 190 M version at work. It is driven by a silenced HATZ 52 Hp Diesel engine, mounted on a trailer for 80 km/h. Also this machine – on request – can be mounted on a "tandem" trailer with rotating platform.

MODEL P	Z 190	
Max. chipping diameter	mm	190
Roller width	mm	240
Max. infeed width	mm	190 × 195
Feeding hopper dimensions	mm	1220×700
Chipping length adjustment	mm	5/20
Flywheel diameter	mm	732
Flywheel thickness	mm	35
Number of knives	No.	2
Minimum tractor power	Нр	40
Number of PTO revs.	rpm	540
Diesel engine power	Hp/kW	40/29 - 52/38
Hourly production	m³	12/14
PTO based machine weight	kg	870
PTO based machine dimensions	mm	$2600 \times 1600 \times 2650$



### PZ 150 CHIPPING MACHINE **(€**

This is the professional machine that reduces logs and branches with diameters up to 150 mm, ensuring hourly production of 8/10 m<sup>3</sup>. The large feeding hopper combined with the large width of the horizontal rollers – PEZZOLATO's special feature – make up the feeding device that allows easy introduction of large pieces of waste wood, hedges and brambles.

The G version of this model (with tractor PTO) is supplied as a standard with attachment to the 3-point hitch of the tractor and is equipped with rubberised wheels that allow towing and simplify storage.

The M version can have a petrol (MB) or Diesel (M) engine and trailer for low (or high) speed.



The PZ 150 MB version at work. It is driven by a 20 Hp petrol engine and mounted on a trailer for 80 km/h. It has a rotating platform that allows to position the feeding hopper in a way to ease entry of the material to be chipped to a maximum.



MODEL PZ 150			
Max. chipping diameter	mm	150	
Roller width	mm	220	
Max. infeed width	mm	150×180	
Feeding hopper dimensions	mm	1110×730	
Chipping length adjustment	mm	5/15	
Flywheel diameter	mm	680	
Flywheel thickness	mm	28	
Number of knives	No.	2	
Minimum tractor power	Нр	20	
Number of PTO revs.	rpm	540	
Petrol engine power	Hp/kW	20/15	
Diesel engine power	Hp/kW	28/20 - 35/26	
Hourly production	m³	8/10	
PTO based machine weight	kg	750	
PTO based machine dimensions	mm	2550×1550×2320	

### PZ 140 CHIPPING MACHINE **(€**

It is the professional machine that reduces logs and branches with diameters up to 140 mm, assuring hourly production of 6/8 m<sup>3</sup>. Like all PEZZOLATO machines, it has been designed and built to last through time, ensuring a rapid return of the capital invested, by the reduction into small fragments of all types of residues from the maintenance of fruit trees and ornamental trees, hedges, as well as the reduction of green and dry material (brambles, scrubs, dead plants,...) and anything else resulting from the cleaning of the undergrowth and garden.

The G version of this model (with tractor PTO) is supplied as a standard with attachment to the 3-point hitch of the tractor and is equipped with rubberised wheels that allow towing and simplify storage.

The M version can have a petrol (MB) or Diesel (M) engine and trailer for low (or high) speed.



The PZ 140 G version at work, is driven by PTO; it has a 3-point hitch and rubberised wheels to ease storage. By applying the removable bar the machine can also be towed at low speed.

MODEL PZ 140			
Max. chipping diameter	mm	140	
Roller width	mm	175	
Max. infeed width	mm	140×180	
Feeding hopper dimensions	mm	1000×640	
Chipping length adjustment	mm	6/12	
Flywheel diameter	mm	655	
Flywheel thickness	mm	24	
Number of knives	No.	2/3	
Minimum tractor power	Нр	20	
Number of PTO revs.	rpm	540	
Petrol engine power	Hp/kW	20/15	
Diesel engine power	Hp/kW	28/20 - 35/26	
Hourly production	m³	6/8	
PTO based machine weight	kg	570	
PTO based machine dimensions	mm	2500×1350×2270	



### PZ 110 CHIPPING MACHINE **(€**

Also aware of the needs of small-scale users, PEZZO-LATO offers them this easy-to-handle and compact machine, with two horizontal rollers to convey the material under the action of the chipping machine flywheel knives.

The feeding hopper can be tipped, in order to reduce overall dimensions and ease towing of the machine. It is the small professional chipping machine that can reduce logs and branches with diameters up to 110 mm, realising hourly production of 3/4 m<sup>3</sup>.

The machine can be driven by tractor PTO or by an internal combustion engine (petrol [MB] or Diesel [M]). The motorised version is supplied (standard) with small wheels for manual movement.

On request it can be trailer-mounted for slow or high speed transport.



The PZ 110 G version at work. It is driven by PTO and equipped with the attachment to the 3-point hitch of the tractor. In the detail, the machine is compacted into the journey position.



MODEL PZ 110			
Max. chipping diameter	mm	110	
Roller width	mm	155	
Max. infeed width	mm	110×115	
Feeding hopper dimensions	mm	890×600	
Chipping length adjustment	mm	5/12	
Flywheel diameter	mm	520	
Flywheel thickness	mm	22	
Number of knives	No.	2	
Minimum tractor power	Нр	15	
Number of PTO revs.	rpm	540	
Petrol engine power	Hp/kW	13/10	
Diesel engine power	Hp/kW	11/8	
Hourly production	m³	3/4	
PTO based machine weight	kg	455	
PTO based machine dimensions	mm	$2550 \times 1050 \times 2150$	

### PZ 100 CHIPPING MACHINE **(€**

This is the smallest chipping machine in the PZ series. The compact structure and manageability make it an ideal machine for the private user. It has only one feeding roller, driven by an independent hydraulic system and a lever with which the operator can ease introduction of the material into the chipping system. It can reduce logs and branches with diameters up to 100 mm, as well as leafy branches, dead plants, scrubs and any-thing else resulting from pruning the nursery, the

orchard, as well as cleaning the kitchen garden and the garden. Even if it is small it can realise production of  $2/3 \text{ m}^3$  per hour.

It is available in the tractor PTO-driven version (G) and in the version equipped with autonomous petrol (MB) or Diesel (M) engines.

The motorised version is supplied as standard with rubberised wheels for manual movement. On request it can be trailer-mounted for low (or high) speed transport.



The PZ 100 G version at work, driven by PTO and equipped with attachment to the 3-point hitch of the tractor.

MODEL PZ 100			
Max. chipping diameter	mm	100	
Roller width	mm	110	
Max. infeed width	mm	100×115	
Feeding hopper dimensions	mm	690×400	
Chipping length adjustment	mm	5/12	
Flywheel diameter	mm	520	
Flywheel thickness	mm	22	
Number of knives	No.	2	
Minimum tractor power	Нр	15	
Number of PTO revs.	rpm	540	
Petrol engine power	Hp/kW	13/10	
Diesel engine power	Hp/kW	11/8	
Hourly production	m³	2/3	
PTO based machine weight	kg	365	
PTO based machine dimensions	mm	$2300 \times 900 \times 2150$	

The PZ 100 MB version driven by 13 Hp petrol engine and equipped with rubberised wheels for manual movement.

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#### THE PRACTICAL SOLUTIONS

All chipping machines in the PZ series can be mounted and accessorised in a way to increase their utility, adding value to their specific performance capacity.

#### Mobility

As well as the solution for the machine that operates



...with trailer for low speed transport...



...with single axle trailer for 80 km/h...

in a fixed position, each machine can be equipped in a way to allow the user to move it to different places at different speeds:

With small wheels for manual movement (for PZ 100 and PZ 110)...



...with "tandem" trailer for 80 km/h...



tracks.

Obviously, the different types of driving are added: G, MB, M, E.

#### The optional supplies

From the PZ 150 model on, it is possible to mount a chain belt on all models (hydraulically activated) from the floor of the large hopper feeding the material to be chipped, in order to ease the entry of large material (waste wood, hedges, leaves and other short material). For all models in the PZ series it is possible to overturn (close) the feeding

hopper in order to reduce the overall size of the machine when it must be transported from one place to another.



For models with tractor PTO (G) it is possible to equip the machine with a 180° rotating platform for orientation of the feeding hopper, in a way to ease feeding of the material to be chipped.



For engine-driven models (MB, M, E), instead, the machine can be equipped with a 360° rotating platform.



A container is available (that can be integrated to the machine) for collection of the chipped material.



Other accessories are also available:

- Height-adjustable bar
- Feeder with grips
- Extension of the discharge pipe
- "No stress" device with the hour-counter
- Soundproof painting
- Soundproof protections
- Spare wheel
- Version for "unimog"

#### Why choose Pezzolato machines?

Strong mechanical knowledge and experience that qualify the design and construction of all machines, certified quality system, attention to customer requirements, large investments in R&D: are some of the reasons that Pezzolato S.p.A. distinguishes itself from competitors on the world's markets.

Three production lines:

- GREENLINE: Disc and drum chippers, shredding, grinding and turning
- machines, sieves for the compost production;
- · REDLINE: Machines and plants for preparation of firewood;
- PLANKLINE: Integrated sawmill systems



SYSTEM CERTIFIED BY DNV = ISO 9001:2008 =

Via Provinciale Revello, 89 12030 Envie (CN) Italia Tel. +39 0175 27 80 77 Fax +39 0175 27 84 21 www.pezzolato.it info@pezzolato.it

PEZZOLATO DEUTSCHLAND Gondershausen (D) info@pezzolato.de



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The progress and constant research at top levels, through time may lead to modifications of technical data and the descriptions contained in this leaflet, of which Pezzolato S.p.A. is not obliged to immediately forewarn all interested parties.