

LAIMET chipper

Laimet LS 280 M IE LW S

Middle heavy chipper, designed especially for making chips for gasification and heating use

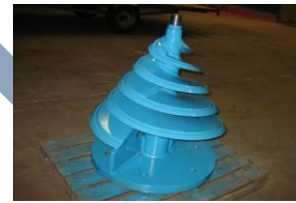


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LAIMET LS 280 M IE LW S

Low Speed -terminal wood chipper

Laimet's Research and Development division has designed a brand new wood chipper model for terminal use named LS 280 M IE LW S. It works as a screw principle just like the other Laimet's wood chipper models do. The screw blade is made of very hard metal by the name of Stellite. The screw is very long-lasting in use: when doing normal work its lifetime is about 20.000-30.000 m³. After that the screw must be changed or must be sent back to the factory for overhaul.



A screw, the core of the chipper

Wood chippers made in accordance with the screw principle have many benefits on their side. The first one is that the chipper does not need any feeding device. The rotating screw pulls logs into chipper automatically. In that way the construction of the chipper is very simple and reliable because there is only a one movable screw. The second benefit is that screw chippers produce the chips with very good qualities and homogeneous sizes. The chips are very well-suited for gasification, because the chips sizes are very uniform and the smallest chips are not generated almost at all. That is why Laimet LS 280 M IE LW S is designed especially on consideration concerning for gasification or heating use, but chips can be used to others purposes too, without screening. In addition to these, LS 280 M IE LW S chipper is designed into Low Speed model and the benefit is low noise and a more silent run. The terminal chipper LS 280 M IE LW S can be placed near to population centers without noise or dust problems.



Chips, made by LS 280 M IE LW S



Opened LS 280 M IE LW S

The chipper needs power between 110-200 kW, and chips productivity can be chosen 75-155 m³ an hour by the customer. Electric motor's power and transmission size depend on chips production volume need. Customer can choose to install three different alternative screws to the chipper, which also make three different lengthened chips. The first one 3/160 makes 20-30 mm, the second one 2/160 makes 35-50 mm and the third screw 1/160 makes 80-115 mm lengthened chips.

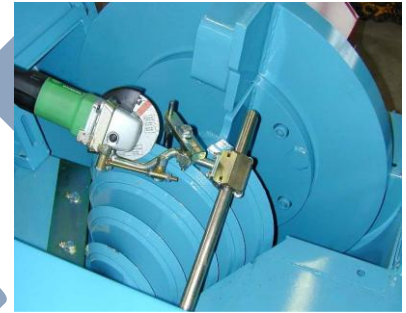
LS 280 M IE LW S unit includes, maintenance platforms and a housing of the re-crusher as standard. In addition to the sharpening device with support trails for maintenance of the screw includes too. There is in the basic delivery a rotating motor for sharpening rotating of the screw adjusted by fre-

quency control. The chipper has main electric box included all needed electrical devices and a service kit. The service kit includes lubrication pump for the main bearings and for the bearings of the re-crusher. Besides there is a manual pump for the opening of the cover of the chipper. The service kit helps maintenance work of the chipper. LS 280 M IE LW S can be shipped in 20 feet container, but the options and the accessories of the chipper can need more room for shipping.



Re-Crusher

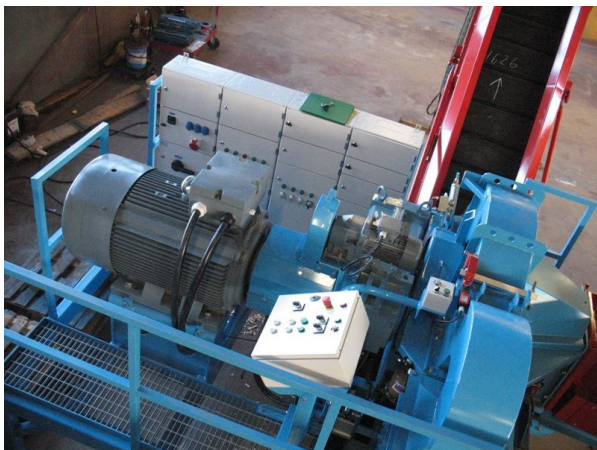
Terminal chipper LS 280 M IE LW S is ready for use and it is possible to furnish with standard made accessories like the re-crusher, feed- and discharge conveyors. The re-crusher is chip's optimizer device, which tears the width of the chips more similar and carries out the chips sizes into more homogeneous. The housing of the re-crusher is integrated in body of the chipper. Accessories such as the re-crusher and the rotation devices are sold separately.



Sharpening device includes as standard

It is also possible to build an independent chipper station. It consists of a log table, a log dozer device, a feed conveyor, a chips discharge

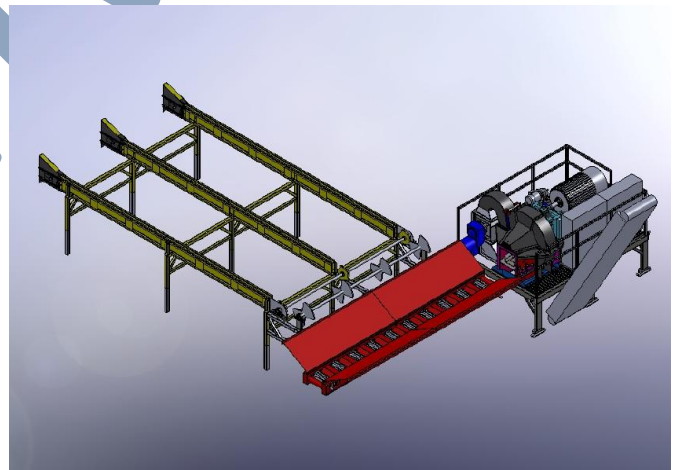
conveyor and the automatism for the operation of the whole chipper station. An operator only takes logs and lifts them on the log table and the chipper station makes chips independently from the logs and moves cut chips into a truck or into a silo of the chips.



Control desk



Lubrication automat



There are many options available for LS 280 M IE LW S

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Specifications:

1. Frame:

- Measures: 3200 x 2300 x 1800/2800 mm (height), weight: 6700 kg without accessories
- Maintenance platforms
- Bed for main motor and re-crusher

2. Chipper:

- Low Speed model
- Electric powered
- Feed opening: 280 x 430 mm
- Max dia of feed logs: 280 mm
- Max chip production: 155 m³ / h
- Blade:
 - 3/160 chips 20 - 30 mm
 - 2/160 chips 35 - 50 mm
 - 1/104 chips 45 - 70 mm
 - 1/160* chips 75 - 115 mm

* cannot use with re-crusher

3. Transmission:

- Main transmission Kumera TG-2250 n₂ 167 rpm
- Power tolerance up to 470 kW
- Torque support
- Rubber pillow clutch
- Sharpening:
 - Sharpening rotation can be adjusted flexible by frequency modulation. Drive motor is 1,5 kW electric motor geared by NordGard or SEW
 - Free wheel clutch
 - V-belts transmission
- Transmission is complete covered and protected

4. Main motor:

- Moves 110-200 kW, 1500 rpm, 50 Hz
- Fuses: 315 A - 500 A

5. Service kit:

- Lubrication automat for bearings of the chipper and the re-crusher
- Hydraulic opening for the lock of the chipper for helping maintenance work
- 2-functional opening pump, manual use

6. Main electric box:

- Main electric switch
- Delta-star starter for main electric motor
- Space position for delta-star starter of the drive motor of the re-crusher
- Main electric switch for maintenance work
- Frequency modulator for sharpening motor
- 3 pcs contact boxes
- 1 pc 32 A 380 V

Options:

1. Re-crusher:

- M-series
- The housing of the re-crusher is integrated into body of the chipper
- Bearing equip includes: bearings, bearing houses and gaskets for the shaft
- Rotors
- Counter blades
- Geared electric motor NordGear SK-62
- Fly-wheel Ø 600 mm
- There are three choices for re-crusher, depending on productivity demand and hardness of the fed wood
 - 37 kW (normal use)
 - 45 kW (heavy use)
- All rotating components are covered

2. Chips discharge conveyor GBBC 800

- GBBC 800 (GummiBord Gum Belt Conveyor, width **800** mm), positioned beside of the chipper
 - Total length 6800 mm
 - Horizontal part 1800 mm
 - Width 800 mm
 - Discharge height 4000 mm
 - Discharge distance 4000 mm
 - Climbing angle 45⁰
 - Free transport width 580 mm
 - Made of the industry rubber and is resin durable
 - Fitting body yes
 - Powered by NordGear or SEW gearbox with 3,0 kW electric motor and speed adjust by frequency modulator
 - Normally positioned on the left side or on the right side of the chipper.

3. Spiked in-feed roller conveyor SRC 430 LE

- SRC 430 LE (Spiked Roller Conveyor Long Electric)
 - Length 5150 mm
 - Width 1620 mm
 - Height 2360 mm
 - Fitting body yes
 - In-feed height 1980 mm
 - In-feed angle for the chipper 6°
 - Diameter of the rollers \varnothing 200 mm
 - Amount of the rollers 10
 - Diameter of the bearings 35 mm
 - Powered by NordGear or SEW gearbox with 1,5 kW electric motor and speed adjustment by frequency modulator
 - Min length of the logs 1000 mm

In addition accessories in above, customer can choose more options for Laimet LS 280 M IE LW S like a log table, a disc dozer, different kinds feeding and chips discharging systems. We also recommend purchasing a spare screw and a spare part kit with the chipper. Laimet wood chippers have a one-year warranty with normal warranty terms.

Manufacturer:

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