



PELLET MILL *N-Midi*



N-MIDI pellet mill machine is projected and manufactured in accordance with CE norm about construction's prescriptions and safety. Besides, Nova Pellet S.r.l. has obtained in 2007 the Italian patent for the innovative system of die s' loading and compression area. With **N-MIDI** you will save money and get **lower pellet production cost**, because we have developed a basic **low relation between electrical Kw consumed and pellet production Kg per hour (ENERGY SAVING)**. In fact, **N-MIDI** has been projected and developed properly for pellet production and all technologies and mechanical solutions are chosen to get the best economic advantageous respect other producers and obtain the **best quality pellet** on market, completely without additives, from natural origin or not. Therefore, with **N-MIDI** and others Nova pellet mill machineries, you can sell pellet both to private or industrial market and gain on **low maintenance and production cost**.



N-MIDI pellet mill has the following general specifications, valid for each model:

PELLET MILL	Unit of measurement	N-MIDI
Dies internal diameter	mm	400
Rollers diameter	mm	180
Pellet diameter	mm	6 - 8 (different on request)
Dimensions	mm	1800x1500x2000
Weight	Kg	3500

Technical specification:

PELLET MILL N-MIDI	A	B	C	D
ELECTRIC POWER				
Active power installed	45 Kw	55 Kw	75 Kw	90 Kw
Electric source	V 400 +/- 10%		Hz 50/60	
PELLET PRODUCTION PER HOUR				
<u>Kg/h</u> soft materials (like spruce, pine, poplar and olive tree)	450/600	550/700	750/900	850/1050
<u>Kg/h</u> hard materials (like beech, oak and chestnut tree)	400/550	500/650	700/850	800/950

General information for raw material to be used to load pellet mill machinery:

- ◆ Consistency : saw dust or material size among 0.5 mm and 1.5 mm
- ◆ Moisture rate : between 8% and 14%
- ◆ Characteristics : every kind of wood tree or other material, without metal residuals



N-MIDI pellet mill is complete by:

<p>Electrical cabinet with Siemens PLC S7200 and remote modem connection</p>	 A photograph of a grey electrical control cabinet. It features a Siemens PLC S7200 unit and a red emergency stop button on the right side.
<p>Dozing screw lead by frequency driver (optional frequency driver on main engine)</p>	 A photograph showing the interior of an open electrical cabinet. It contains various electronic components, including a Siemens PLC S7200 unit and several modules.
<p>Rollers' setting and easy and fast cleaning by front doors</p>	 A photograph of the roller assembly of a pellet mill. The rollers are mounted on a metal frame, and the front doors are open, showing the internal mechanism.
<p>Water/air spray to humidify the raw material</p>	 Two photographs showing the water/air spray system. The left image shows a large blue and red hose connected to a spray nozzle. The right image shows a close-up of the spray system's control panel, which includes several gauges and valves.
<p>Mechanical sensor level</p>	 A photograph of a mechanical sensor level. It consists of a cylindrical metal tank with a sensor probe extending from the top. The sensor is used to monitor the level of raw material in the mill.



**End of cycle oil pump
and
automatic grease lubrication**



Suction plugs for dust and air



Technical innovations of N-MIDI pellet mill (respect to pellet mill for feed business sector):

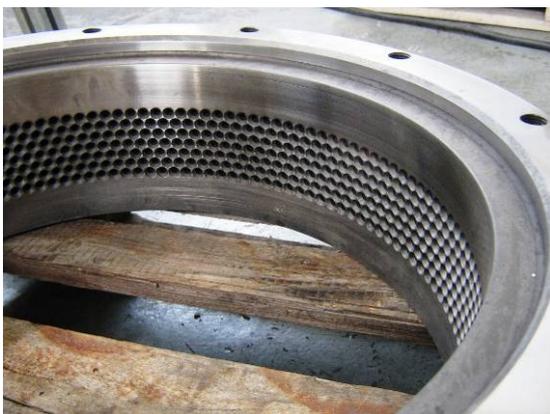
- Same innovative and patented N-PLUS system of die cutter s' loading and compression
- Roller's setting and adjustment outside the main door of the machine, that means no running cycle stops for setting
- Pellet production without additives or glues, from natural origin or not
- High efficiency engines IE2 norms (ENERGY SAVING)
- Frequency driver on main engine (Optional)
- One central screw to load saw dust into the dies
- Rollers attached in two sides to the structure of the machinery
- Ring die with easy change system and low wear time for the tools of the pellet mill
- Vegetable oil for start and stop production cycle (to avoid saw dust hardness inside the dies during machinery stop)
- Air and water mixer to humidify the raw material
- Compact size machinery
- Fast tools change by the direct front machine 's opening that permit low time and cost for maintenance and cleaning



General specifications of N-MIDI pellet mill:

- Pellet mill with mechanical and electrical functioning system
- System control and management by PCL Siemens and touch screen
- Electrical cabinet with remote connection modem
- Manual rollers regulation (tools that permit the rotation of the dies)
- Saw dust loading system is composed by a stainless steel mini-silos and a screw (regulated by an inverter connected to the dies charge)
- Dies' holes' length from 14 to 50 mm, in accordance to the raw materials we are going to pelletize (saw dust or other vegetal or agricultural residuals)
- Mechanical level sensor on the saw dust hopper
- Manual grease lubrication for engine
- Automatic grease lubrication for rollers and main shaft
- Front side pellet unloading
- Electrical safety locks
- Engine area hardware protected
- Connectable to a dust and steam suction line
- Instruction manual and CE conformity certificate

Nova Pellet staff is able to supply immediate and complete assistance and support on its pellet mills installed all over the world. Besides, Nova Pellet projects, manufactures and supplies all spare parts of all the models of Pellet Mill Machinery:



DIE



ROLLERS



N-PACK

Nova Pellet project and developed a packaging modular structure to install besides **N-MIDI** models. **N-PACK** permit to package directly pellet production into 15 kg bags: a vibrating screen cleans the pellet, then a tilted conveyor belt load a cistern to storage pellet, here you can package the pellet into 15 kg bags, opening the pneumatic valve. Then you can weld the bags and sell it.

N-PACK is composed by:

- Vibrating screen model N-VB1100 for 45 – 55 kW and N-VB1500 for 75 – 90 kW;
- Tilted conveyor belt with suction plugs;
- Pellet storage hopper 2 / 3 Mc;
- Big bag support (optional)
- Pneumatic valve for double weight;
- Weighing bag machine for kg 10 – 30 bags double weight;
- Welding machine;
- Support for weighing and welding machine;
- Electrical board.

In the following picture you can see, first, N-Pack plus Big Bag support packaging system





In the following picture you can see

N-MIDI pellet mill installed with N-PACK packaging system:



NOVA PELLET SRL
SALES OFFICE