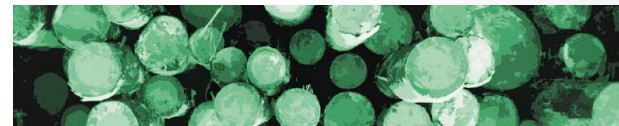
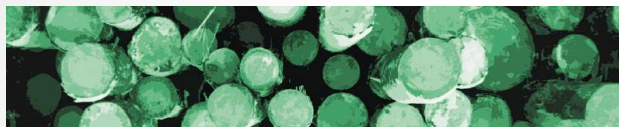


Raw materials supply. Combined logging, sawmilling and woodworking companies in Russia



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Total volume of roundwood logging in Russia

Russia may harvest
704 million m³/year

According to the FAO - 670 million m³/year

Harvesting – 236 million m³/year

Plans for 2030 - 286.1 million m³/year



Export volume - 19-20 million m³/year



The current situation on the market of wood products

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The proportion of harvested wood used for wooden housing

212 million m³/year

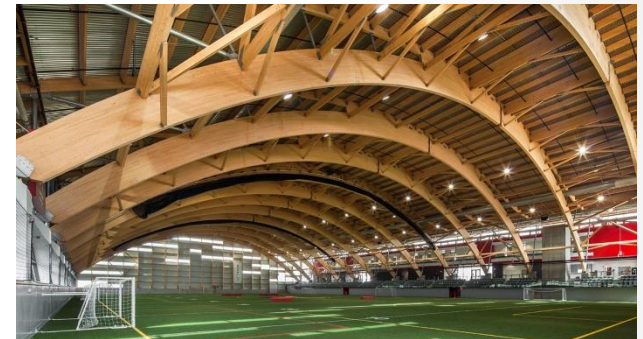


2017 z.

1,13 %



2,4 million m³/year.
including glued wooden
structures - 0,4-0,45 million
m³/year.)



2030 z. - forecast

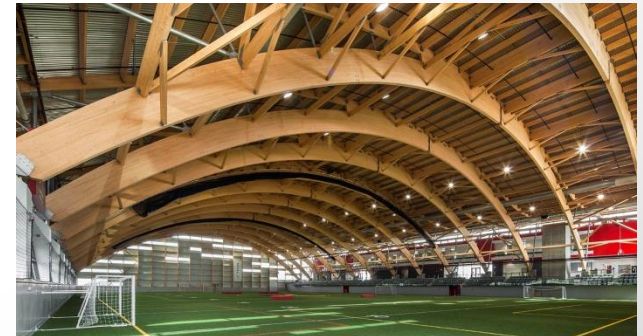
286 million m³/year



1,5 %

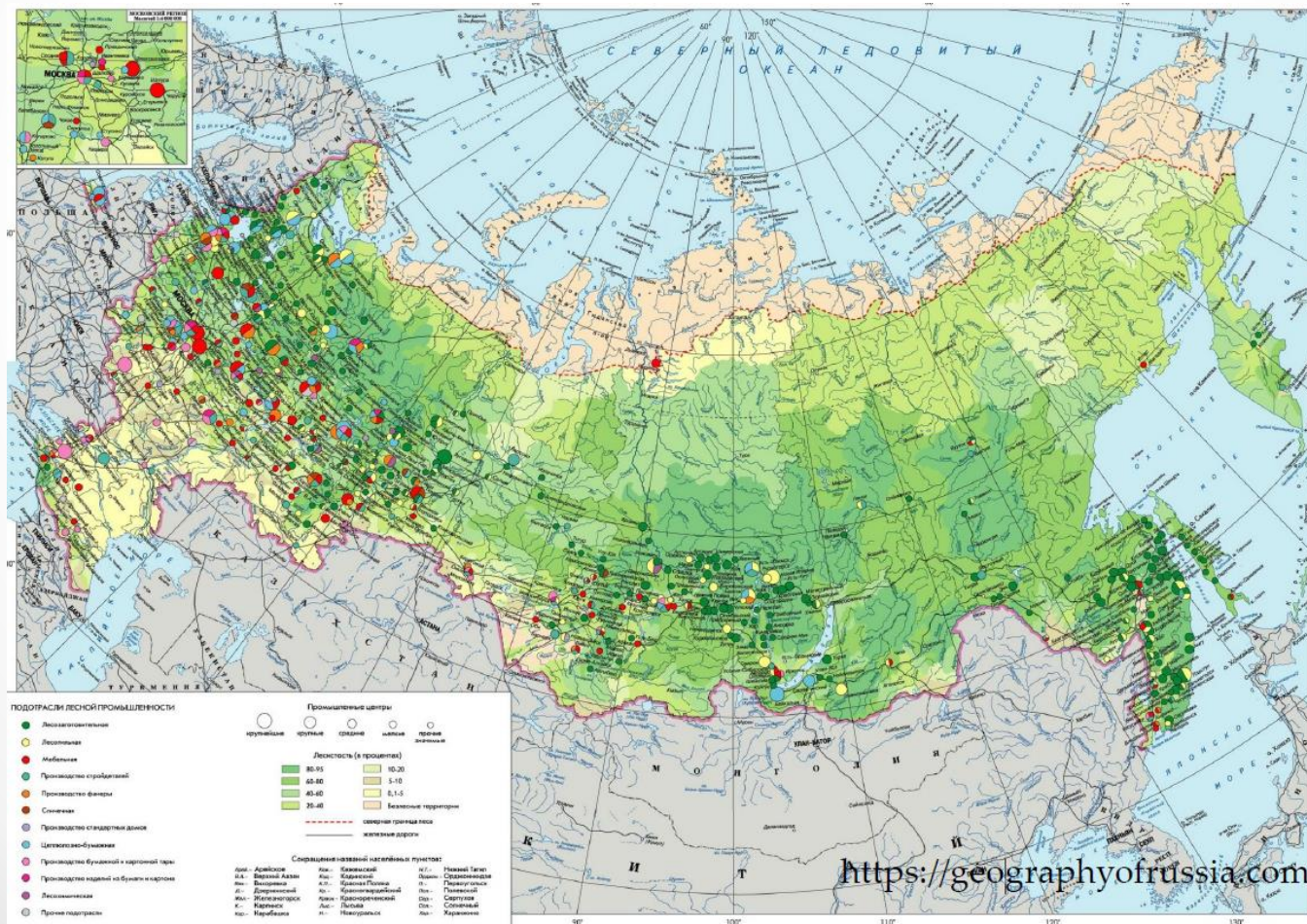


4,3 million m³/year



Export oriented industry

Domestic consumption lags far behind the production of wood products, which are mainly exported to China and Europe



Consequences of production growth in economically accessible regions



Increasing the distance hauling
200-400 km



Tendency to decrease the diameter of
round timber



Lack of raw material



Understatement of the age of maturity of
wood



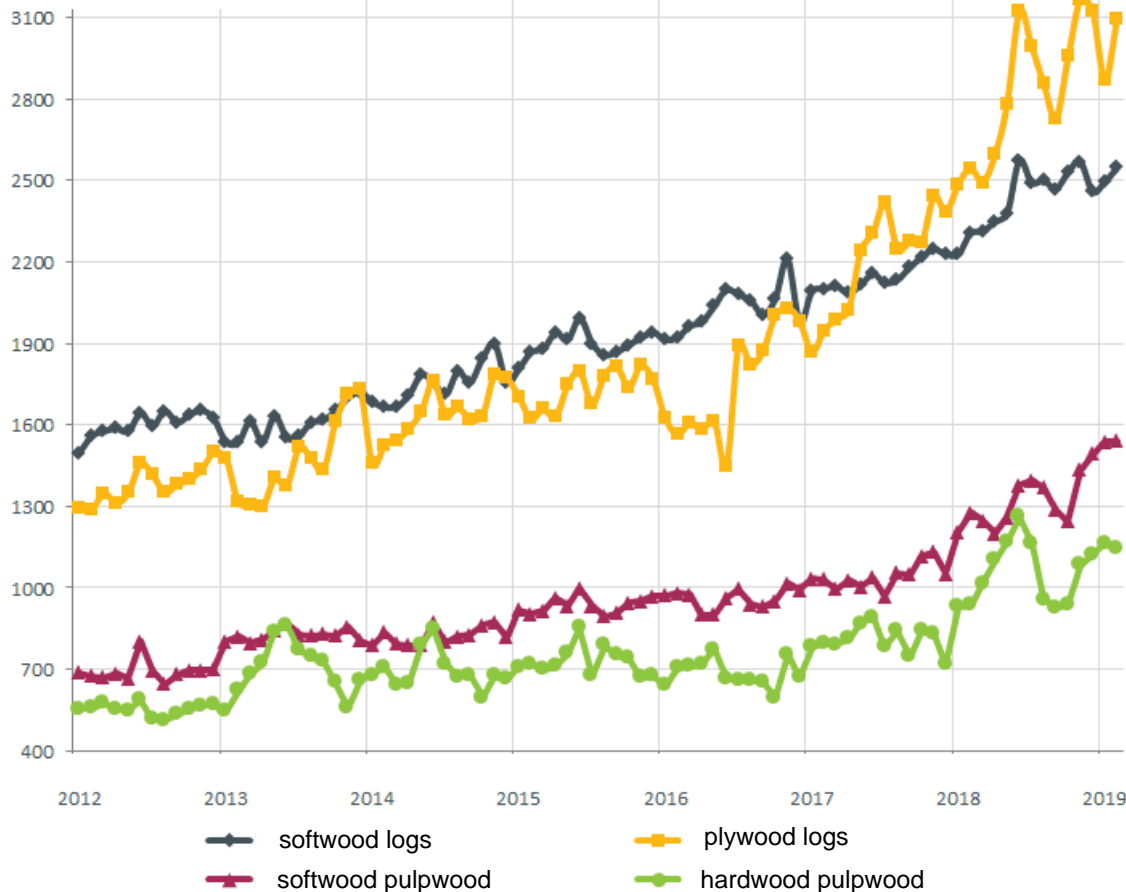
Change in species composition



The cost of roundwood for the manufacture of lumber and plywood is growing

Domestic average prices for roundwood

Rubles / cubic meter

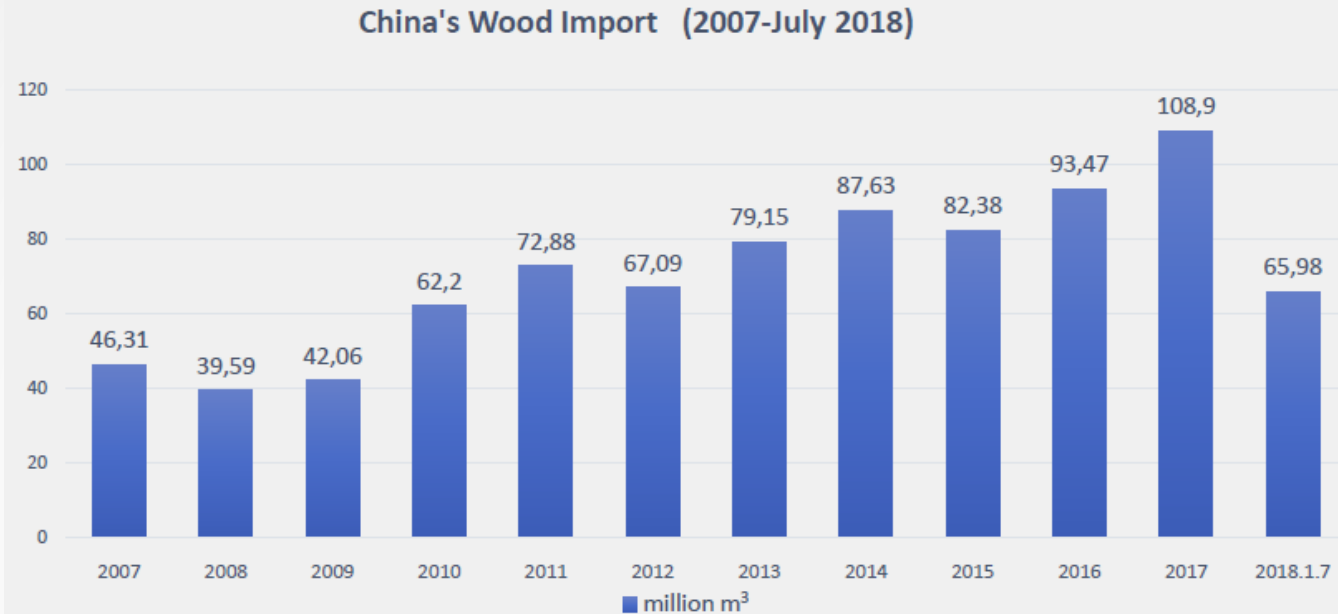


According to the enterprises, the cost of raw material reaches 4800 rub/m³

≈ 65-68 euro/m³



New plants are under construction, but the customers has lessened their consumption



From January to July 2018, China imported about 65.98 million cubic meters wood with an increase of 7.5%, among this, about 35.51 million cubic meters was log with an increase of 14.5%, and sawnwood was 21.45 million cubic meters with an increase of 0.3%.

The total value of import was 12.85 billion USD, increased by 16.5%.

С января по июля 2018 года Китай импортировал около 65,98 млн кубометров древесины с увеличением на 7,5%, из них около 35,51 млн кубометров бревна с увеличением на 14,5%, а пиломатериалы составили 21,45 млн кубометров с увеличением на 0,3%.
Общая стоимость импорта составила 12,85 млрд долларов США, увеличившись на 16,5%.



Results 2018 China's sawnwood imports - 36.74 million m³

We should expect competition between Russian sawmills for consumers in
foreign markets

Russia's share in the global sawnwood production is 10-11%.



- A large number of «greenfield» projects
- Increased production capacity of sawmills
- Deficit and rising cost of raw material
- Safety raw material implies a minimum amount of 25% of its own harvesting supply

The main vector of development is not the search for investment, but the search for a new forest resource base, which allows further development



How to get the forest resources base?

1. Rent through auction
2. The List of Priority Investment Projects in the Timber Industry (In the implementation of projects on modernizing timber processing infrastructure, including reprocessing of waste wood (among other things for bioenergy purposes), the minimum capital investment should be not less than 500 million rubles; in the implementation of projects on creating new forest and timber processing infrastructure, including reprocessing of waste wood (among other things for bioenergy purposes), the volume of capital investments should be not less than 750 million rubles.

The most effective measure of state support of enterprises of the Russian timber industry is the provision of a preferential rental rate for forest plots with a coefficient of 0.5 until reaching the payback period of investments, which should be in the range from 3 to 10 years.



3. The idea of priority forest resources obtaining by Russian enterprises engaged in wood processing (in developing)

The Ministry of Natural Resources and Ecology of the Russian Federation has formed a regulatory legal framework for the implementation of the mechanism for leasing forest areas based on the results of tenders. A special feature of the provision of forest plots is that wood processing enterprises no longer bargain at an auction for the right to conclude a forest plot lease agreement, but receive a resource based on a tender, where the depth of wood processing matters.

The priority in obtaining forest resources is given to enterprises that have their own wood processing facilities. It uses open information about forests and applies the declarative principle.

Technological integration

It is necessary to introduce sawing processes in the harvesting industry, which will allow to process the entire volume of harvested wood, including pulpwood and low quality wood.

Long distance to consumers today makes pulpwood and low quality wood unclaimed. This is due to the insufficient amount of pulp and paper enterprises and boiler houses on chips.

Harvesting – 236 million m³/year



Sawlog	Plywood log	Pulpwood	Export of round timber	Left in the forest	Other Wood-based panels, biofuels, firewood
82-85 million m ³ /year (35-36%)	8-8,5 million m ³ /year (3,4%)	34-35 million m ³ /year (14,5 %)	19 million m ³ /year (8 %)	20 million m ³ /year (8,5 %)	

Harvesting

A priority



If trends continue, cheap wood in Russia can no longer be a major competitive advantage in world markets in the long run

The advantage of loggers with their own rental base. Logging companies are organizing their own sawmills, increasing competition in the lumber market



Sawmill companies find it difficult to compete with each other for raw materials on the open market. They form their own loggers plant



Technological integration will increase the production capacity, effective process raw materials of different **species**, **length** and **destination** at different stages of the production process, which can be arranged either in the form of specialized enterprises, either in the forest or on timber yards

- Consolidation of enterprises
- Diversification of production flows
- Creating separate companies performing partial processing of wood in the forest
- Involvement in the processing of hardwood and low-quality wood

Consolidation - the ULK group of companies



Enterprises of the ULK group of companies in 2018 has harvested more than 2 million m³ of round logs

In 2019, all timber industry enterprises will need to process about 4 million m³ of round logs.

In 2018, the Ustyansky timber industry complex has started up a small-size wood processing plant. The total sawn timber production by the Ustyansk timber processing plant in 2018 was about 500 000 m³



Diversification "Luzales"

Kydziavidz village, Priluzsky district

- Logline # 1
- Logline # 2
- Pallets and pallet's production

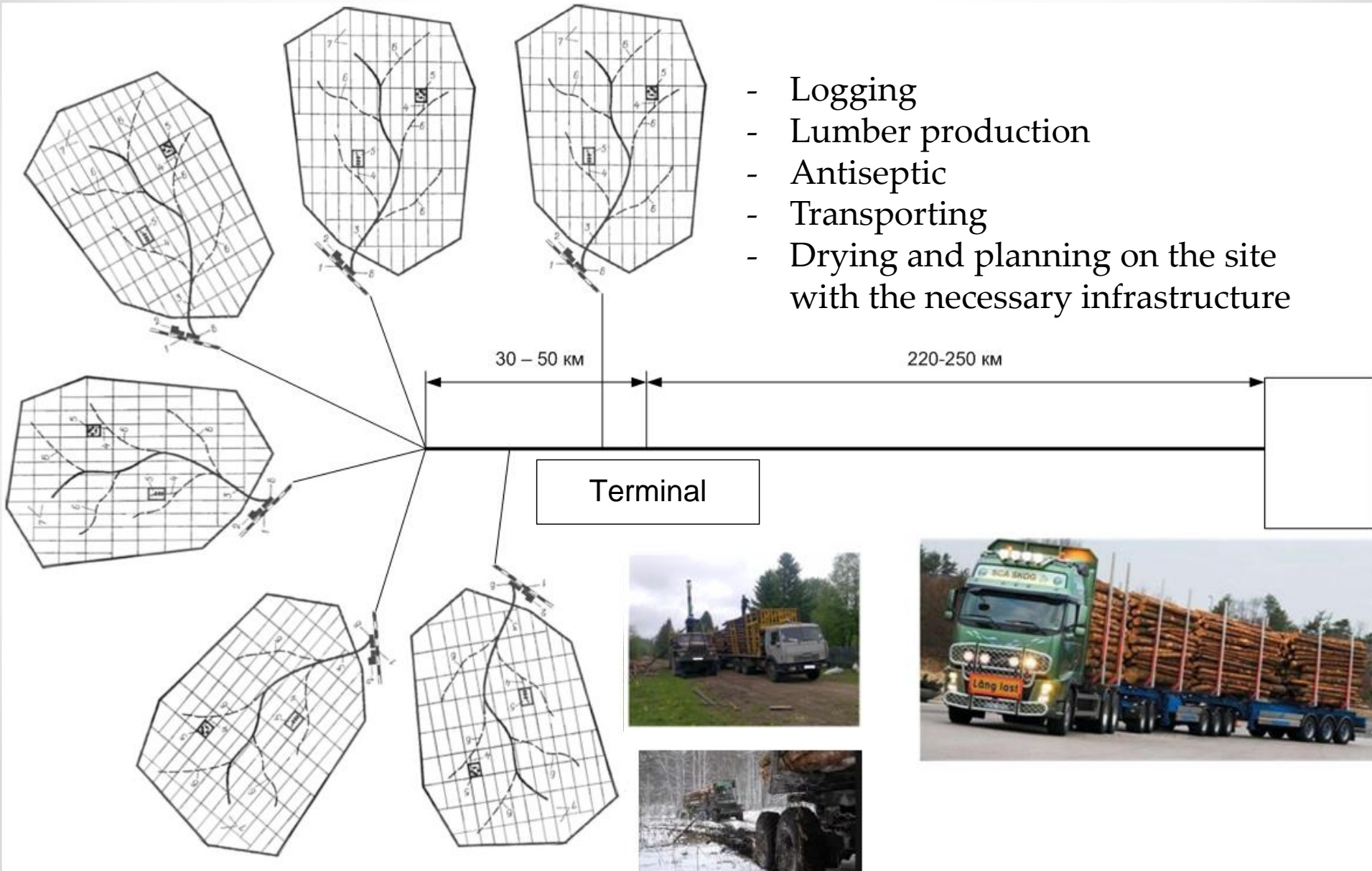
Syktyvkar

- Sawmill
- Block house production
- Gluelam manufacturing
- Planner mill, MXM panels
- Further procesing

The expected demand for aggregate raw materials for the company's sawmills was 1.2 million m³ in 2018,



Creation of separate enterprises engaged in partial processing of wood in the forest



Thin loglines can be transported into the logging site

More than 300 m³ per shift



Sawmill lines with feed rates from
50 m / min



≥ 750 kW



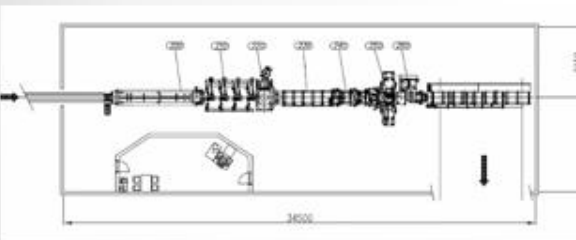
80-210 m³ per shift



Sawmill lines with feed speeds up to
30 m / min



≥ 340 kW



USNR



HewSaw R200



micromill

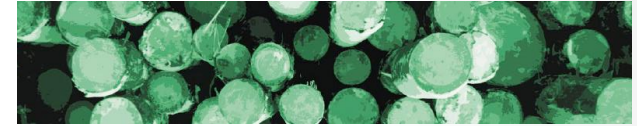
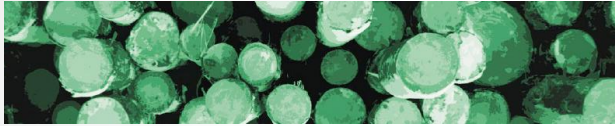
Hardwood processing



Hardwood processing



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THANKS FOR ATTENTION!



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