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FRAME

SAWMILLING OF WOOD

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Raw material for sawmill

Wood - lignin and cellulose containing substances between the pulp and the bark of a tree or shrub.

X

Timber - wood in the form of standing or felled trees, or in the form of their first stage of processing.

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Raw material for sawmill

Raw wood (wood raw material) - products created by splitting trunks or branches of felled trees. This term also includes forest chips, residues after logging and sorting, including other dendromasses intended for industrial processing. Raw wood is the subject of commercial activity.

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Raw material for sawmill

Log - A felled tree with the top and branches separated, which may or may not be cut further, except for firewood.

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Raw material for sawmill

Tree crown – the upper part of the tree with branches and twigs, possibly also with part of the trunk.

Trunk – the above-ground part of a tree without branches.

Rhizome – the thickened lower part of the trunk.

Stump – the above-ground and underground part of the tree that remains after felling.

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Raw material for sawmill

Cutout – squared part of a log. According to the original location on the trunk, the cutouts are sometimes referred to as rhizome, first and second center cutouts, and top (pin) cutouts. It differs in solid wood and the presence of knots.

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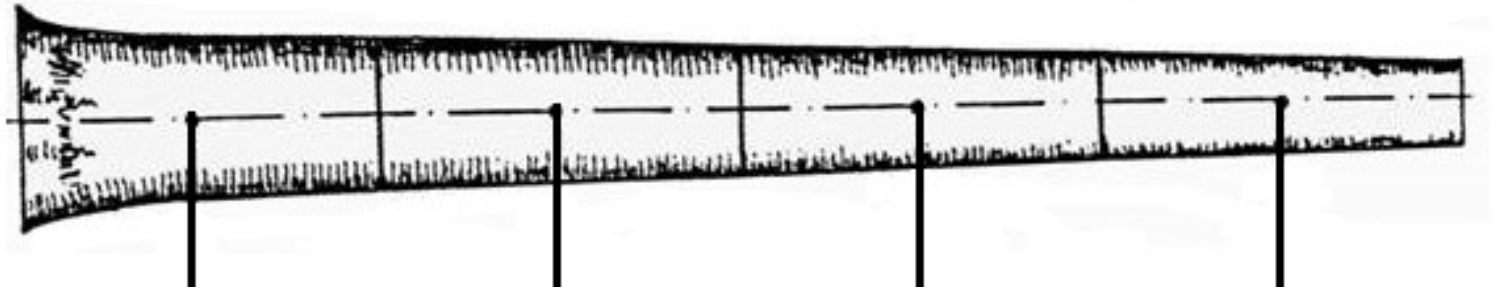
Raw material for sawmill

division of the trunk along the length



rhizome cutout | 1. center cutout | 2. center cutout | pit cutout

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Raw material for sawmill

Sawmill cutout - a cutout intended for the production of lumber.

Veneer cut-out – cut-out intended for the production of veneers.

Special cut-out – a cut-out of specified length and/or thickness intended for special use.

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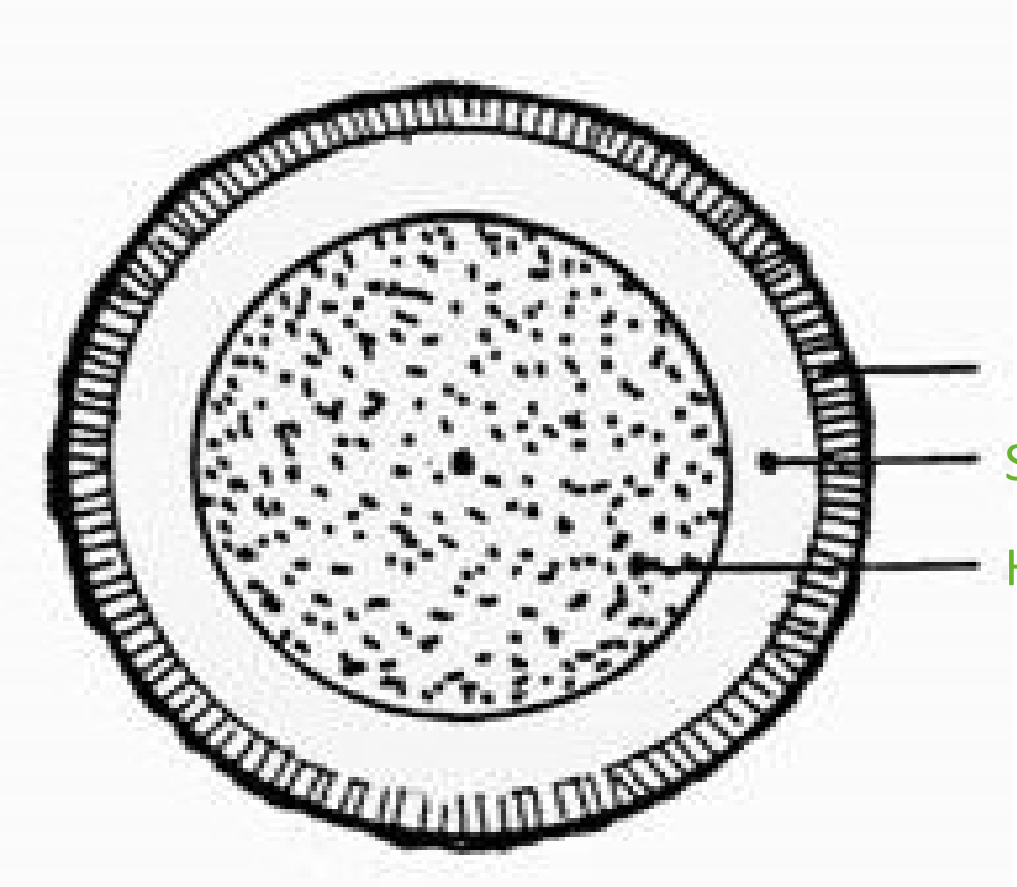
Raw material for sawmill



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Raw material for sawmill

Length = shortest distance between cutout faces.

X

Nominal length = specified length of log without length allowance.

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With Bark = A term used in connection with a measurement term to indicate that the measurement includes bark.

X

Without Bark = A term used in conjunction with a measurement term to indicate that the measurement does not include bark.

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Raw material for sawmill

LENGTH

It is measured in metres, with an accuracy of 1cm and rounded down to 0.1m. For nominal lengths (most often after 1 m), it is rounded down to the nearest step of the nominal length. Similarly, when grading according to the contract - it is rounded down to the contracted lengths.

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Raw material for sawmill

The length of a curved log - with simple curvature, the length is the shortest distance between the faces (similarly to a straight log). In the case of compound curvature, it can be measured in sections, the minimum length of the section must be agreed between the supplier and the customer

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Raw material for sawmill

DIAMETER (THICKNESS)

The diameter has a more significant effect on the total cubic volume than the length (exponential growth), while the severity of the error is greater for thinner and longer logs.

It is given in cm in whole numbers (data after the decimal point are not considered). The central thickness is measured in the center of the cutout, in specified cases it is replaced by the pin thickness, which is measured on the pin of the cutout.

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Raw material for sawmill

DIAMETER (THICKNESS) – center thickness

The center thickness is measured at the center of the nominal length of the cutout. If there is a significant growth irregularity at the measurement location, the central thickness is measured at two locations that are at the same (as small as possible) distance from the original measurement location before and behind the growth irregularity, and the central thickness is calculated as an arithmetic mean.

For cutouts with a central thickness of more than 20 cm, the central thickness is measured in two mutually perpendicular planes.

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Raw material for sawmill

Pin thickness is measured at the cut-out pin (narrow end). The use of the pin thickness for the purpose of determining the volume of the measured log must be agreed between the supplier and the customer.

The measurement procedure is similar to when measuring the central thickness.

If the thickness is measured in two mutually perpendicular directions, the arithmetic mean is calculated from two (or four) measurements. Each measurement is expressed in whole centimeters (data after the decimal point is not considered). The calculated arithmetic mean is expressed in whole centimeters.

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VOLUME

$$V_{bk} = \frac{\pi}{4} \times d_{bk}^2 \times l \times 10^{-4}$$

V_{bk} - volume in m^3 with accuracy to hundredths

d_{bk} - central thickness without bark in cm

l - nominal length of the cutout in m

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THANKS FOR YOUR ATTENTION