

Wengé

Atibt

Wengé; 1. NEN-EN 13556: wengé (GB), wengé (F), Wengé (D), Code MTLR; 2. NEN-EN 13356: panga panga (GB), panga panga (F), Panga panga (D), Code MTST

Other Names

1. Awong (Kameroen), n'toko, n'gondou (Congo), anong (Guinee), n'son-so (Gabon), mboto, bokonge, dikala-kala, tshikalakala, dikela, kiboto, monkonge, mundambi, wengé (Democratiscie Republiek Congo).
2. Jambire, pangire (Mozambique), m'pande, mpanga (Tanzania), panga panga.

Botanical name

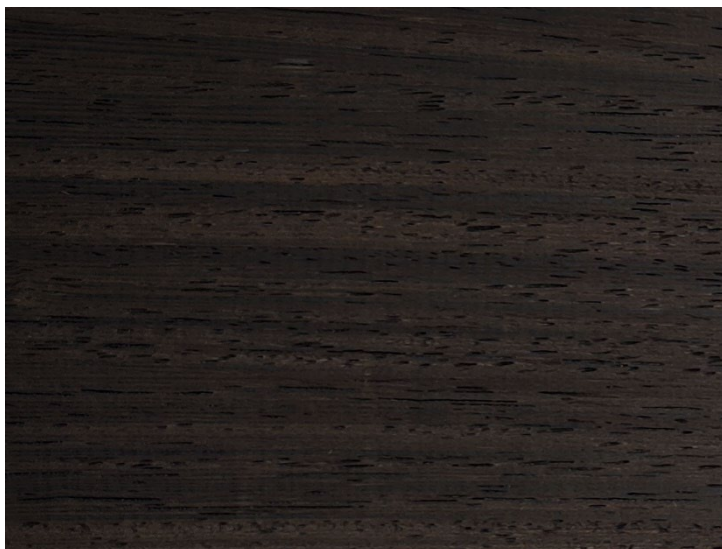
1. *Millettia laurentii* De Wild..
2. *Millettia stuhlmannii* Taub..

Family

Leguminosae (Papilionaceae).

Growing Area

1. Democratic Republic Congo.
2. Tropical East-Africa, mainly Mozambique and Tanzania.



Tree description

Height 20-25 m. The branchless trunk has a diameter of 0.6-0.9(-1.2 m). Root strips are often present and the usable part of the trunk is therefore usually 8-12 m. The trees are usually cylindrical, but rarely straight and sometimes have a rotten heart, cracks and an ingrown bark, furthermore they are often rather brushy.

Supply

Round wood (sawn and veneered) and sawn (edged) wood and veneer.

Wood description

Freshly sawn wenge has a light yellow-brown (sometimes even white) colour. Exposed to light, the wood soon turns dark brown. Panga panga generally has a lighter colour than wenge and becomes uniformly brown with fine light-coloured streaks. The sapwood of both species is 25-50 mm wide and has a yellowish-white colour. The vessels in the heartwood of panga panga are sometimes filled with a yellow substance. This yellow substance is also present in the surrounding tissue and therefore cannot be removed. In wenge, this substance has not yet been observed, in panga panga it occurs in varying amounts or sometimes not at all. With an excess of yellow contents, the wood is marred on the longitudinal surface by yellow streaks, dots or white spots. With prolonged and direct sunlight, the wood becomes lighter in colour again (black areas become dark brown and brown areas become yellow-brown). The wood has water-soluble constituents.

Timber recognition

Heavy, hard, dark brown in colour, on end face wide parenchyma bands in a regular pattern, on quarter face regular striping (alternating brown-black), on cut face a flame pattern. Wenge and panga panga are very similar but panga panga may contain yellow constituents and fluoresce slightly yellow-green, whereas wenge has no yellow constituents and does not fluoresce.



Thread	Straight, cross-hatching occurs.
Nerf	Abrasive
Volumetric mass	(750)875(-1000) kg/m³ at 12% moisture content, fresh 1100-1200 kg/m³ (moisture content about 45%).
Shrinkage	Both types: radial 1.5% and tangential 2.6%.
Drying	Very slow with little deformation. A calibration line is available for carrying out electrical wood moisture measurements. An application wood moisture content of 16% is recommended for joinery.
Hardness	Longitudinal plane wenge 10600 N, panga panga longitudinal plane 7250 N.
Machinability	Quite good, but tools stump quickly and it should be borne in mind that the wood splits quickly. It is excellent wood for turning. Good extraction is necessary as sawdust and sanding dust can cause stomach disorders and skin inflammation. Splinters are difficult to remove and cause immediate inflammation.
Nailing and screwing	Pre-drilling required.
Glueing	Moderate. If many contents are present, it is difficult to glue.
Bending	Bad.
Surface Finishing	Moderate. Due to the coarse grain and due to content substances, the surface finish sometimes causes problems. In outdoor applications, the wood should be sealed to prevent leaching of the dark-coloured contents, which can cause stains on underlying materials. Treatment with oil gives the wood a somewhat deadly appearance, but a wax treatment gives an attractive result.
Impregnability	Heartwood 4, sapwood not known (according to NEN-EN 350).
Details	The wood from Ghana is said to provide the most even wood with a regular stripe pattern.
Applications	Furniture and panelling (both in solid wood and veneered panels), stair treads, banisters, parquet and strip flooring, frames, windows, doors (quarter-sawn stiles and sills), turned goods, carving and sculpture, mouldings.
Quality Demands	Wenge is listed in SKH Publication 99-05, which means that window frames can be manufactured with KOMO® product certificates.
Strength Class	Not known.



Durability

Relative fungal resistance

Heartwood class 2 (1) (NEN-EN 350: practical experience and field research).

Relative resistance to animal organisms

Heartwood: drywood borers D, termites D and marine borers (S-)D (NEN-EN 350).