



DECORATIVE
WOODEN POLES





WOODEN POLES

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Extensive product
data can be found
in a separate
technical appendix



DECORATIVE WOODEN POLES



New products and reference photos
valmontstructures.com

Tehomet – A Valmont Company – reserves the right to change, modify and improve the technical specifications, details and design of its products.

FINNISH

FOREST



The growth season for trees in Finland is short. Coniferous tree species usually start to grow in thickness in Finland at the end of May, and the most rapid growth occurs between June and July. Annual length growth occurs over an even shorter period, which usually ends in August.

OUR GREEN GOLD





PEFC CERTIFICATE

PEFC (Programme for the Endorsement of Forest Certification) is an international forest certification program that aims for ecologically, socially and economically sustainable forestry throughout the world. Approximately 10% of the world's forests are certified and two-thirds of those (around 740 million acres) are certified according to the demands of the PEFC.

PEFC certification is represented by a producer-dedicated logo on a product, product label or product-related documentation. A producer can obtain the right to use this logo when their company's operations are certified.





WOOD



RAW MATERIAL

Glulam beams are made of sawn structural timber. These planks, called lamellas, are cut along the grain and then fingerjointed and glued together to the required size. The gluing is done with the heartwood facing outwards from the beam in order to prevent cracking when the timber dries and shrinks.

Slowly-grown coniferous tree species from the boreal forest zone offer dense wood fibres, which make the material dense and durable.

On request, we can provide poles manufactured of further enhanced weather-resistant materials to fulfill all the customer demands in extreme conditions.





CARBON FOOTPRINT

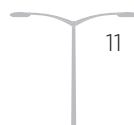
Generally, the less metallic components the lighting pole has, the lower the CO2 emissions are. Our wooden poles are manufactured in a carbon-neutral factory, where the environmental loads are reduced thanks to heat generated from air compressors being used to heat the factory, and the implementation of low consumption LED lighting.

Throughout its life cycle, from the extraction of raw materials to its final recycling, every product has an environmental impact. There are several factors which have a negative impact on the environment:

- Greater greenhouse gas emissions.
- Energy consumption.
- Production of hazardous waste.
- Impact on air (toxicity, acidification).
- Impact on water (acidification, toxicity).
- Depletion of the ozone layer.

The scale of the task and the requirement set by the Kyoto Agreement (lower greenhouse gas emissions), has brought Valmont® to focus on the carbon footprint of its products. The volume of greenhouse gas emissions is calculated throughout the life cycle of a product and is converted into CO2 equivalent to determine the carbon footprint. This varies according to the product assessed (diameter, height, materials, etc.)

Thus, in some cases, the choice of an alternative glulam timber may reduce the carbon footprint of your project by up to 40%. For an independent assessment, the Valmont has worked with engineering consultants REJLERS. Valmont is therefore able to provide the carbon footprint for each of their products as part of its Continuous Improvement Policy and as new products are designed. Our goal is to achieve the lowest environmental foot-print possible for all your projects, whatever the material.





The Design from Finland mark indicates the origin of unique Finnish design.

POLE

STRUCTURE

A pole is constructed of several components. The translucent-colored wood shaft is manufactured of high quality glued laminated timber and is available in various shapes and lengths to be combined with the steel base and a cap at the top of the pole or luminaire fixings along the pole shaft. Brackets, and arms are also available for installation on the pole. Steel components feature hot dip galvanization and powder coating for longevity and perfect aesthetics. The base section has an easy access door for the gear and customer-specifiable installation options for anchor bolt installation or embedding.



PRODUCTION

Parikkala, Finland

Key Flag Symbol is a registered collective mark. It demonstrates that the product has been manufactured or the service has been produced in Finland.





PALLAS

FAMOUS FINNISH ARCTIC FELL

Pallas is one of the most famous locations in Finnish Lapland.

This national park has been a popular travel destination for many decades.



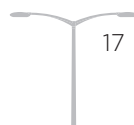


PALLAS

Round steel base,
round tapered wood shaft

Pallas is a classic, elegant tapered wooden pole. It's stylish design is made to outlast changes in trends, and it suits different needs from park lighting to high mast area lighting. With the wide selection of colors and options, Pallas is available in numerous designs to perfectly match each project.

Pallas is a popular standard model, with deliveries all around the world.





PALLAS















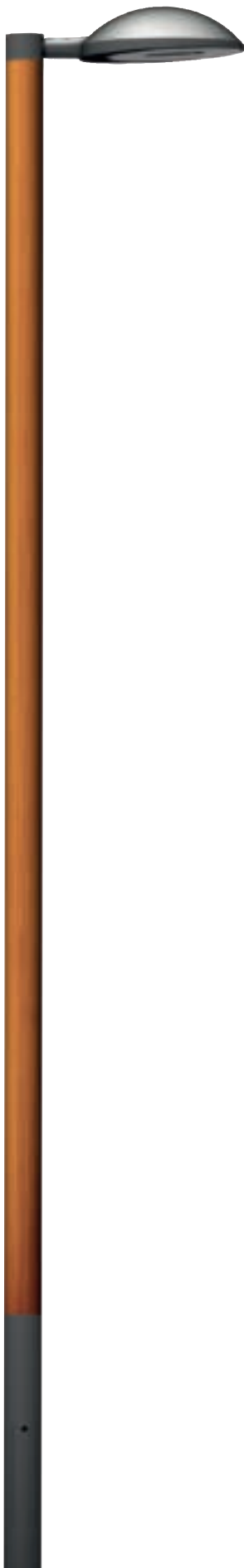


INARI



FELL AFTER FELL

Ivalo is the largest population center in the municipality of Inari, and is neighbors with the popular resort of Saariselkä, which is named after scenes featuring countless fells.



INARI

Straight round steel
base, round wood shaft

The Inari is a straight and clean-shaped wooden pole, ideal for several projects and landscapes. The Inari can be complemented with different luminaires, that change the appearance to match the setting. More versatility comes with coloring options, which can either boldly highlight or discreetly identify the surroundings.



INARI













RUKA



SOUTHERN ARCTIC FELL

The resort of Ruka is situated around Rukatunturi, a fell in Kuusamo. Ruka's forests carry a thick blanket of snow in winter.





RUKA

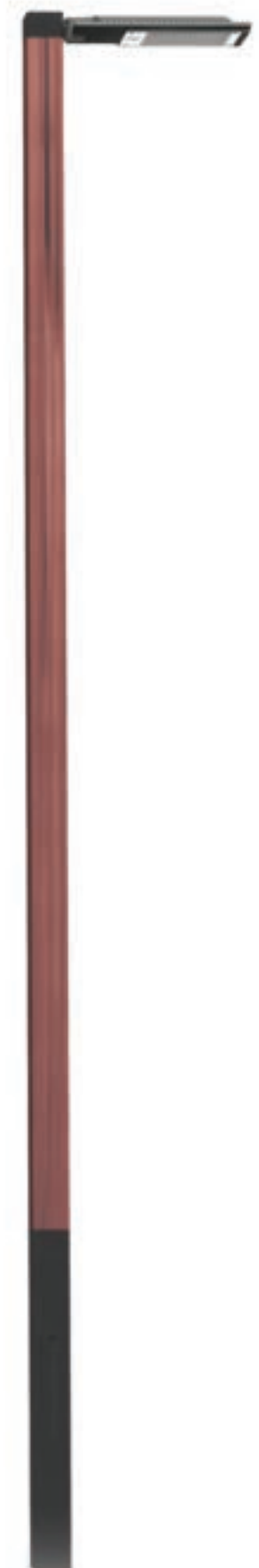


Square steel base,
straight square wood shaft





RUKA











©Photo Julien Falsimagne



NATIONAL LANDSCAPE

Koli Hill in North Karelia is regularly voted as the most beautiful view in Finland. This national scenery from Ukko-Koli is reason enough to make the climb up to top of the hill.



KOLI



KOLI



Square steel base, square tapered wood shaft



KOLI



A square tapered shape can create new looks compared to the standard round shapes commonly used.









LEMPEA

SOFT SHAPES OF NATURE

Most shapes in nature are round, soft and tender.

Natural. Comfortable to the touch and sight.



LEMPEA

EVOLUTION

Cylindrical
steel base,
tapered wood
shaft with a
gentle hump.









CUSTOM



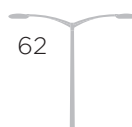
UNIQUE DESIGNS

Develop a custom wood aesthetic for your specific project design. By combining materials and utilizing innovative engineering, we can develop a look that is all your own





Customized poles:
“BASEBALL BAT”



Customized poles:
PENCIL





Customized poles: PALLAS



Customized poles:
INARI



Customized poles: INARI





Customized poles: PALLAS



Customized poles:
RUKA



ARMS



Swallow

Square tube structure to be installed on shaft.

Possible to install in different heights on square profile poles.



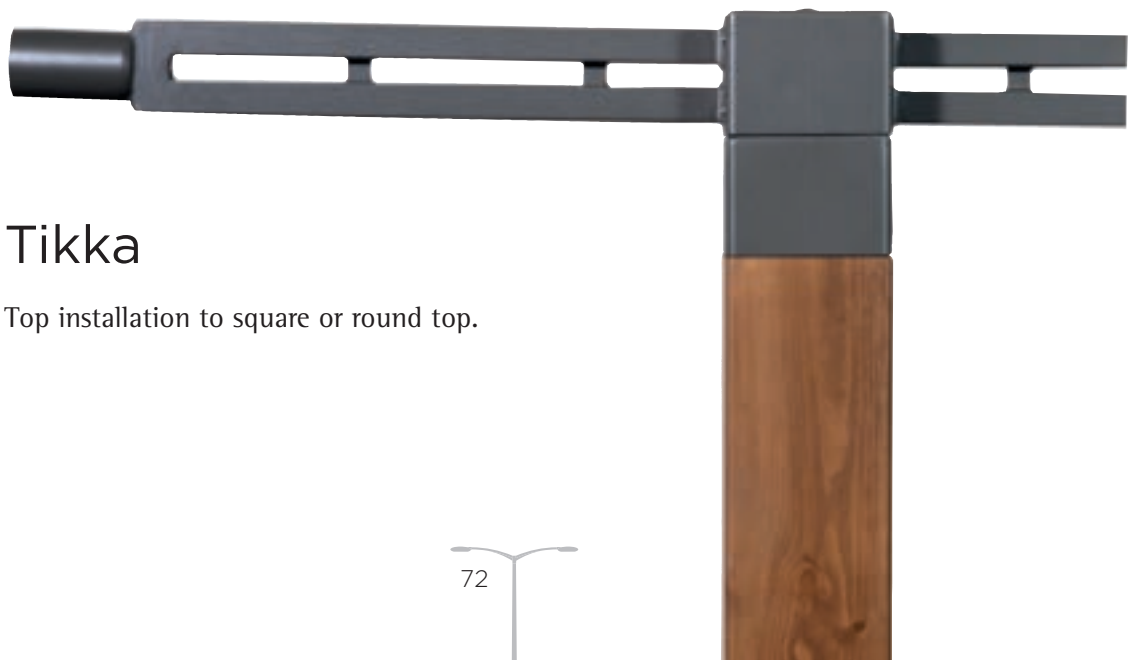
Gull

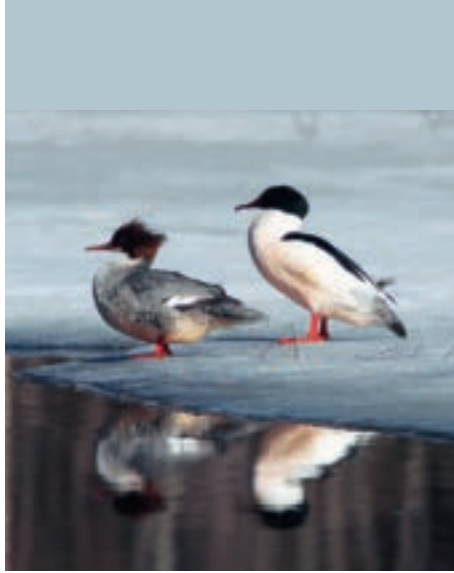
Square tubes reaching up to the sky. Top installation, possible to use on most models.



Tikka

Top installation to square or round top.





Merganser

Simple timeless form with round tube.

Top installation, possible to use on most models.

CINNAMON

Smooth

Brushed

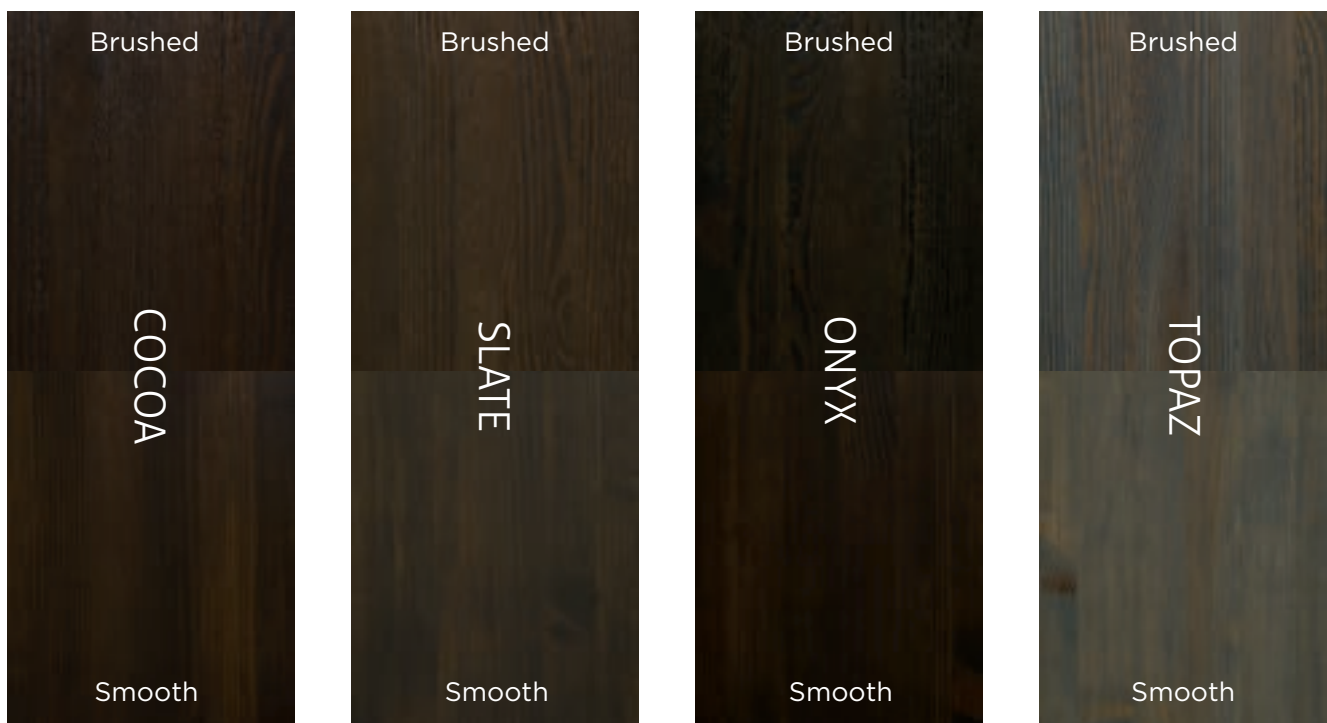


Pleasant
COLORS
from nature



SURFACE TREATMENT

Wood is treated against aging and natural enemies of wood, such as blue stain fungi, mildew and rot. As a natural material wood is expected to expand and shrink as the seasons and moisture change. Our elastic coating is designed to adapt to this behaviour of wood without cracking. Several layers are applied to give wood its final color and to protect against UV radiation to maintain desired looks. Consistent coating is achieved by using a spray gun and modern drying chamber.



Due to printing techniques, the colors presented may differ from reality.

BEHIND THE POLES





TEHOMET - A VALMONT COMPANY

Tehomet is the Nordic countries' largest manufacturer of wooden lighting poles and high masts. Established in 1979, the company has been based in Kangasniemi, Finland, throughout its history. In 2005, Tehomet Baltic was founded in Estonia, to serve customers in the Baltic region. Tehomet became part of Valmont in spring 2007.

Wood production began in 2007 in Parikkala,

a town with a population of 5,200 located in the region of South Karelia near the Russian border. The production site is located in the heart of the forest. It is equipped with all the necessary technology for the production of lighting poles, and is staffed by local employees.



Production in Parikkala.



Tehomet decorative poles production in Kangasniemi.

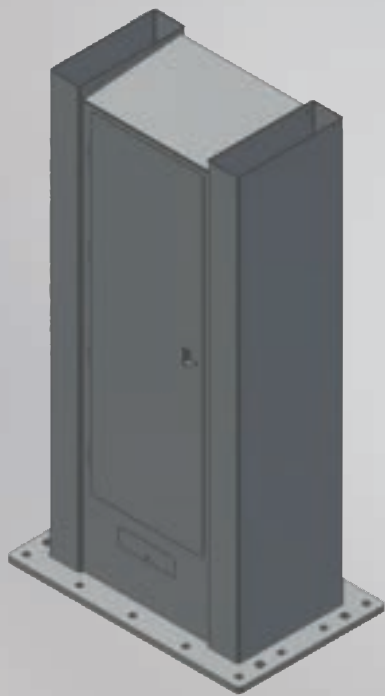


Production in Kiiu, Estonia.



VALMONT INDUSTRIES, INC.

Valmont Industries, Inc. is the world's leading designer and manufacturer of metal poles. The company is listed in the United States on the New York Stock Exchange. In addition to poles, Valmont manufactures products for the needs of wireless communications and public utilities. Its product range includes special lighting poles and masts, irrigation equipment for agricultural use, and miscellaneous support structures. Valmont is also a supplier of steel tubing and coatings.



RESEARCH & DEVELOPMENT

Over the years Tehomet has developed long-term collaboration with two Finnish research centers of expertise:

- VTT Technical Research Centre of Finland Ltd is the leading research and technology company in the Nordic countries. www.vtt.fi

The expertise of this engineering unit covers various sectors, including the forest industry. It provides assistance to industries in various fields such as R&D, auditing, certification and process control.

- South-Eastern Finland University of Applied Sciences. www.xamk.fi

In Mikkeli, this university specialises in the fields of materials technology and the environment.

Our products are tested in their laboratory dedicated to wood technology.

DESIGN

The goal of the industrial design process is to develop products in a way that is mutually beneficial for both the end user and the manufacturer, and to strike a balance between form, materials, manufacturing techniques, transportation, installation, maintenance, aesthetics, and cost.

Tehomet has been recruiting industrial designers since 2006. As well as their internal role in the company, they are also the essential interface between customers, sales teams, engineering offices and production facilities.



ENGINEERING

From design to production, each wooden product is systematically developed and assessed with regard to the aesthetic, technical, economic and environmental criteria. Our engineering department is dedicated to ensuring that you get the most appropriate and validated solution for your wooden project.

Wooden poles and masts are subject to various weather conditions as well as wind and weight loads, influencing the number of lighting fixtures and possibly other additional equipment used. To ensure the capacity of the lighting support structure, Valmont has developed its own software to calculate and guarantee the resistance of its poles and masts in respect of more than 20 international standards and regulations. All pole calculations are based on AASHTO standard 2009 code.



LOGISTICS

Well-packed and protected poles are shipped on pallets all over the world. Overseas deliveries are usually dispatched in shipping containers. Air freight is also possible when short transportation times are required.



Tehomet wooden poles have been delivered to more than thirty countries around the world.



CERTIFICATE OF CONSTANCY OF PERFORMANCE

0809 - CPR - 1199

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product.

GLUED LAMINATED TIMBER and GLUED SOLID TIMBER

the strength class of which is GL32, GL30, GL28 or GL24 and C30 or C24,
the species used are spruce (*Picea abies*) or pine (*Pinus sylvestris*)
and the adhesive used is of type I;

placed on the market under the name or trade mark of

Versowood Oy

Teollisuustie 60
FI-19110 Vierumäki, Finland

and produced in the manufacturing plan

Hartola unit in Finland

Kurpanpellontie
FI-19600 Hartola, Finland.

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 14080:2013

under system 1 for the performances set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on December 1, 2016 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Espoo December 1, 2016



Pertti Jokinen
Product Manager



Mikael Fonselius
Lead Assessor

PALLAS

INARI

RUKA

KOLI

LEMPEA

SWALLOW

GULL

TIKKA

MERGANSE

valmont 
STRUCTURES

+1 800.825.6668

valmontstructures.com