

TEHOMET SURFACE FINISHING

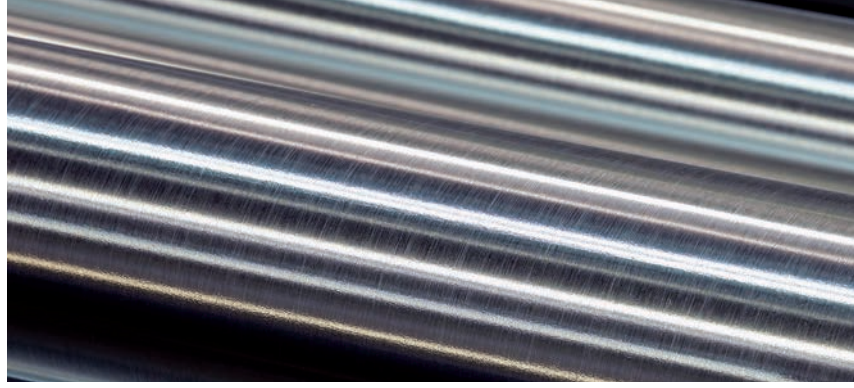




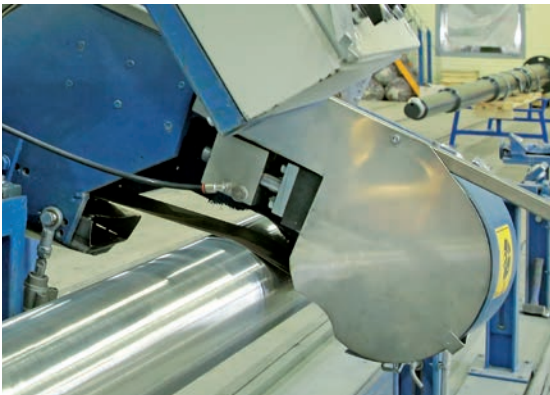
MODERN PAINT SHOP

The paint shop, located next to Tehomet's lighting pole factory in Kangasniemi is one of Finland's biggest covering a total floor area of 2,760 square metres. The modern paint shop's equipment includes for example a large 13-metre oven in which 12-metre long poles and other long structures can be finished. Painting of significantly longer items can be carried out using the traditional wet painting method. Actual painting work is performed by the experienced company FSP Finnish Steel Painting Oy.





In addition to powder coating our paint shop can also apply wet paints, Plascoat thermoplastic coatings and utilize modern solutions producing different kinds of textures. Lighting poles like many other products designed for outdoor use, are hot dip galvanized before painting. After hot dip galvanization, the items are sand swept or abraded to remove the oxidised surface. The actual painting method is selected according to the demands of the location and the size of the products.



The paint shop can also paint other products suitable for the process, such as pipes, cylinders, fences, gates...



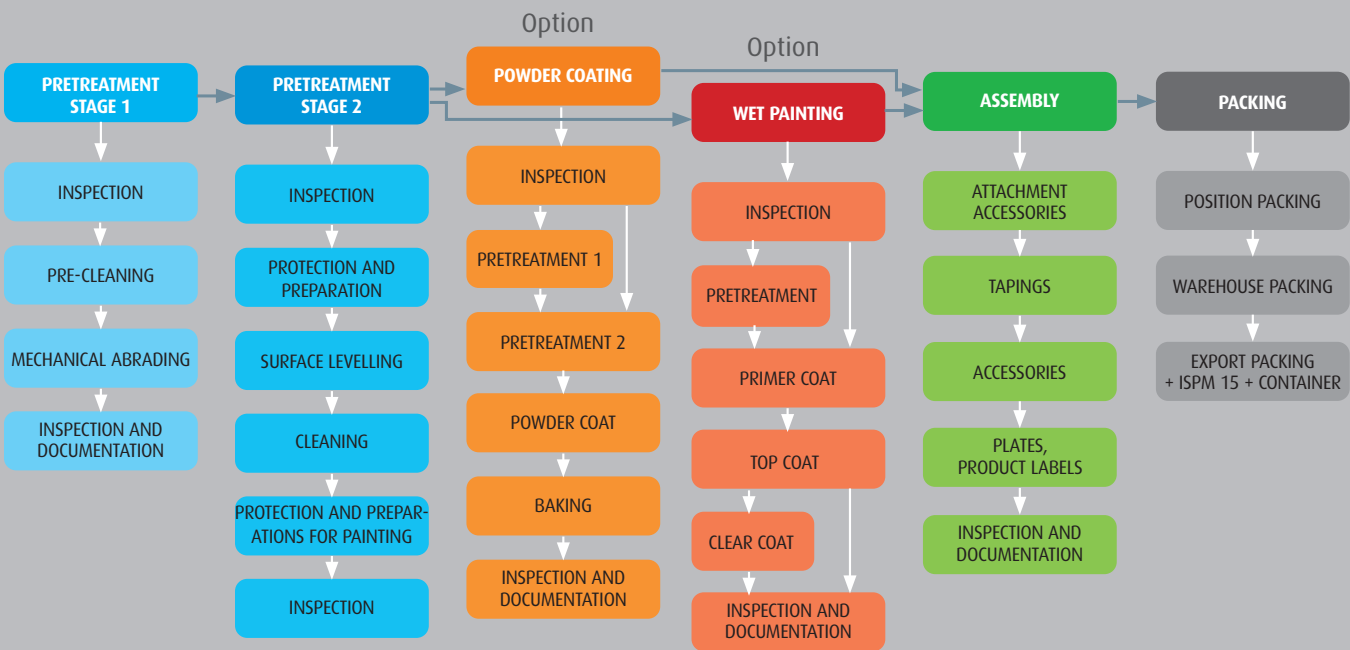
CONTROLLED QUALITY



Packaging options for the transport and storage of different types of poles.

The painting method is selected according to the customer’s wishes and products taking into account their purpose and the demands set by their location. The paint shop uses tested materials of reputable manufacturers and quality is systematically controlled during the multi-stage process. Inspection, packing and transport of finished products are executed with care to ensure the delivery of flawless products.

Painting process





Powder coating is a modern, quick and environmentally-friendly method and is carried out on most of the products that fit the process requirements. The products receive a hard and durable surface in an oven heated to 200°C.

The table shows the differences between different methods and their suitability taking different types of environmental conditions into account.

Painting method	Pretreatment	Priming			Surface finish			Painting system	
		Bonding agent	Layers	Coating thickness (µm)	Bonding agent	Layers	Coating thickness (µm)	Layers total	Coating thickness (µm)
Powder coating	Sand sweep (Sw)	-	-	-	PE	1	80	1	80
Powder coating	Sand sweep (Sw)	-	-	-	PE	1	120	1	120
Powder coating	Sand sweep (Sw)	PE	1	60	PE	1	60	2	120
Wet painting	Sand sweep (Sw)	EP	1	80	PUR	1	40	2	120
Wet painting	Sand sweep (Sw)	PE	2	120	PUR	1	40	3	160
Plastic coating	Sand sweep (Sw)	-	-	-	PE	1	200	1	200

Painting method	Paint durability (SFS-EN ISO 12944)															Solvent emissions
	Corrosivity category C2			Corrosivity category C3			Corrosivity category C4			Corrosivity category C5-I			Corrosivity category C5-M			VOC, g/m²
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	
Powder coating	X	X	X	X	X	X	X									0
Powder coating	X	X	X	X	X	X	X	X								0
Powder coating	X	X	X	X	X	X	X	X	X	X			X	X		0
Wet painting	X	X	X	X	X	X	X	X		X			X			100
Wet painting	X	X	X	X	X	X	X	X	X	X			X	X		130
Muovipinnoitus	X	X	X	X	X	X	X	X		X			X			

Paint types:

PE Polyester
EP Epoxy
PUR Polyurethane

Paint durability

L 2–5 years
M 5–15 years
H Over 15 years

Classification of environmental conditions, atmospheric corrosivity category (SFS-EN ISO 12944)

C1 Very mild
C2 Mild
C3 Moderate
C4 High
C5-I Very high (industrial)
C5-M Very high (marine)

VOC:

Volatile organic compounds abbreviated as VOC damage the atmosphere through chemical reactions. For example they directly or indirectly increase the amount of harmful ozone.





COATING SOLUTIONS

TEHOCOAT[®] BASIC

The traditional wet painting method has good anti-corrosion properties, good weather resistance and good mechanical and chemical durability. As a painting method wet painting is a good solution when the product's size or weight class is not suitable e.g. for powder coating. Wet painting is also used when special colour shades are needed or when particular properties are required of the paint. The UV-resistance of the wet painting can be improved by applying a polyurethane clear coat.

TEHOCOAT[®] POWDER


Powder coating is a fast, durable and environmentally-friendly solution. Powder paints contain no volatile organic compounds and can be used to obtain a strong paint surface resistant to mechanical and chemical abrasion. Due to its electric charge powder paint spreads into small pits and depressions so it is also highly suitable for more multi-dimensional pieces. The same method can also be used to produce a resilient Plascoat thermoplastic coating to which stickers do not adhere nor tongues stick in freezing weather. In addition it has the advantage of being easy to maintain.

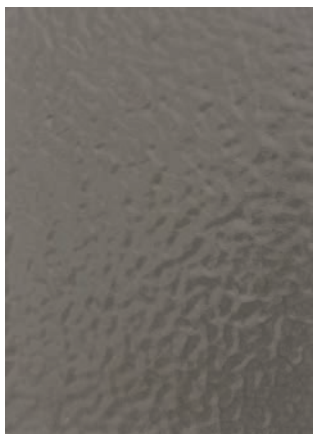
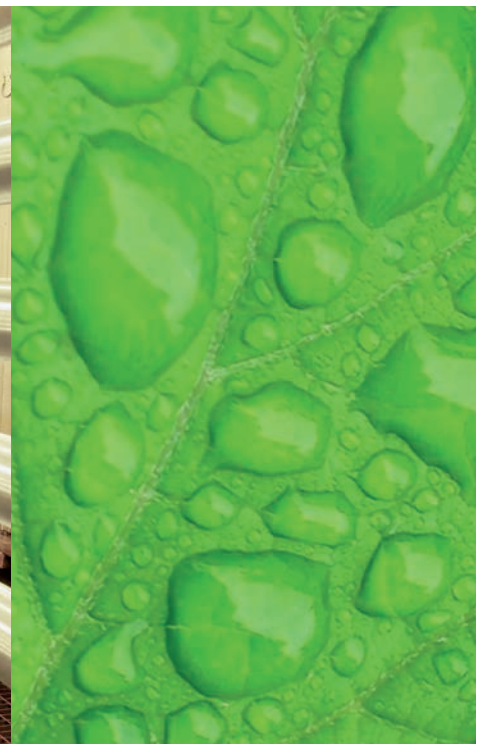
TEHOCOAT[®] DESIGN

Modern methods and tools can be used to create for products highly individual surface solutions and different kinds of structures. Examples of this are effects that mimic old copper or modern carbon fibre surfaces. In addition special coatings fulfill the technical requirements set for products.

TEHOCOAT[®] UNIQUE

Our paint shop can also fulfill more specialised requests for example by combining different coating methods or by discovering other solutions to meet the customer's wishes. Contact us with your questions. Tell us your ideas!





DESIGN



COLOUR DOES MATTER!

The colouring of lighting poles is often rather traditional and conservative. Of course dark shades and an understated look often suit many locations best. But today's lighting poles are no longer just a necessary evil; they are also an important part of the architecture and overall look of a milieu. New individual pole solutions also call for boldness in colouring - and we have all sorts of colours to choose from!

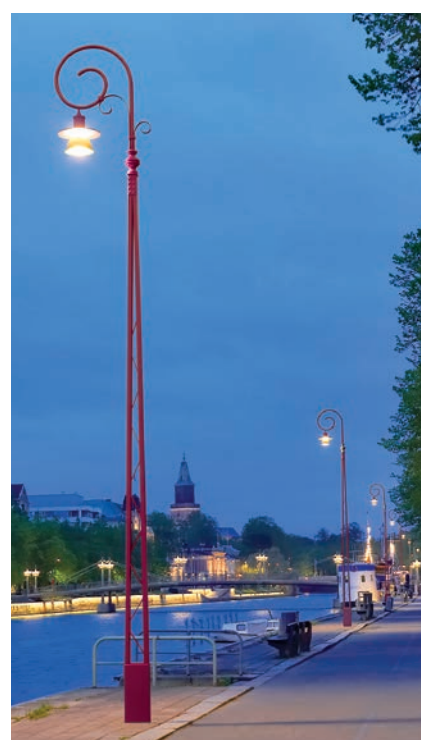
Colour selection has a significant impact on the look of the pole itself and on the entire landscape.



ROVANIEMI



TURKU



Our flexibly operating paint shop can paint even small series of poles with different colours, such as in this Tuusniemi location.



SHOWCASES



From the many lighting locations implemented with Tehomet poles you can also find examples of bold colours and colour combinations. Poles can be painted for example in a company's or organisation's own identifying colours.

See also: www.tehomet.com/english/gallery

YLITORNIO





FSP



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