



A DIVISION OF CASK ELECTRIC

PRODUCT CATALOGUE

Steel Poles

Street lighting · Decorative · High mast · Flood lighting · CCTV & telecom · Solar · Flag poles

3 – 12 m

lighting poles

15 – 50 m

high masts

EN 40

design

EN ISO 1461

galvanizing



ABOUT CASK STEEL

Poles engineered for the place where they stand

CASK Steel, the steel division of CASK Electric, designs and manufactures lighting and infrastructure poles at its factory in Dilovası, Kocaeli, Türkiye, and delivers them to projects in more than 45 countries.

Every pole carries its luminaires, cameras or antennas safely for decades, in the wind, sun and rain of its site. That is why each design starts from the height, the equipment it carries and the local wind speed, and is checked to the EN 40 series before it goes into production.

Cutting, bending, welding, hot-dip galvanizing, powder coating and inspection are carried out under one quality system, with traceable material and a test report for every order on request.

3 – 12 m

Lighting poles

15 – 50 m

High masts

140 km/h

Standard design wind

EN 40

Design standard

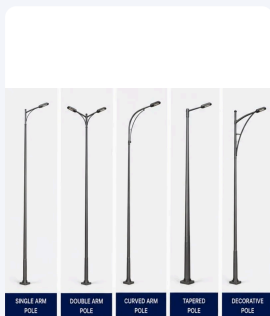
Contents

Product range overview	03
Engineering & design	04
Octagonal street lighting poles	05
Round conical poles	06
Arms & brackets	07
Reference design: 12 m pole	08
Decorative poles	09
High mast poles	10
Flood lighting & sports masts	11
CCTV & telecom poles	12
Solar lighting & flag poles	13
Foundations, doors & earthing	14
Materials, finishes & quality	15
Standards & item numbers	16
Enquiry data sheet	17

PRODUCT RANGE OVERVIEW

One factory, every type of pole

From 3 m garden poles to 50 m high masts, the range covers lighting, security, communication and flags, all designed to the same engineering rules.


**CST-PO101 · PO102
SERIES**
Street lighting poles

3 – 12 m · octagonal or round conical

Page 05 →


CST-PO201 SERIES
Decorative poles

3 – 6 m · classic, modern, heritage

Page 09 →


CST-PO301 SERIES
High mast poles

15 – 50 m · lowering systems

Page 10 →


CST-PO302 SERIES
Flood lighting masts

8 – 25 m · cross arms, rings

Page 11 →


CST-PO401 SERIES
CCTV poles

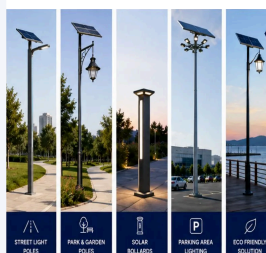
4 – 12 m · rigid, with cabinet

Page 12 →


CST-PO402 SERIES
Telecom poles

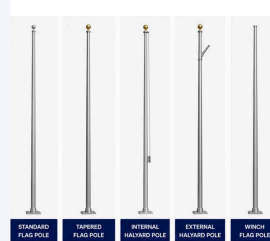
15 – 40 m · engineered to order

Page 12 →


CST-PO501 SERIES
Solar lighting poles

4 – 10 m · panel and battery mounts

Page 13 →


CST-PO601 SERIES
Flag poles

6 – 12 m · internal or external halyard

Page 13 →

ENGINEERING & DESIGN

Designed to EN 40 for every project

A pole is a structure. Its height, wall thickness, base plate and foundation are calculated for the loads it will carry and the wind on site.

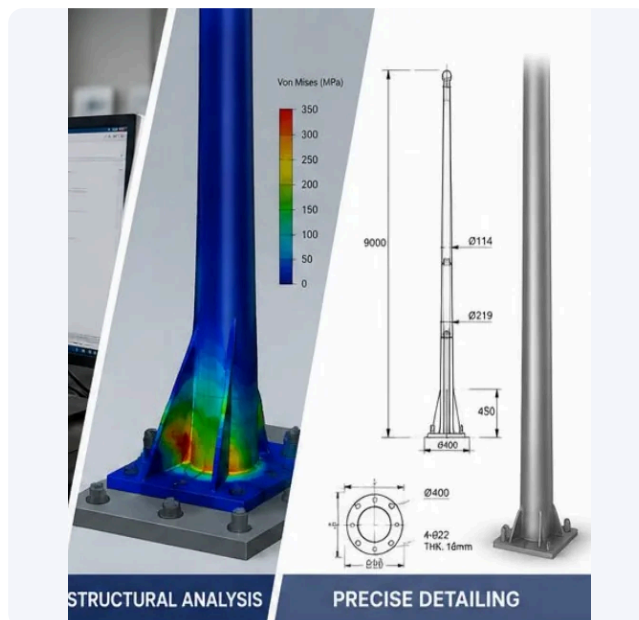
How we design a pole

- **Loads:** luminaires or equipment (weight and projected area), arms, cabinets, flags or antennas
- **Wind:** basic wind speed and terrain category of the site, to EN 40-3-1 and EN 1991-1-4
- **Verification:** strength and deflection by calculation to EN 40-3-3, including the door opening
- **Steel:** S235JR as standard, S355JR for tall or heavily loaded poles (EN 10025-2)
- **Foundation:** anchor bolts, template and concrete block sized for the base moment
- **Drawings:** calculation note, general arrangement and shop drawings with every offer on request

Standard design basis of the tables

Parameter	Value
Design wind speed	140 km/h (terrain category II)
Safety factor	1.5
Luminaire load	1 – 2 luminaires, up to 0.12 m ² and 15 kg each
Arm	1.5 m, Ø60 × 3 mm, 5 – 15° tilt
Steel	S235JR, hot-dip galvanized

Poles for higher wind speeds, heavier equipment or longer arms are calculated per project; the wall thickness, base plate and anchor bolts then change.



Terms used in the tables

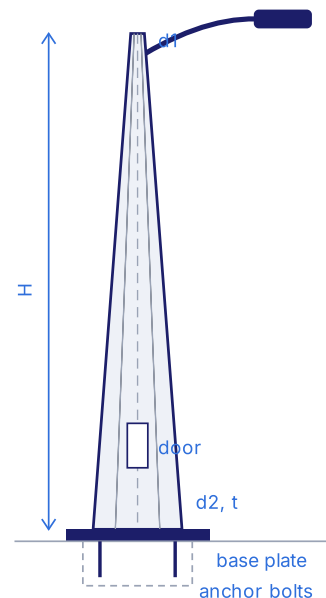
Symbol	Meaning
H	Height above the base plate (m)
d1	Top diameter, across flats (mm)
d2	Bottom diameter, across flats (mm)
t	Wall thickness (mm)
a × b × c	Base plate width × depth × thickness (mm)
n × M × L	Anchor bolts: number × thread × length (mm)

STREET LIGHTING · CST-PO101 SERIES

Octagonal street lighting poles

The most used road lighting pole: an eight-sided tapered shaft, press-braked from one sheet and seam-welded along its full length. Stiff, economical and easy to galvanize.

- Heights 3 to 12 m (other heights on request)
- Spigot Ø60 mm for post-top luminaires or arms (Ø76 on request)
- Service door with fuse rail and earthing point from 4 m
- Base plate with slotted holes for easy alignment
- Single, double, triple or quadruple arms (page 07)



Item number	H m	d1 mm	d2 mm	t mm	Base plate mm	Anchor bolts	Door mm	Weight ≈ kg
CST-PO101-030	3	60	95	3	200 × 200 × 12	4 × M16 × 500	–	22
CST-PO101-040	4	60	107	3	220 × 220 × 12	4 × M16 × 500	200 × 80	31
CST-PO101-050	5	60	118	3	250 × 250 × 15	4 × M18 × 600	200 × 80	42
CST-PO101-060	6	60	130	3	260 × 260 × 15	4 × M18 × 600	200 × 80	52
CST-PO101-070	7	60	142	3	280 × 280 × 16	4 × M20 × 700	200 × 80	65
CST-PO101-080	8	60	153	3	300 × 300 × 18	4 × M20 × 700	200 × 80	79
CST-PO101-090	9	60	165	4	330 × 330 × 20	4 × M20 × 720	200 × 80	122
CST-PO101-100	10	60	177	4	350 × 350 × 20	4 × M20 × 720	200 × 80	143
CST-PO101-110	11	60	188	4	380 × 380 × 20	4 × M20 × 720	200 × 80	165
CST-PO101-120	12	60	200	4	400 × 400 × 20	4 × M20 × 720	200 × 80	187

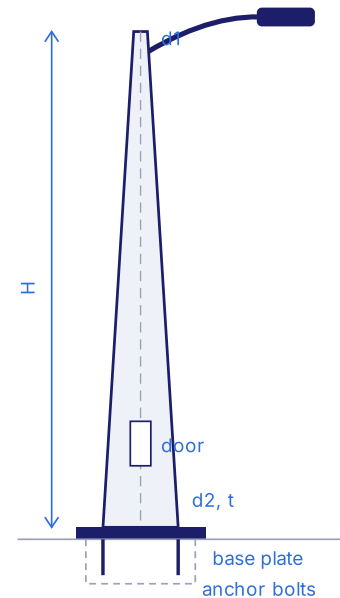
Weights are for the shaft and base plate, without arm, door cover and anchor bolts. Item number: CST-PO101-120 = octagonal pole, 12.0 m. The 12 m pole is our reference design (page 08); the other sizes are scaled from it for the design basis on page 04.

STREET LIGHTING · CST-PO102 SERIES

Round conical poles

A smooth round taper with a single longitudinal weld, chosen for city centres, campuses and architectural projects where the pole is part of the street furniture.

- Heights 4 to 12 m
- Taper about 12 mm per metre
- Spigot Ø60 mm, Ø76 mm from 10 m
- Powder coating in any RAL colour over galvanizing
- Flange-mounted or for direct burial (planted) on request



Item number	H m	d1 mm	d2 mm	t mm	Base plate mm	Anchor bolts	Weight ≈ kg
CST-PO102-040	4	60	108	3	220 × 220 × 12	4 × M16 × 500	29
CST-PO102-050	5	60	120	3	250 × 250 × 15	4 × M18 × 600	41
CST-PO102-060	6	60	132	3	260 × 260 × 15	4 × M18 × 600	51
CST-PO102-080	8	60	156	3	300 × 300 × 18	4 × M20 × 700	77
CST-PO102-100	10	76	196	4	350 × 350 × 20	4 × M20 × 720	153
CST-PO102-120	12	76	220	4	400 × 400 × 20	4 × M20 × 720	200

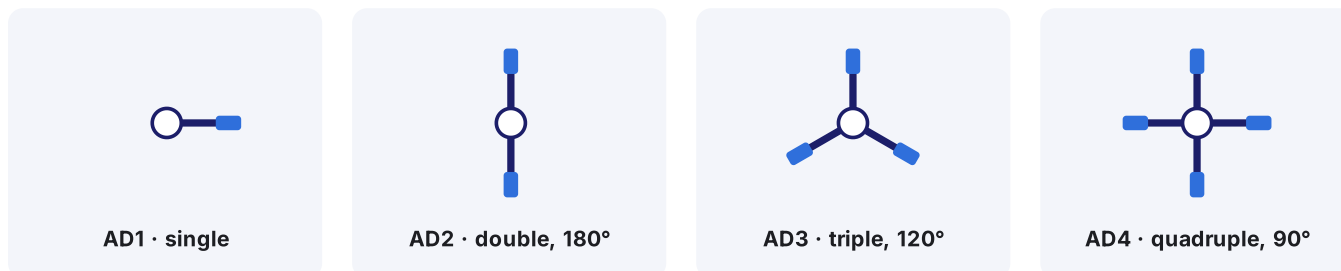
For planted (direct burial) poles, add the burial depth to the length, typically 10 % of the height plus 0.6 m, and choose a root section with a cable entry slot.

ARMS & BRACKETS

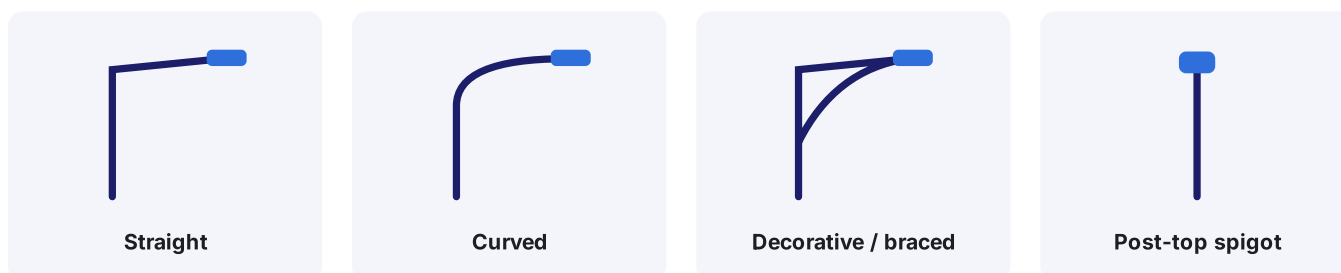
Arms, brackets and spigots

Arms slip over the pole top and are fixed with M10 × 70 set screws. They are made of Ø60 × 3 mm tube, galvanized with the pole, and end in a Ø60 mm spigot for the luminaire.

Number of arms



Arm shapes



Option	Standard values
Arm length (outreach)	0.5 · 1.0 · 1.5 · 2.0 m (2.5 m on request)
Tilt angle	0° · 5° · 10° · 15°
Arm tube	Ø60 × 3 mm
Luminaire spigot	Ø60 mm (other sizes on request)
Fixing	M10 × 70 set screws

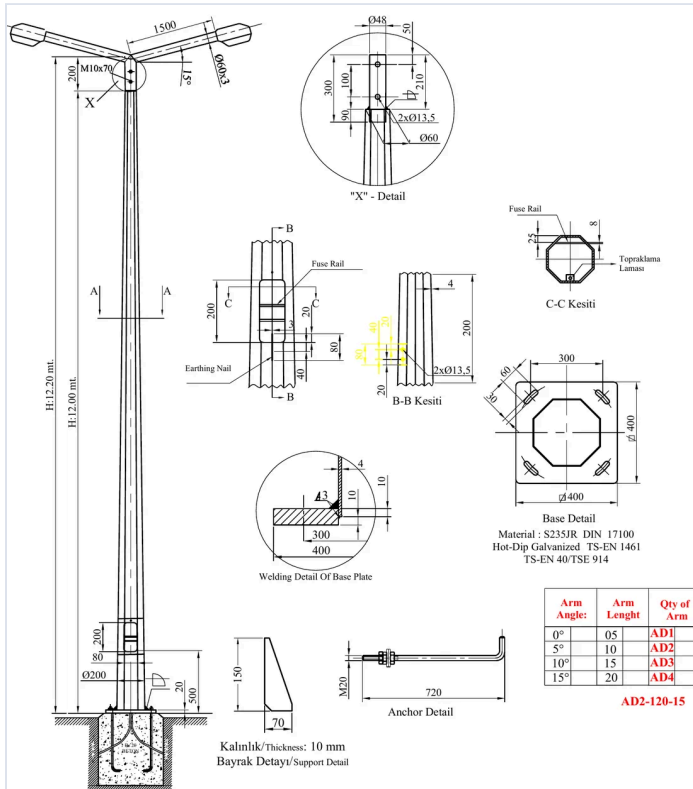
Model code

AD2 – 120 – 15

AD2 = two arms · 120 = 12.0 m pole · 15 = 1.5 m arms. The tilt angle is added to the order (for example 10°). The code is printed on our drawings and offers.

REFERENCE DESIGN · ML-2000

12 m double-arm street lighting pole



Item	Value
Model	AD2-120-15 (CST-PO101-120)
Height	12.00 m (12.20 m with spigot)
Shaft	Octagonal, tapered, t = 4 mm
Diameters	Ø200 mm base, Ø60 mm top
Arms	2 × 1.5 m, Ø60 × 3 mm, 15°
Base plate	400 × 400 mm, 10 mm gussets
Anchor bolts	4 × M20 × 720 mm, L-type
Door	200 mm, 500 mm above base, fuse rail
Earthing	Earthing nail and strip inside
Steel	S235JR (St37), ASTM A36
Finish	Hot-dip galvanized, TS EN ISO 1461
Design	TS EN 40 / TSE 914, 140 km/h, SF 1.5
Foundation	C20 concrete block

From CASK drawing ML-2000. Certified drawings are issued with each order.

DECORATIVE · CST-PO201 SERIES

Decorative poles

Elegance with the strength of a steel pole. Decorative poles give parks, squares, pathways and residential areas their own character, in classic, modern or heritage style.

- Hot-dip galvanized, then powder coated (black RAL 9005 or any colour)
- Base covers, collars, finials and lantern brackets to match the luminaire
- Custom designs from your sketch or architect's drawing



Item number	Style	H m	Features	Typical use
CST-PO201-030	Classic	3.0	Cast base cover, lantern bracket	Parks, old towns
CST-PO201-040	Heritage	4.0	Fluted shaft, ornamental collar	Squares, promenades
CST-PO201-045	Modern	4.5	Slim round shaft, curved top	Campuses, residential
CST-PO201-050	Contemporary	5.0	Post-top for disc or lantern luminaire	Plazas, waterfronts
CST-PO201-060	Twin lantern	6.0	Double ornamental arm	Avenues, entrances

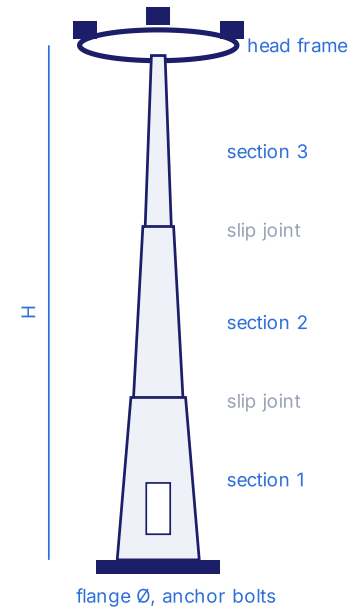
Diameters, base plates and anchor bolts follow the octagonal and round tables of the same height. Decorative parts are confirmed with drawings for each project.

HIGH MAST · CST-PO301 SERIES

High mast poles 15 – 50 m

Sixteen-sided masts in two to four sections that slide into each other on site, for airports, ports, motorway junctions, stadiums and industrial yards.

- Head frames: fixed ring, mobile ring, crown or polygonal
- Raising and lowering systems with manual or motorised winch, so floodlights are serviced at ground level
- Large frame door with cable and winch access
- Lightning finial and earthing as standard
- Heights above 40 m to 50 m engineered per project



Item number	H m	Sections	Base Ø mm	Top Ø mm	t per section mm	Base flange mm	Anchor bolts	Max floodlights
CST-PO301-150	15	2	330	140	4 / 4	Ø 520 × 25	8 × M24 × 1000	6
CST-PO301-180	18	2	380	150	5 / 4	Ø 570 × 30	8 × M24 × 1000	8
CST-PO301-200	20	2	420	160	5 / 4	Ø 620 × 30	12 × M27 × 1200	9
CST-PO301-250	25	3	500	170	6 / 5 / 4	Ø 720 × 35	12 × M30 × 1200	12
CST-PO301-300	30	3	580	180	8 / 6 / 5	Ø 820 × 40	16 × M30 × 1400	16
CST-PO301-350	35	3	660	200	8 / 6 / 5	Ø 920 × 40	16 × M36 × 1600	20
CST-PO301-400	40	4	740	220	10 / 8 / 6 / 5	Ø 1020 × 45	20 × M36 × 1600	24

Floodlight numbers for 0.15 m² / 20 kg floodlights at 140 km/h. Thickness listed from the bottom section to the top. Every mast is supplied with a calculation note, anchor bolts and template.

FLOOD LIGHTING · CST-PO302 SERIES

Flood lighting and sports masts



Masts from 8 to 25 m that carry several floodlights on a cross arm, ring or star frame, for sports grounds, car parks, logistics yards and ports.

Head frame	Floodlights	Typical height
Single cross arm	2 – 4	8 – 15 m
Double cross arm	4 – 8	12 – 20 m
Circular ring	4 – 12	15 – 25 m
Star frame	6 – 8	12 – 20 m
Compact head	3 – 6	8 – 15 m

- Fixed frames, or lifting systems with manual or motor winch
- Aiming brackets with angle scale for each floodlight
- Shafts follow the octagonal table up to 12 m and the high mast table above

CCTV · CST-PO401 · TELECOM · CST-PO402

CCTV, surveillance and telecom poles

A camera needs a stable picture, so CCTV poles are stiffer than lighting poles of the same height: thicker walls, larger bases and a deflection check at the camera.

- Top Ø76 mm with camera bracket, multi-arm or platform
- Equipment cabinet or large door at the base
- Internal cable routing with grommets
- Hinged or tilting versions for easy maintenance on request



Item number	H m	d1 mm	d2 mm	t mm	Base plate mm	Anchor bolts
CST-PO401-040	4	76	130	4	300 × 300 × 20	4 × M20 × 700
CST-PO401-060	6	76	150	4	300 × 300 × 20	4 × M20 × 700
CST-PO401-080	8	76	175	4	350 × 350 × 20	4 × M20 × 720
CST-PO401-100	10	76	200	4	400 × 400 × 25	4 × M24 × 900
CST-PO401-120	12	76	225	5	450 × 450 × 25	4 × M24 × 900



Telecom and communication poles (CST-PO402)

Monopole, antenna, microwave and guyed poles from 15 to 40 m carry antennas, dishes and cabinets for mobile and private networks. They are engineered to order from the antenna loading (number, area, height) and the operator's deflection limits, with platforms, cable ladders and climbing systems.

SOLAR LIGHTING · CST-PO501

Solar lighting poles

Poles from 4 to 10 m with a tilting panel bracket and a battery box or in-pole battery compartment, for roads, parks and car parks without grid power. They are designed for the extra wind area of the solar panel.

- Panel bracket adjustable 0 – 45°, facing south (north in the southern hemisphere)
- For LiFePO4 batteries and smart controllers with motion and light sensors
- Systems rated IP65 / IP66, operating from –30 °C to +60 °C



FLAG POLES · CST-PO601

Flag poles



Item number	H m	d1	d2	t	Halyard	Hoisting
CST-PO601-060	6	60	110	3	Ext. / int.	Cleat
CST-PO601-080	8	60	130	3	Ext. / int.	Cleat
CST-PO601-100	10	76	160	3	Internal	Winch
CST-PO601-120	12	76	180	4	Internal	Winch

Gold or aluminium finial, rotating truck, stainless halyard parts. Internal halyard with lockable door against misuse.

FOUNDATIONS, DOORS & EARTHING

Foundations, doors and earthing

Concrete foundation blocks (lighting poles)

Pole height	Block W × L × D mm
3 – 4 m	500 × 500 × 700
5 – 6 m	600 × 600 × 900
7 – 8 m	700 × 700 × 1100
9 – 10 m	800 × 800 × 1300
11 – 12 m	900 × 900 × 1500

Indicative for firm soil (150 kPa) and C25/30 concrete. Foundations must be checked by a civil engineer for the actual soil.

Anchor bolts

L-type or straight anchor bolts in 4.6 or 8.8 grade, hot-dip galvanized threaded end, with two nuts and washers each. A steel template keeps the bolts in position while the concrete is poured.

Service door

Reinforced door opening with a flush cover and tamper-resistant lock, 500 mm above the base plate. Inside: a fuse rail for the cable terminal box (fuse and connection board), and an earthing nail or earthing strip.

Earthing

Every pole has an earthing point inside the door and one at the base. They connect to the earthing system of the project with copper or galvanized steel conductors, see the CASK Steel earthing catalogue.

Cable entry

Central cable hole in the base plate, or a cable slot in the root of planted poles.

MATERIALS, FINISHES & QUALITY

Made and checked in our factory



Materials

- Shafts: S235JR or S355JR to EN 10025-2
- Base plates and flanges: S235JR / S355JR
- Arms: steel tube to EN 10219
- Bolts: grade 8.8, hot-dip galvanized
- Mill certificates for every heat

Finishes

- Hot-dip galvanizing to EN ISO 1461, inside and outside
- Optional powder coating over galvanizing (duplex system), any RAL colour
- Bitumen coating of the root for planted poles
- Coating thickness checked and recorded

Production & inspection

- Laser cutting and CNC bending
- Robotic welding
- Visual and dimensional inspection of every pole
- Weld and galvanizing checks, test reports on request
- Third-party inspection on request

STANDARDS & ITEM NUMBERS

Applicable standards

Standard	Subject
EN 40-1	Lighting columns: definitions and terms
EN 40-2	Lighting columns: general requirements and dimensions
EN 40-3-1 / 3-2 / 3-3	Design and verification: loads, testing, calculation
EN 40-5	Requirements for steel lighting columns
EN 1991-1-4	Eurocode 1: wind actions
EN 10025-2	Hot-rolled structural steel
EN ISO 1461	Hot-dip galvanized coatings on fabricated iron and steel articles
TS EN 40 / TSE 914	Turkish standards for lighting columns
ASTM A36 / A123	On request for American specifications

How to read the item number

CST – PO101 – 120

Part	Meaning
CST	CASK Steel
PO	Product group: poles
101	Series: 101 octagonal, 102 round conical, 201 decorative, 301 high mast, 302 flood lighting, 401 CCTV, 402 telecom, 501 solar, 601 flag
120	Height in decimetres (120 = 12.0 m)

REQUEST A QUOTATION

Enquiry data sheet

Fill in and send to **casksteel@caskelectric.com**. The more complete the data, the faster and more accurate our offer.

Project / application

Quantity

Pole type (street, decorative, high mast, flood, CCTV, telecom, solar, flag)

Height (m)

Arms: number, length, tilt

Luminaire / equipment: weight (kg) and projected area (m²)

Site location or design wind speed

Finish: galvanized / powder coated (RAL)

Mounting: base plate or planted

Accessories: door, cabinet, winch, platform

Delivery place and required date

Company, contact name, e-mail, phone

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