



TENSION STRINGING
EQUIPMENT

T
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2021

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our company Zeck TSE International Ltd.



Zeck TSE International Ltd. was founded in the year 2011 as Manufacturer of Equipment for Construction of Power Transmissionlines, so called Tension Stringing Equipment, or short "TSE". It is a subsidiary of the German company ZECK GmbH, one of the hidden champions within the German medium sized Machine Manufacturing Industry. This company, of which Zeck TSE is carrying the genes, is family owned and managed in third generation. Of it's over 100 years long history Zeck GmbH is since 50 years already specialized onto the design and manufacture of Tension Stringing Equipment. Based on this immense expertise Zeck TSE first started in Thailand with the manufacture of braided wires ropes, which are essential for pulling power conductors over transmissionline towers. Since then Zeck TSE is consistently developing and manufacturing new products. The supplies of the Zeck companies in Germany and Thailand perfectlyround up into a first class and competitive package. The European-Asian Bridge is making us fit for the challenge of the changes of time.

For the territory of Asia, the Middle East and large parts of Africa Zeck TSE takes charge of sales and service for the complete product range of the Zeck group of companies. Besides equipment for powerline construction this includes also Railway Construction Equipment.



The administrative headquarter of Zeck TSE is located in the city of Bangkok. The factory, a custom designed building on an area of 16,000m² is located approximately 80 km southeast of Bangkok in the outskirts of Chonburi City. This is the centre of Thailand's so-called "Eastern Economic Corridor", an area with high industrial concentration promoted by the Thai Government with various incentives to attract international investment. The factory is only 30 km away from the international deep seaport Laem Chabang. Zeck TSE currently employs a staff of approximately 70 highly motivated, well trained, diligent and loyal people.

For diversification into a related industry Zeck TSE recently started to venture into the market of Underground Utility Construction. Exclusively for the Thailand market It is representing a group of first class European manufacturers for horizontal directional drilling, pipe jacking, and blowing systems for fibre optic cables and more.

our mother company ZECK GmbH in Germany

Our mother company ZECK GmbH was established in the year 1918 short after World War I by Michael Zeck sen. Initially they were specialized on machines for agriculture. In the year 1966 Fritz Zeck, the son of the company founder, developed for a German Power Utility Company a first Tensioner for contactless stringing of Power Transmissionlines. Over the years to come this was triggering the development of the whole ZECK product range of equipment for construction of Power Transmission Lines.

In upcoming October 2020 ZECK GmbH has scheduled the manufacture of its **10,000th machine**, an 18 ton capacity Puller-Tensioner WB 1800/18. They currently employ approx. 150 highly qualified people.

The equipment manufactured by ZECK GmbH is ahead of the pack in terms of technical innovativeness, user friendliness and aftersales service. ZECK GmbH is frequently receiving official rewards for innovativeness and it is considered to be among the best medium sized machines manufacturing companies in Germany. They are the role model for our company in Thailand.



For the complete product range please refer to the catalogue of ZECK GmbH, Germany
www.zeck-gmbh.com

our Vision:

excel to be a global market leader in our field, setting standards in our industry by producing and trading a wide range of innovative Tension Stringing and other Equipment in symbiotic relation with ZECK Germany

our Mission:

- develop and manufacture products with unique features and of outstanding quality
- achieve maximum benefit for our clients
- develop excellency in products/service/and on time delivery
- fulfill our employees with pride about being part of Zeck TSE and the ZECK group of companies
- enhance the capabilities of our employees with opportunities to improve their functional knowledge and skills
- increase our competitiveness by continuously improving internal and external processes



TENSION STRINGING
EQUIPMENT

Puller 50 kN

This machine is a compact, light and very powerful hydraulic double capstan winch for pulling of a single rope with up to 50kN force. It is designed for tower erection and other purposes. It can optionally be equipped with hydraulic power take-off for attachment of a reelwinder. Optionally available is also a safety clamp for protection of rope slippage in case of operator failure.

PUL-01-05



PULLER PERFORMANCE

max. pulling force:	50 kN
max. speed:	26m/min
speed at max pulling force:	10m/min

BULL WHEELS

number of bull wheels:	2
diameter of bull wheels:	255 mm
groove diameter:	22 mm

DIMENSION/WEIGHT

length x width x height:	1600x1650x1165 mm
weight:	560 kg

OPTIONAL FEATURES

- automatic rope clamping device for lifting operations
- hydraulic power take-off for separate reelwinder special modifications or equipment on request.

ENGINE

- max. 13kW (17.4 hp)
- Honda GX690 with electro start

DRIVE SYSTEM

- hydraulic Drive System
- bull wheel with completely closed drive unit (motor+brake+gear box) for minimal maintenance and high efficiency
- automatically activated safety brake system

CONTROL SYSTEM

- control of rope in/out via hand lever
- control instrument for the pulling force

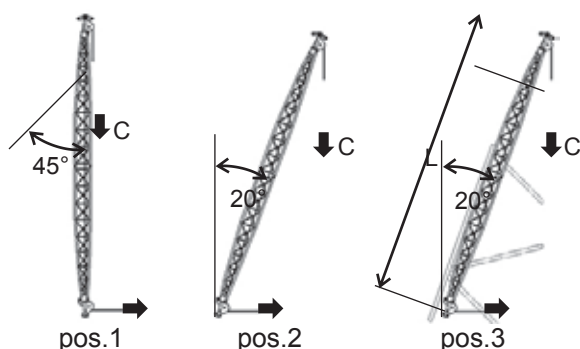
GENERAL FEATURES

- steel frame with anchoring eyes

Ginpoles

Ginpoles are used for the erection of transmission line or telecom towers. In combination with lifting winches they function similar to crane arms. Once the tower has been erected up to a certain height, the Ginpole is lifted and anchored within the tower structure for further erection until the complete tower is mounted.

We fabricate Ginpoles made of high tensile aluminium with safe lifting loads from 10KN up to 50KN (pos.1, vertical). The standard lengths of our Ginpoles range between 8 and 30 meters. Standard wise we produce Ginpoles with the superior **internal rope guidance system**, which has integrated pulleys for the guidance of the rope. Upon request we also produce Ginpoles with **external rope guidance system**. We also produce longer Ginpoles upon request.



Lifting load is indicated in 3 positions: pos.1 vertical, pos. 2 with 20 degree inclination installed in the tower center, pos. 3 with 20 degree attached to a towerleg.

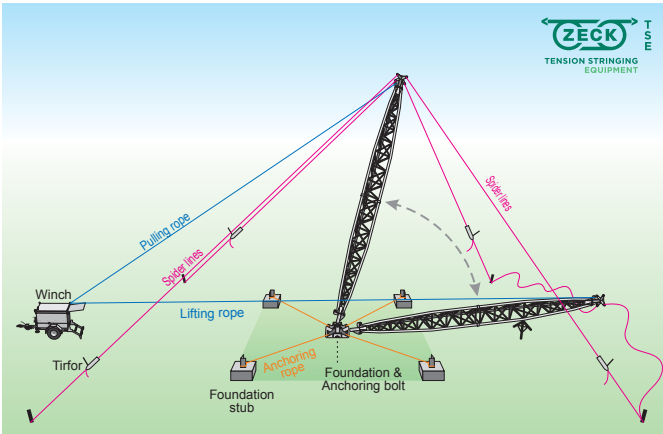
Please note: operation of the Ginpole always requires some inclination.

part no.	ZECK GmbH part no.	total length m	C - safe working load (SWL) (kN)			sections m	weight* Kg
			P1 pos.1 a = 0°	P2 pos.2 a = 20°	P3 pos.3 a = 20°		
GPI-01-0600	77-2200	6	10	6	2.4	3+3	60
GPI-01-0800	77-2220	8	10	6	2.4	4+4	79
GPI-01-1000	77-2222	10	10	6	2.4	4+2+4	92
GPI-01-1200	77-2224	12	10	6	2.4	4+4+4	105
GPI-02-1200	77-2250	12	25	15	6	4+4+4	270
GPI-02-1600	77-2252	16	25	15	6	4+4+4+4	321
GPI-02-1800	77-2253	18	25	15	6	4+4+2+4+4	332
GPI-02-2000	77-2254	20	25	15	6	5+5+5+5	369
GPI-03-1200	77-2270	12	35	21	8	4+4+4	281
GPI-03-1600	77-2272	16	35	21	8	4+4+4+4	329
GPI-03-2000	77-2274	20	35	21	8	5+5+5+5	381
GPI-03-2500	77-2276	25	35	21	8	5+5+5+5+5	438
GPI-05-1600	77-2280	16	50	30	12	4+4+4+4	424
GPI-05-2000	77-2282	20	50	30	12	5+5+5+5	488
GPI-05-2400	77-2291	24	50	30	12	5+5+4+5+5	564
GPI-05-2500	77-2286	25	50	30	12	5+5+5+5+5	569
GPI-05-3000	77-2287	30	50	28	10	5+5+5+5+5+5	650

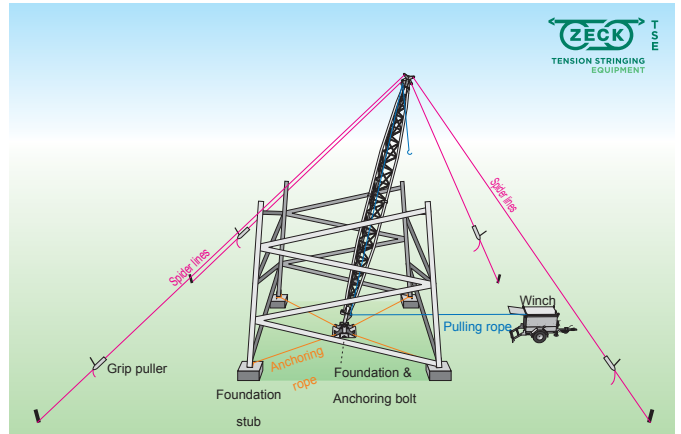
max. lifting rope dia. For GPI - 01/02 : 11 mm

max. lifting rope dia. For GPI - 03/05 : 14 mm

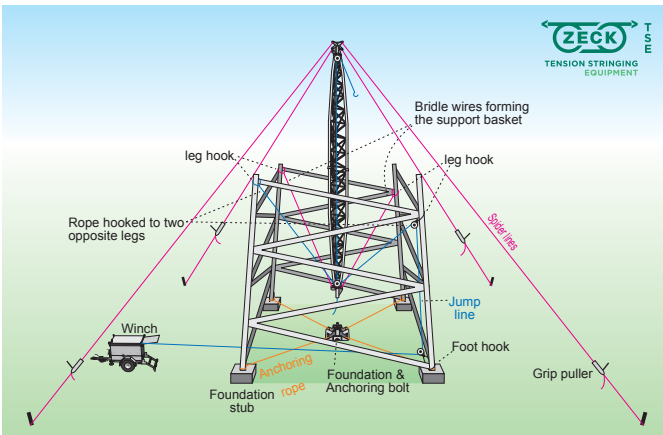
* The weight indication includes Groundplate as well as Ginpole Heads and Ginpole Feet with integrated snatch blocks (for superior internal rope guidance)



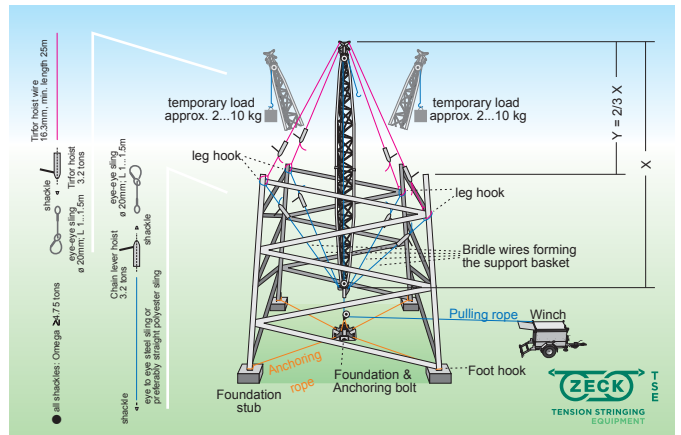
1. Assembly and Positioning of the Ginpole.



2. Using the Ginpole on the ground.



3. Lifting the Ginpole.



4. Using the Ginpole as a centrally placed floating Ginpole.



Pulling Ropes (braided steel)

Braided steel wire ropes are torsion free because they are made of equal numbers of left and right winding wire strands. This makes them the perfect choice for conductor stringing with double capstan pullers. Our wire ropes are made of high quality strands supplied by the world leading wire rope manufacturers. The properties of our wire rope combine long endurance with high tensile strength. The strands are individually lubricated and manufactured in strict compliance with European Standards.



including optional marking tape

part no.	ZECK GmbH part no.	dia. mm	SWL kN	min BL kN	weight Kg/m	standard length m**	max. length with reel dia.		
							1,100 mm	1,400 mm	1,800 mm
SWR-12-08	60-1008	8	13	50	0.23	1600	3200	6400	12800
SWR-12-10*	60-1010	10	20	72	0.33	1000	2000	4000	8000
SWR-12-11	60-1011	11	24	85	0.39	800	1600	3200	6400
SWR-12-12	60-1012	12	25	110	0.49	1400	1400	2800	5600
SWR-12-13*	60-1013	13	30	115	0.56	1200	1200	2400	4800
SWR-12-14	60-1014	14	34	127	0.68	1000	1000	2000	4000
SWR-12-16*	60-1016	16	45	180	0.81	800	800	1600	3200
SWR-12-18*	60-1018	18	58	215	1.10	1200	-	1200	2400
SWR-12-20*	60-1020	20	75	270	1.35	1000	-	1000	2000
SWR-12-22*	60-1022	22	88	320	1.52	900	-	900	1800
SWR-12-24*	60-1024	24	101	360	1.80	800	-	800	1600
SWR-18-27	60-1027	27	131	460	2.29	600	-	600	1200
SWR-18-29	60-1029	29	151	536	2.59	500	-	500	1000

* produced on stock
** other lengths available upon request

working loading is calculated according to European standards (safety factor : 3.55)

Optional Equipment:

part no.	ZECK GmbH part no.	description
SWR-00-01	60-1000	marking tape, indicating serial #, part #, length and manufacturing month/year

ZECK2020-P/H HDR-12-24 LENGTH 800 M 0008 HTR SN. 01-0624-0520-0440

Pulling Ropes “HEAVY DUTY” (braided steel)

Offering a higher breaking load ratio we developed our “heavy duty” or HD-ropes. We are achieving this without increasing the carbon content of the steel and therefore maintain excellent endurance properties.

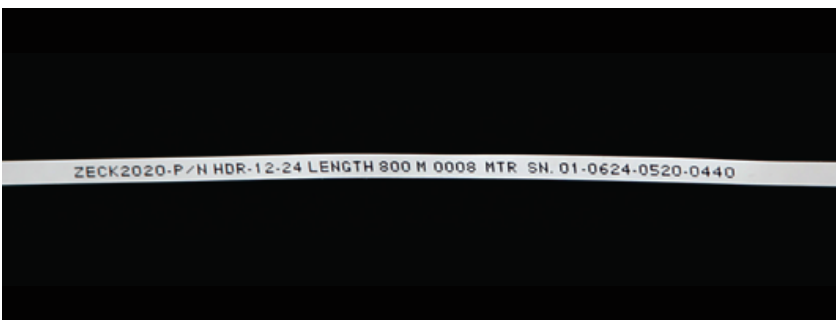


part no.	ZECK GmbH part no.	dia. mm	SWL kN	min BL kN	weight Kg/m	standard length m**	max. length with reel dia.		
							1,100 mm	1,400 mm	1,800 mm
HDR-12-13	60-1013HD	13	38	138	0.70	1200	1200	2400	4800
HDR-12-16	60-1016HD	16	58	195	1.01	800	800	1600	3200
HDR-12-18	60-1018HD	18	67	240	1.19	1200	-	1200	2400
HDR-12-22	60-1022HD	22	104	370	1.74	900	-	900	1800
HDR-12-24	60-1024HD	24	127	450	2.11	800	-	800	1600
HDR-18-27	60-1027HD	27	152	529	2.61	600	-	600	1200
HDR-18-29	60-1029HD	29	177	616	3.17	500	-	500	1000

working loading is calculated according to European standards (safety factor : 3.55)

Optional Equipment:

part no.	ZECK GmbH part no.	description
SWR-00-01	60-1000	marking tape, indicating serial #, part #, length and manufacturing month/year



including steel reel

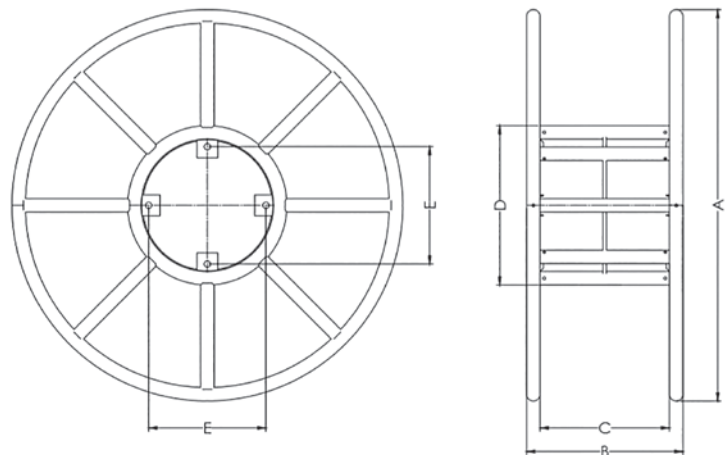
Steel Reels

Our steel reels are welded of steel tubes and finished with a high quality painting. Optionally we supply them hot-dip zinc coated. For Zeck Pullers we optional supply them with welded or lasered crossplates. These reels are available in sizes of 520 up to 1,800 mm diameter.

Detachable reels are supplied for re-conductoring works, when the wound up conductor needs to be scrapped. For extra long lengths of wire rope we supply galvanized steel drums with a capacity up to 13,000 KG.



For special lengths of wire rope we supply steel drums of any customized size and strength.



non detachable

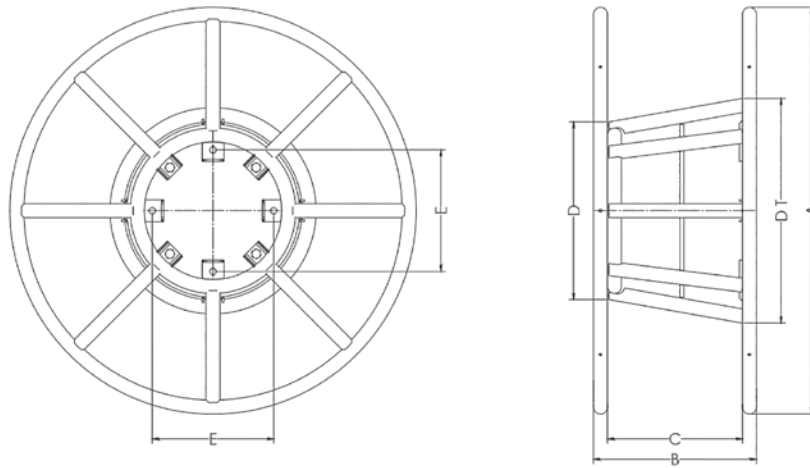
part no.	ZECK GmbH part no.	dimensions in mm						weight Kg
		A	B	C	D	E	F	
TSR-01-0520	77-9030	520	420	334.6	264	160	50	29
TSR-01-1100	77-9034	1100	560	460	570	420	50	73
TSR-01-1400	77-9035	1400	560	460	570	420	50	83
TSR-01-1450	77-9038	1450	560	460	570	420	50	85
TSR-01-1800	77-9037	1800	560	460	570	420	50	105

hot-dip galvanized finishing

non detachable

part no.	ZECK GmbH part no.	dimensions in mm							weight Kg
		A	B	C	D	DT	E	F	
TSR-02-0520	77-9030-L	520	420	334.6	264	-	160	50	29
TSR-02-1100	77-9034-L	1100	560	460	570	-	420	50	71
TSR-02-1400	77-9035-L	1400	560	460	570	-	420	50	81
TSR-02-1450	77-9038-L	1450	560	460	570	-	420	50	83
TSR-02-1800	77-9037-L	1800	560	460	570	-	420	50	105

painting finishing



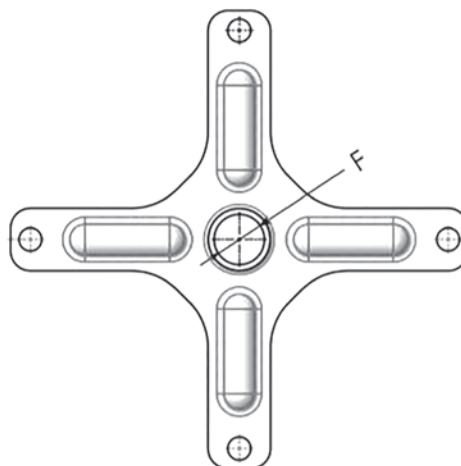
detachable

part no.	ZECK GmbH part no.	dimensions in mm							weight Kg
		A	B	C	D	DT	E	F	
TSR-03-1100	77-9052	1100	560	460	570	680	420	50	79
TSR-03-1400	77-9054	1400	560	460	570	715	420	50	93

hot-dip galvanized finishing

part no.	ZECK GmbH Part no.	dimensions in mm							weight Kg
		A	B	C	D	DT	E	F	
TSR-04-1100	77-9052-L	1100	560	460	570	680	420	50	76
TSR-04-1400	77-9054-L	1400	560	460	570	715	420	50	90

painted finishing



Optional Equipment:

part no.	description	thickness mm	weight Kg
TSR-00-01	one pair of bolted crossplate, punched, galvanized plate for fitting the reel winder shaft of Zeck Pullers	6	5.20

Heavy Duty Pulling Grips

SINGLE with compressed eye or DOUBLE with two open ends

NEW : because faulty pulling grips may cause serious accidents for **ultimate safety** each grip is supplied with **individual serial number and electronic compression protocol**. Produced by ourselves under strictest quality control



Single Pulling Grips

part no.	rope dia.	min BL kN	SWL kN	grip length mm	weight kg
SPG-01-0613	6 to 13	22	7	650	0.6
SPG-01-1219	12 to 19	85	27	825	0.7
SPG-01-1624	16 to 24	97	32	1,100	1.3
SPG-01-1925	19 to 25	120	40	1,100	1.6
SPG-01-2532	25 to 32	145	48	1,400	2
SPG-01-3238	32 to 38	180	60	1,400	2.3
SPG-01-3848	38 to 48	235	78	1,400	3

safety factor : 3

Double Pulling Grips

part no.	rope dia.	min BL kN	SWL kN	grip length mm	weight kg
DPG-01-0613	6 to 13	22	7	650	1.2
DPG-01-1219	12 to 19	40	13	825	1.4
DPG-01-1624	16 to 24	55	18	1,100	2.6
DPG-01-1925	19 to 25	62	20	1,100	3.2
DPG-01-2532	25 to 32	95	32	1,400	4
DPG-01-3238	32 to 38	110	36	1,400	4.6
DPG-01-3848	38 to 48	110	36	1,400	6

safety factor : 3

Drum Stand for overhead stringing



Thanks to its easy transportability and capacity to install conductor drums without use of a crane this design is the most popular among transmissionline contractors worldwide. With the drumshaft being inserted conductor drums can be rolled into the drumstand and then lifted with two manually operated hydraulic jacks. Once in operating position the drumshaft will be rested on a mechanical holding device, so that the hydraulic jacks are freed from any constant load. The drumstand DST is equipped with two disk brakes for stationery purpose. For most efficient operation we highly recommend the use of hydraulic drum-drive motors.

part no.	ZECK GmbH part no.	model	min. drum dia. mm	max. drum dia. mm	max. drum weight Kg	max. drum width mm
DST-01-070	V244-200	TB IT 7	1600	2800	7000	1500
DST-01-100	V244-300	TB IT 10	2000	3200	10000	2040

center shaft bore: min. 95mm, max. 115mm

Optional Equipment

part no.	ZECK GmbH part no.	description	dimensions LxWxH (mm)	weight Kg
DST-00-001	V244-982	hydraulic hose set 15 m for TB/IT 7	-	26.70
DST-00-002	V244-211	hydraulic drum drive: max. drive 2900 Nm	-	97
DST-00-003	V244-220	transport box - TB IT 7	2250x920x750	65
	V244-320	transport box - TB IT 10	2500x960x880	75
DST-00-004	V244-311	adapter for steel drum	-	4.5*

special designs on request

* weight per peice

Reel Winder

This is a simple reelwinder without drive unit to feed out pulling ropes. It has a robust steel frame with anchoring eye bolts, hot-dip galvanized. It allows quick and easy loading and unloading of reels, dismantable for reduced transport dimensions.



part no.	ZECK GmbH part no.	max. reel dia. mm	max. reel weight Kg	shaft dia. mm	dimensions LxWxH (mm)	weight Kg
REW-01-1400	V192-500	1,400	1,500	45	2600x1300x1100	85

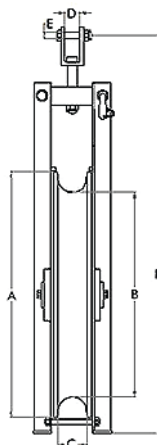
Optional Equipment

part no.	ZECK GmbH part no.	description	dimensions LxWxH (mm)	weight Kg
REW-00-01	V192-501	disk brake	-	15

Pulley Blocks (Helicopter)

Single Pulley

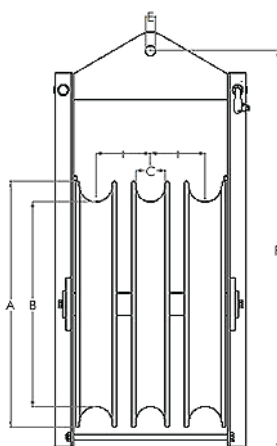
- massive aluminium sheave molded in one piece for increased stability
- for single conductor
- ball bearing hinge mechanism for automatic insertion of the pulling rope
- galvanized steel frame with clevis attachment turnable by 90°
- bolted groove liners for easy exchange
- high-quality maintenance-free ball bearings with high safe working load



part no.	ZECK GmbH part no.	no. of wheels	A mm	B mm	C mm	D mm	E mm	F mm	BL kN	SWL kN	weight Kg
HPB-01-0650	76-1244	1	750	650	95	17	20.5	1228	141	47	69

3-Sheave Pulley Block

- massive aluminium sheave molded in one piece for increased stability
- for single conductor 2- or 3-bundle
- ball bearing hinge mechanism for automatic insertion of the pulling rope
- galvanized steel frame with clevis attachment turnable by 90°
- bolted groove liners for easy exchange
- high-quality maintenance-free ball bearings with high safe working load



part no.	ZECK GmbH part no.	no. of wheels	A mm	B mm	C mm	D mm	E mm	F mm	H mm	BL kN	SWL kN	weight Kg
HPB-03-0650	76-1293	3	750	650	95	22	30.5	1593	178	219	73	218

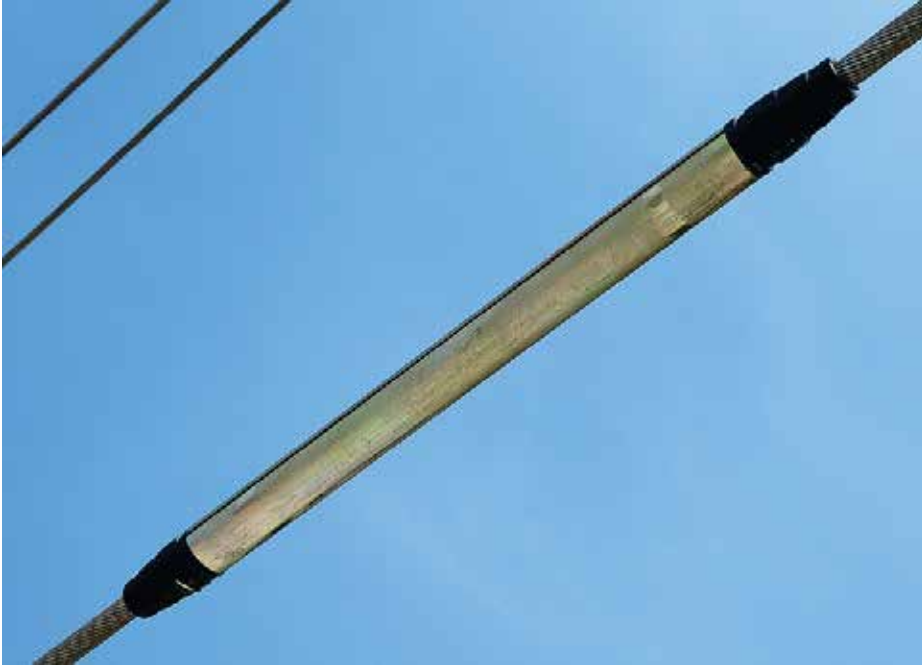
OPTIONAL

- groove liners of polyamide or aluminium
- anti-fleeting device
- alternative distance between sheaves (h)
- fixed clevis
- grounding device with laterally mounted disc and carbon brush for aluminium groove liners (tested according to IEC 61328)

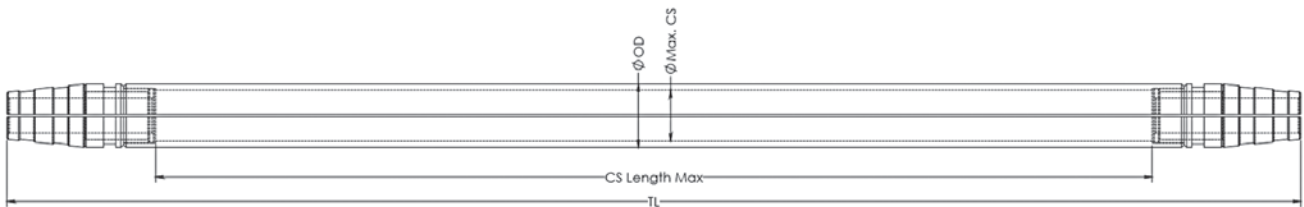
working load: calculated according to European standards (safety factor 3)

Joint Protectors

When conductor midspan joints are compressed during the process of pulling conductors over the towers they need to be covered with an enclosure which prevents them from bending while travelling through the Pulley Blocks.



designed to protect mid-span joints while being pulled over Pulley-Blocks during stringing



part no.	ZECK GmbH part no.	OD mm	min. pulley groove width mm	max. CS \varnothing	CS length after compression max mm	TL* mm	BL kN	weight Kg
JOP-01-001	77-0450	60.30	68	49	698	1038	2-5	6.75
JOP-01-002	77-0452	73	80	58	829	1169	max 6.5	11.05

OD - outside diameter **CS** - compression sleeve **O.D. CS** - outside diameter of compression sleeve
TL - total length including rubber insert

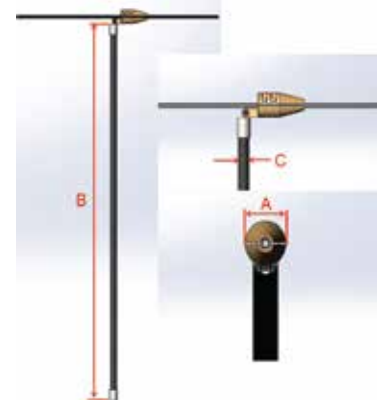
* total length of joint protectors can be made up to order.

Please specify on the order:

Conductor Type/Name
 Conductor diameter
 Max. compression sleeve OD
 Length after compression

OPGW Counterweight

These are counterweights to prevent rotation of OPGW during stringing process. This new and very flexible design prevents problems when pulling over angles towers. We recommend using two counter weights in order to avoid rotation while one counter weight is on a pulley block.



part no.	ZECK GmbH part no.	no. of conductors	A mm	B mm	C mm	OPGW dia. mm	weight Kg
OCW-01-01	77-0841	1	60	1800	38	10-17	5
OCW-01-02	77-0843	1	60	1800	38	17-23	5

Support Structures

These structures are made to prevent conductors in certain areas from laying on the ground



aluminium structure to keep loosely hanging conductors above ground

part no.	length mm	capacity Kg	structure	weight Kg
SST-01-2000	2000	2000	triangular	11
SST-01-4000	4000	2000	triangular	22

Optional Equipments:

part no.	description	weight Kg
SST-00-01	base structure for SST-01 for firm positioning	10
SST-00-02	head structure for SST-01 for supporting horizontal support bar	15

Drone Stringing System



part no.	DSS-01-0200
performance	horizontal pull force approx. 200 N single pulling length approx. 2,500 m
dimensions/ weight	1,600 mm x 1,600 mm x 400 mm 14 kg (w/o batteries)
key facts	pilot line stringing drone system for fast and efficient flying out of pilot lines, remote controlled for single spans up to 2,500 m.

Specifications:

part no.	description
DSS-00-01	Drone <ul style="list-style-type: none"> • 6 units of kv 100 motors, 6 units 30 x 9 inch foldable propellers • single motor thrust approx. 140 N • edicated vision system • edicated rope system • transport case
DSS-00-02	rope unwinding and control system <ul style="list-style-type: none"> • for preparation of up to 20,000 m of rope in one workshift • folding stand with bearings and braking force system • electric winding system • gearmotor and controller box • scale system • lipo battery • including 5 drums
DSS-00-03	high range RC controller with integrate vision system <ul style="list-style-type: none"> • range of at least 2,500 m • DJI Crystal Sky Display, 7.85 inch, 1000 nits brightness • 2 batteries, charger, case
DSS-00-04	high Power dual Charger <ul style="list-style-type: none"> • allow to charge up to 8 batteries simultaneously • cables, adapter, case
DSS-00-05	high Power dischargers in case <ul style="list-style-type: none"> • 10 dedicated rope pulleys • spare part package • on site training

Hydraulic Compression Machines

Hydraulic Compression Head

This crimping unit is particularly light and convenient to use. It is equipped with "flat face" hydraulic fittings, which prevent dirt to intrude into the hydraulic system. It has a double acting hydraulic cylinder with very fast pressing cycle and highest reliability.



description	100 ton	200 ton
die set for steel compression	HCD-01-0100	HDC-01-200
die set for al. compression	HCD-02-0100	HCD-02-200

part no.	ZECK GmbH part no.	compression force Kg	operating pressure in bar	max. exterior dia. of compression mm	max. stroke mm	weight Kg
HCH-01-0100	77-7400CE	1000	700	71	24	33
HCH-01-0200	77-7500CE	2000	700	90	33	98

Hydraulic Power Unit 700 bar for Compression Head

This is a strong and reliable Power Unit with integrated valve control unit. Same as the Hydraulic Compression Head, it is equipped with "flat face" quick action coupling for prevention of dirt intrusion.



part no.	ZECK GmbH part no.	engine	dimensions LxWxH (mm)	weight Kg
HPU-01-0700	77-7730CE*	gasoline 4.3 KW	720x490x490	52
HPU-02-0700	77-7700CE	gasoline 4.3 KW	590x430x450	63

* 77-7730CE is equipped with an extra oil-filter

Hydraulic Hose Kit

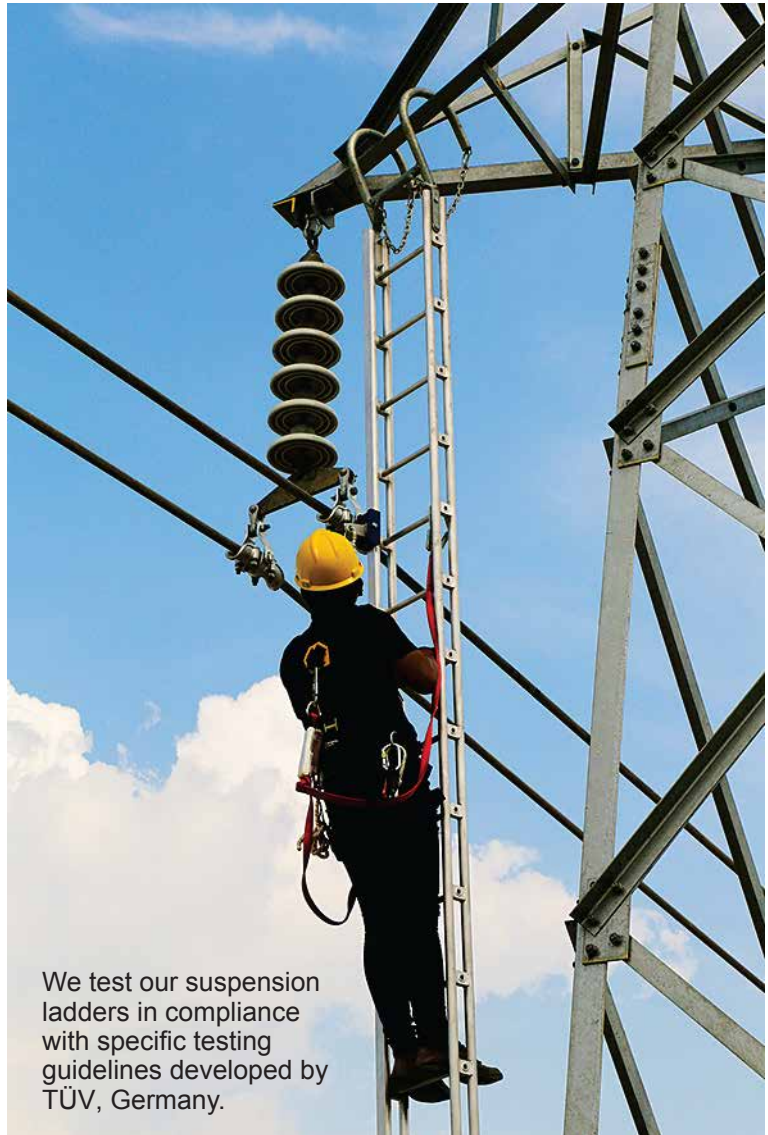
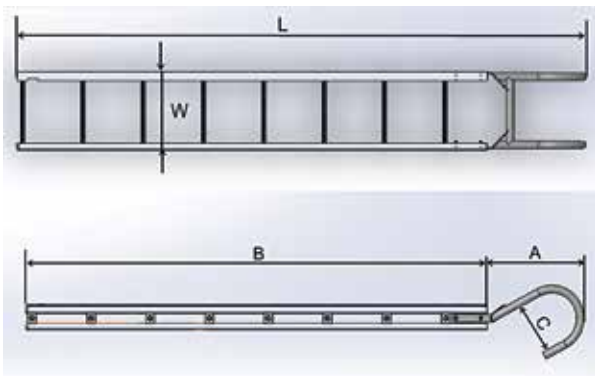
part no. ZECK GmbH part no. length m weight Kg	HHK-01-03 77-7431CE	HHK-01-05 77-7432CE	HHK-01-06 77-7437CE	HHK-01-10 77-7433CE	HHK-01-15 77-7434CE	HHK-01-20 77-7435CE
	3	5	6	10	15	20
	3.4	4.5	5.0	7.9	10.8	14.3

Suspension Ladders

These ladders are designed to be used in hanging position at the tower-cross arms for performing works, for instance at the insulator chains. They can be used also as anchoring ladders if supplied with the optional foldable conductor hook or tower- and conductor hook (SLA-00-02 or SLA-00-03). If supplied with the optional available anti-fall system (SLA-00-01) the ladder is supplied with a guide rail on the left side.

The tower hook is made of galvanized steel and equipped with a safety chain to prevent accidental fall down of the ladder. The ladder itself is a welded structure of first grade extruded aluminum pipes. The rungs are corrugated for slip protection. The working load in hanging position is 3 kN. If used as anchoring ladder (with optional SLA-00-02 or SLA-00-03) the maximum allowable working load is 1 kN.

Different dimensions are available upon request.



We test our suspension ladders in compliance with specific testing guidelines developed by TÜV, Germany.

part no.	ZECK GmbH part no.	W mm	sections qty.	SWL vertical kN	SWL horizontal kN	L=A+B m	hook length C mm	weight Kg
SLA-01-0250	77-0709	305	1	3	1	2.5	220	19
SLA-01-0300	77-0710	305	1	3	1	3	220	20
SLA-01-0400	77-0712	305	1	3	1	4	220	22
SLA-01-0500	77-0713	305	1	3	1	5	220	24
SLA-01-0600	77-0714	305	1	3	1	6	220	28
SLA-02-0600	77-0714-2	305	2	3	1	6m(4+2)	220	32
SLA-02-0800	77-0715	305	2	3	1	8m(4+4)	220	44
SLA-02-1000	77-0716	305	2	3	1	10m(5+5)	220	52
SLA-03-1200	77-0717	305	3	3	1	12m(4+4+4)	220	63

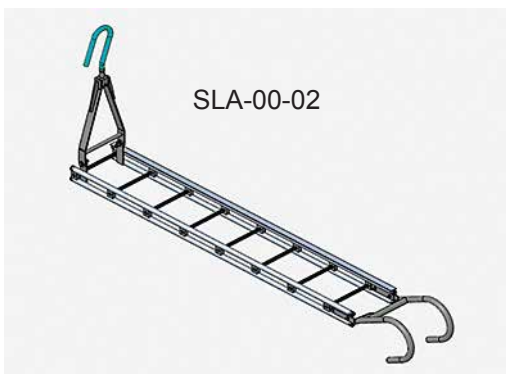
other length available upon request



SLA-00-03



anti-fall system SLA-00-01



SLA-00-02



SLA-00-04



SLA-00-05

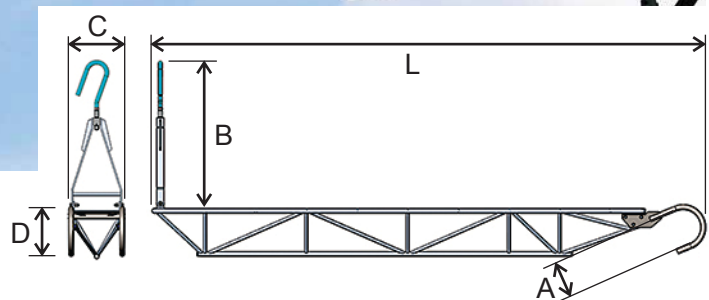
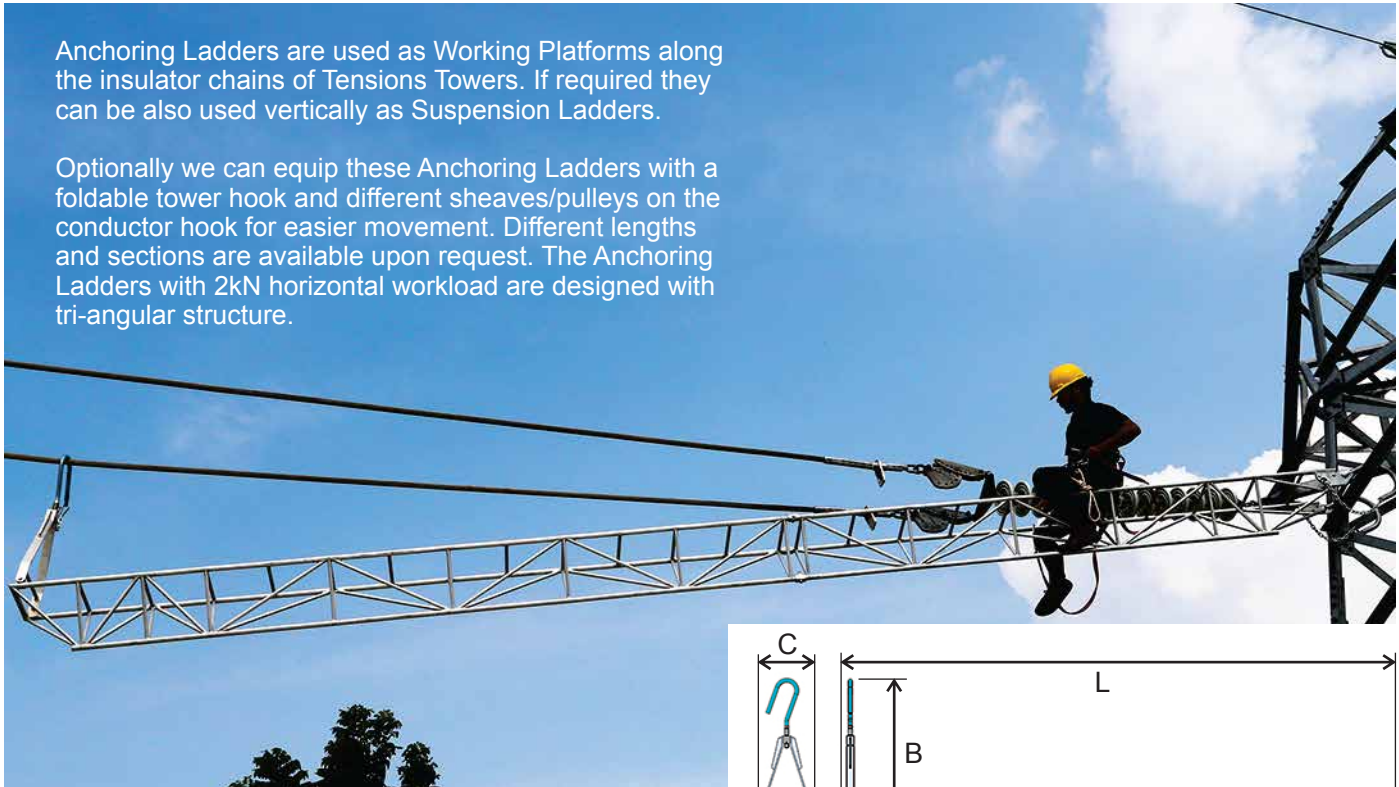
Optional equipment for Suspension Ladders

part no.	ZECK GmbH part no.	description	weight Kg
SLA-00-01	77-0705	anti-fall system (glider/arrester and T-profile on left ladder stringer)	1
SLA-00-02	77-0702	foldable and turnable conductor hook	4
SLA-00-03	77-0703	foldable and turnable tower hook	9
SLA-00-04	77-0700	hook with neoprene sheave	5
SLA-00-05	77-0704	hook with aluminium sheave	6

Anchoring Ladders (2kN SWL)

Anchoring Ladders are used as Working Platforms along the insulator chains of Tensions Towers. If required they can be also used vertically as Suspension Ladders.

Optionally we can equip these Anchoring Ladders with a foldable tower hook and different sheaves/pulleys on the conductor hook for easier movement. Different lengths and sections are available upon request. The Anchoring Ladders with 2kN horizontal workload are designed with tri-angular structure.



part no.	ZECK GmbH part no.	L m	sections qty.	SWL horizontal kN	SWL vertical kN	A mm	B mm	C mm	D mm	weight Kg
ALS-01-0350	77-1250	3.5	1	2	3	220	900	320	320	25
ALS-01-0400	77-1251	4.0	1	2	3	220	900	320	320	27
ALS-01-0500	77-1253	5.0	1	2	3	220	900	320	320	31
ALS-01-0600	77-1254	6.0	1	2	3	220	900	320	350	35
ALS-02-0600	77-1255	6(4+2)	2	2	3	220	900	320	350	36
ALS-02-0700	77-1256	7(4+3)	2	2	3	220	900	320	350	40
ALS-02-0800	77-1257	8(4+4)	2	2	3	220	900	320	350	44

Optional Equipment:

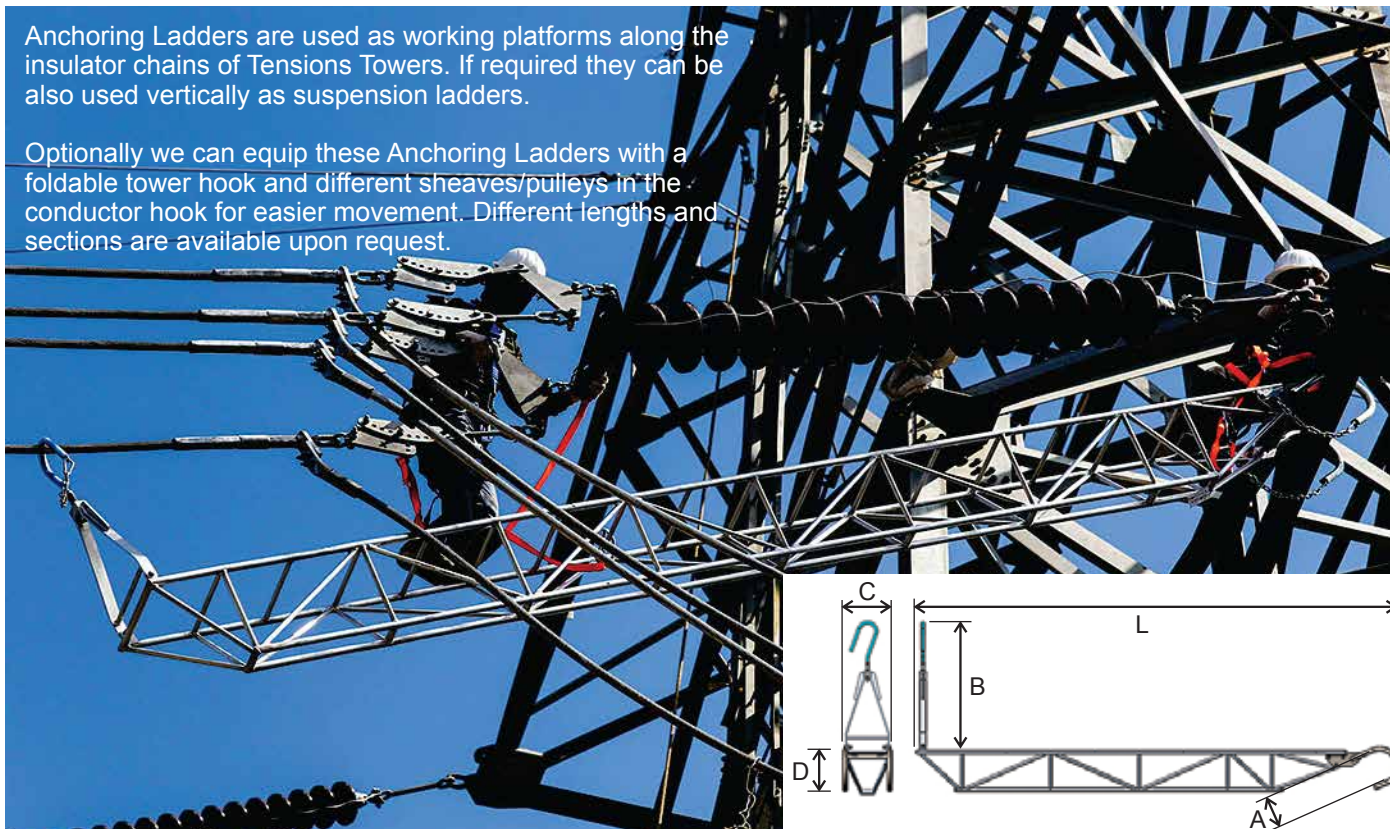
part no.	ZECK GmbH part no.	description	weight Kg
ALS-00-01	77-1272	foldable and turnable tower hook	9
ALS-00-02	77-1275	foldable and turnable conductor hook with neoprene sheave	5
ALS-00-03	77-1277	foldable and turnable conductor hook with aluminium sheave	6
ALS-00-04	77-1274	anti-slip aluminium plate	7

other length available upon request
anti-slip aluminium plate is weight per 2 meters length

Anchoring Ladders (3kN SWL)

Anchoring Ladders are used as working platforms along the insulator chains of Tensions Towers. If required they can be also used vertically as suspension ladders.

Optionally we can equip these Anchoring Ladders with a foldable tower hook and different sheaves/pulleys in the conductor hook for easier movement. Different lengths and sections are available upon request.



part no.	ZECK GmbH part no.	L m	sections qty.	SWL horizontal kN	SWL vertical kN	A mm	B mm	C mm	D mm	weight Kg
ALT-01-0350	77-1260	3.5	1	3	3	220	900	320	320	26
ALT-01-0400	77-1261	4.0	1	3	3	220	900	320	320	29
ALT-01-0500	77-1263	5.0	1	3	3	220	900	320	350	34
ALT-01-0600	77-1264	6.0	1	3	3	220	900	320	350	39
ALT-02-0600	77-1265	6(4+2)	2	3	3	220	900	320	350	40
ALT-02-0700	77-1266	7(4+3)	2	3	3	220	900	320	350	45
ALT-02-0800	77-1267	8(4+4)	2	3	3	220	900	320	350	50
ALT-02-1000	77-1268	10(5+5)	2	3	3	220	900	320	350	60
ALT-03-1200	77-1270	12(4+4+4)	3	3	3	220	900	320	350	72
ALT-03-1800	77-1276	18(6+6+6)	3	3	3	220	900	350	446	115

Optional Equipment:

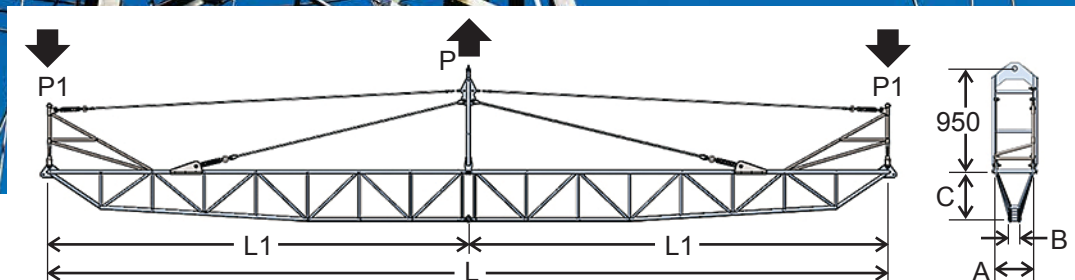
part no.	ZECK GmbH part no.	description	weight Kg
ALS-00-01	77-1272	foldable and turnable tower hook	9
ALS-00-02	77-1276	foldable and turnable conductor hook with neoprene sheave	5
ALS-00-03	77-1277	foldable and turnable conductor hook with aluminium sheave	6
ALS-00-04	77-1274	anti-slip aluminium plate	7

other length available upon request
anti-slip aluminium plate is weight per 2 meters length

Working Platforms (for jumper construction)

These platforms provide linesmen a safe working area at Tension Towers, particularly for the construction of conductor jumpers between insulator chains. They consist of a tubular structure of welded aluminium pipes. In the centre they are equipped with a suspension device and at both ends with anchoring points.

We particularly recommend to equip the platforms with the optionally available sheet metal stepping ground, which increases safety of the linesmen significantly. Optionally available is furthermore a second Anti-Fall Barrier.



part no.	ZECK GmbH part no.	working platform length L and sections m	SWL kN	A mm	B mm	C mm	weight Kg
PLA-01-0700	77-1204	7 m (3.5+3.5)	3	350	85	446	80
PLA-01-0800	77-1205	8 m (4-4)	3	350	85	446	88
PLA-01-1000	77-1206	10 m (4+2+4)	3	350	85	446	105
PLA-01-1200	77-1207	12 m (4+4+4)	3	350	85	446	116
PLA-01-1400	77-1208	14 m (5+4+5)	3	350	85	446	129
PLA-01-1600	77-1209	16 m (4+4+4+4)	3	350	85	446	144
PLA-01-1800	77-1210	18 m (6+6+6)	3	350	85	446	164
PLA-01-2000	77-1211	20m (5+5+5+5)	3	450	85	550	200
PLA-01-2400	77-1212	24 m (6+6+6+6)	3	450	85	550	250
PLA-01-2600	77-1213	26 m (5+5+6+5+5)	3	450	85	550	265
PLA-01-3000	77-1215	30 m (6+6+6+6+6)	3	450	85	550	470
PLA-01-3400	77-1216	34 m (4+5+5+6+5+5+4)	3	450	85	550	515

other length available upon request

Optional Equipment:

part no.	ZECK GmbH part no.	description
PLA-00-0001	77-1200	second anti-fall barrier
PLA-00-0002	77-1200-P2	press trolley, 360 degree turnable
PLA-00-0003	77-1200-PP2	railway profile for press trolley
PLA-00-0004	77-1219	metal sheet coverage on stepping area



press trolley (PLA-00-0002)



railway profile (PLA-00-0003)



anti-slip aluminium plate on stepping area (PLA-00-0004)

Sagging Thermometer



This thermometer is for measuring the conductor temperature during sagging process. The measuring range is from -40 to 70 degree Celsius, it is delivered with calibration certificate and transport case.

part no.	ZECK GmbH part no.	weight Kg
STN-01-01	77-4605	0.6

Sag Scope

During the sagging process this device allows accurate monitoring of the conductor sag. It is equipped with a fine adjustment on all axes comes with tower mounting fixture and transport case.



part no.	ZECK GmbH part no.	weight Kg
SCO-01-01	77-0001	4.2

Line Seat (for single conductor/earth wire)

part no.	ZECK GmbH part no.	description	SWL Kg	dimension LxWxH (mm)	weight Kg
LSE-01-01	77-6125	Line Seat for single conductor/earthwire	100	948x432x727	19

The Line Seat can be easily moved over single conductor or earth wires, for instance for installation of aircraft warning balls, vibration dampers. It is equipped with two combined stationary and dynamic brakes. Optionally a meter counter is available.

Please note: when riding over single conductors/ earthwires a safety line with sufficient breaking load needs to be installed.

Optional Equipment:

part no.	ZECK GmbH part no.	description	weight Kg
LCP-00-01	77-6129	meter counter	1.25



part no.	ZECK GmbH part no.	description	SWL Kg	dimension mm	weight Kg
LCP-01-01	77-6124	single conductor/earthwires	150	645x725x1956	43

Line Car (for single conductor/earth wire)

The Line Car is like the Line Seat used for traveling over single conductors or earthwires for installation of aircraft warning balls, vibration dampers, etc. The operator is positioned in a trolley. This model is equipped with stationary brake plus dynamic disk brake. Optionally available is a meter counter.

Please note: when riding over single conductors/earthwires a safety line with sufficient breaking load needs to be installed.

Optional Equipment:

part no.	ZECK GmbH part no.	description	weight Kg
LCP-00-01	77-6129	meter counter	1.25



Line Car (Inspection Trolley for single conductor for 2 linemen)

part no.	ZECK GmbH part no.	description	SWL Kg	dimension LxWxH (mm)	weight Kg
LCP-02-01	-	single conductor/earthwire	200	2500x750x2186	100

Line car for 2 people, suitable to work on single conductor or earthwire. Welded from stable and high-strength aluminium. They are equipped with parking brake as well as dynamic disk brake with two parking brakes and large nylon wheels with a diameter of 440 mm. The balancing wheels hold the line car in position and the user can work on the platform.



Optional Equipment:

part no.	ZECK GmbH part no.	description	weight Kg
LCP-00-01	77-6129	meter counter	1.25

Line Cars (2, 3, 4 conductors without drive unit)

The Line Cars LCP-01-xx have a compact trolley for one operator. They are equipped with parking brake as well as dynamic disk brake. Optionally available is a meter counter.



part no.	ZECK GmbH part no.	description	SWL Kg	spacing between conductors mm	dimensions LxWxH (mm)	weight Kg
LCP-01-02	77-6126	2-bundles	150	400-510	1178x820x1410	62
LCP-01-03	77-6127	3-bundles	150	400-510	1178x820x1410	65
LCP-01-04	77-6128	4 bundles	150	400-510	1178x820x1410	66

Optional Equipment:

part no.	ZECK GmbH part no.	description	weight Kg
LCP-00-01	77-6129	meter counter	1.25

Line Cars (2, 3, 4 conductors for tower surpassing without drive unit)

The function of Line Cars is to transport workers along powerlines for execution of works like the installation of spacers or inspection.

Our models LCP-02 are designed for a safe working load of 200 KG. The four axles can be opened in sequence. This enables the Line Car to pass over suspension towers instead of lowering it down and lifting it up again at every tower.

The Line Car LCP-02 is welded of superior aluminium alloy and equipped with meter counter and parking brake. Within the scope of supply is also a dynamic brake system by two hydraulic activated disk brakes.

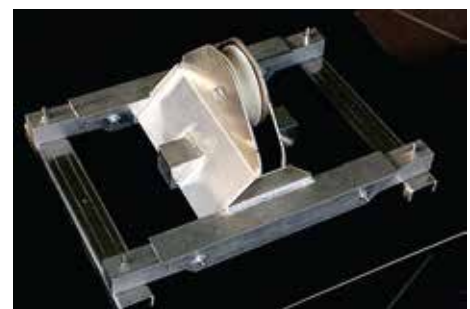
Upon ordering the distance between the conductors need to be specified.



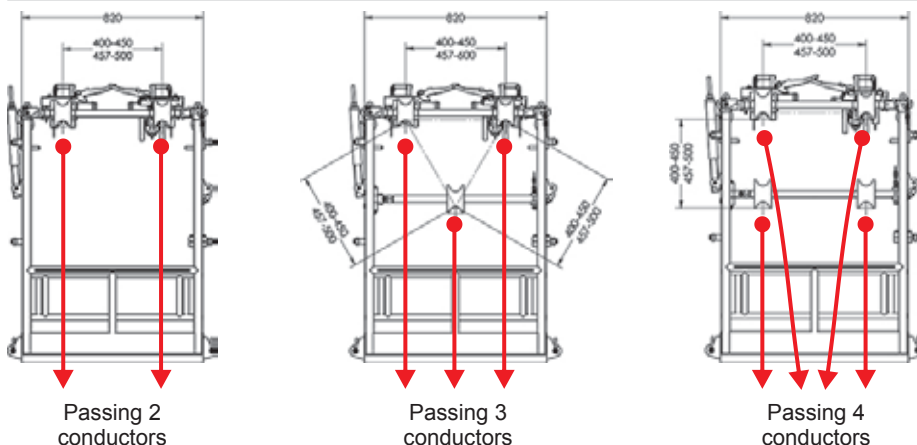
part no.	ZECK GmbH part no.	description	SWL Kg	spacing between conductors mm	dimensions LxWxH (mm)	weight Kg
LCP-02-02	77-6133	2-bundles	250	400 - 510	2078x820x1270	90
LCP-02-03	77-6134	3-bundles	250	400 - 510	2078x820x1270	96
LCP-02-04	77-6135	4-bundles	250	400 - 510	2078x820x1270	100

Optional Equipment:

part no.	ZECK GmbH part no.	description	safe lifting load Kg	weight Kg
LCP-00-01	77-6129	meter counter	-	1.25
LCP-00-02	947-800	lifting device	500	9



lifting device (LCP-00-02)

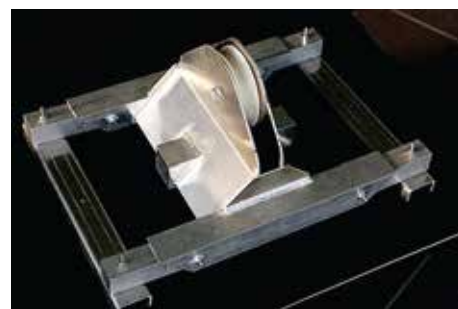


Line Cars (2, 3, 4 conductors for tower surpassing with drive unit)



The Line Cars LCA-01-xx are powered by a 6.3 KW Honda gasoline engine which drives a hydraulic pump and motors on two axles. Without being pulled by external force they are capable to travel along conductor spans and climb slopes up to 25 % inclination. The maximum travelling speed are 40m/min. The hydraulic system serves also as a very effective dynamic brake. Like all our other linecars the LCA-01-xx are equipped with parking brake and a meter counter.

It is equipped with 4 openable axles and a jack for closing them, the LCA-01-xx is capable to surpass over suspension towers.



lifting device (LCP-00-02)

part no.	ZECK GmbH part no.	description	SWL Kg	spacing between conductors mm	dimensions LxWxH (mm)	weight Kg
LCA-02-02	77-6130	2-bundles	250	400-600	2100x1200x1800	215
LCA-02-03	77-6131	3-bundles	250	400-600	2100x1200x1800	220
LCA-02-04	77-6132	4 bundles	250	400-600	2100x1200x1800	225

Optional Equipment:

part no.	ZECK GmbH part no.	description	safe lifting load Kg	weight Kg
LCP-00-01	77-6129	meter counter	-	1.25
LCP-00-02	947-800	lifitng device	500	9

Line Bicycles



Line Bicycles allow linesman to safely travel along transmissionline conductors and earthwires. The advantage towards Line Cars is that they are muscle powered. Without any motorization the operator can conveniently pedal along the line for inspection, installation of spacers, vibration dampers or aircraft warning spheres. Models for single conductor, twin, triple, quad-bundled conductors are available

Characteristics:

- high-tensile ball-bearing mounted neoprene sheaves with fall protection
- static braking device with jaws locking on conductors, controlled by lever
- dynamic disc braking device at the drive shaft, controlled by lever
- adjustment to conductor spacing between 400 and 510 mm
- comfortable sitting position
- fall protection
- meter counter device



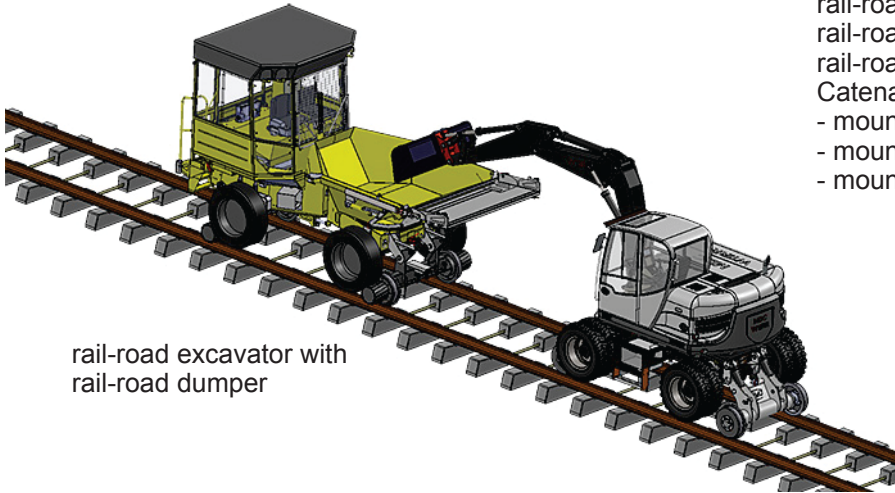
Line Bicycles

part no.	ZECK GmbH part no.	description	SWL Kg	dimensions LxWxH (mm)	weight Kg
 LBP-01-01	77-6150	for single conductor / earthwire	100	1050x554x1655	25
 LBP-01-02	77-6152	for 2-bundle conductors	100	650x770x1560	32
 LBP-01-03	77-6154	for 3-bundle conductors	100	706x643x1560	38
 LBP-01-04	77-6156	for 4-bundle conductors	100	850x770x1903	42

Railway Construction Equipment

Zeck GmbH manufactures highly specialized machines for the Railway Construction Industry:

- rail-road dumpers
- rail-road excavators
- rail-road baskets
- rail-road platforms
- Catenary Installation Units (CIU), "wiring trains"
 - mounted on pulled wagons
 - mounted on self-moving wagons
 - mounted on rail-road vehicles



rail-road excavator with
rail-road dumper



rail-road basket

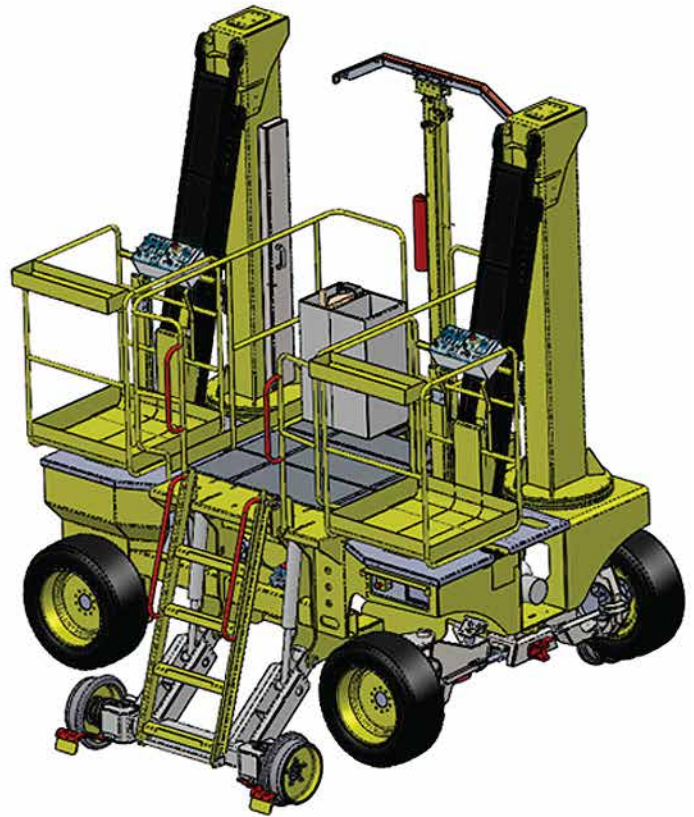


rail-road basket



rail-road dumper





rail-road working platform/baskets

Catenary Installation Unit





catenary installation unit pulled by rail-road truck



Catenary Installation Unit mounted on self-propelled wagon

Underground Utility Construction

As an extension of our product line we are representing the following European companies in Sales & Aftersales Service, exclusively for the Thailand market.



Leaders in Advanced Cable Installation Equipment

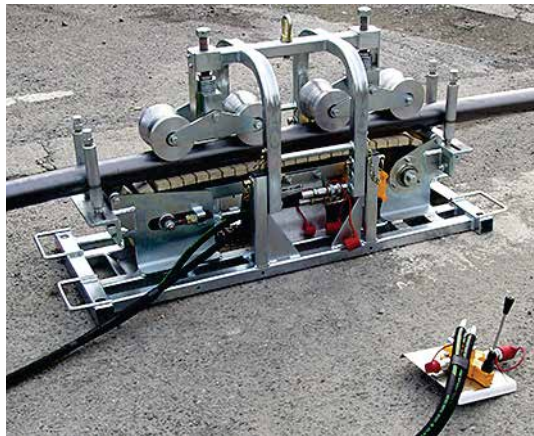
CBS Products Ltd., Oakham, United Kingdom

CBS Products is at the forefront of cabling technology, the design and manufacture of installation equipment for LV Distribution lines, Railway Tracksides and underground CATV / Telecommunication networks, including the handling of Fibre Optic Cables. They offer also offer a comprehensive range of standard equipment.

www.cbsproducts.com



cable blowing machine



cable pusher



duct rods



puller for distribution lines



cables winch



Walter Föckersperger GmbH

Walter Föckersperger GmbH is manufacturer of a unique pipe and cable laying plow. The system works as follows:

Separated from the plow is a winch crawler with large anchor spade. It positions itself 110 meters ahead of the plow and stabs it's spade in the ground to provide a stable footing before it starts pulling the plow. Once the plow starts moving, it takes 3 – 15 minutes to install 100 meters of cables or pipes, depending on laying depth and ground conditions. An installation speed of up to 1,500 meters per hour is achievable in normal ground conditions. The cable laying plow has adjustable wheels and adapts to undulating terrain and overcome slopes, ditches and other hurdles.
<https://www.foeck.com/en/>

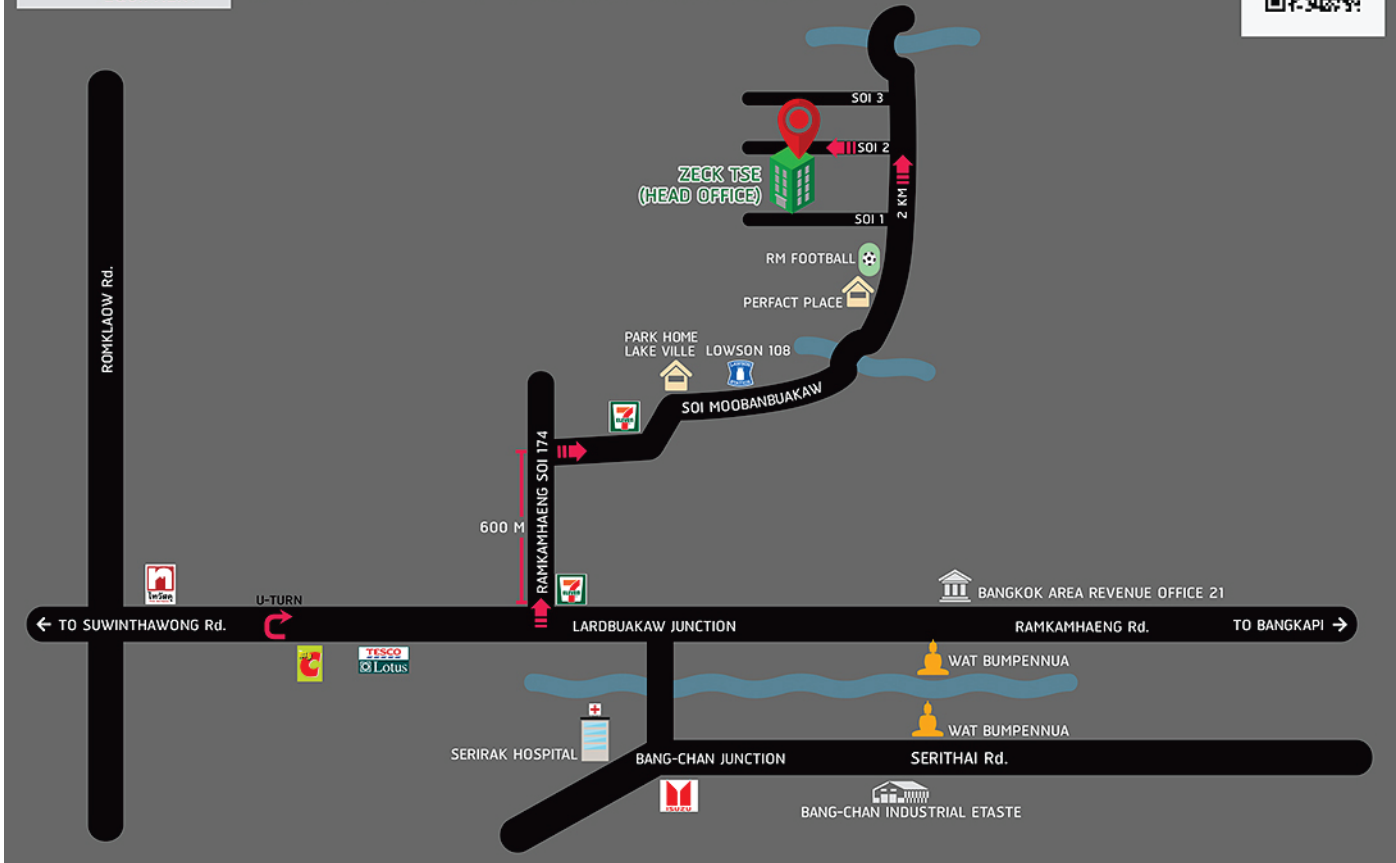


Cable Plowing Machine

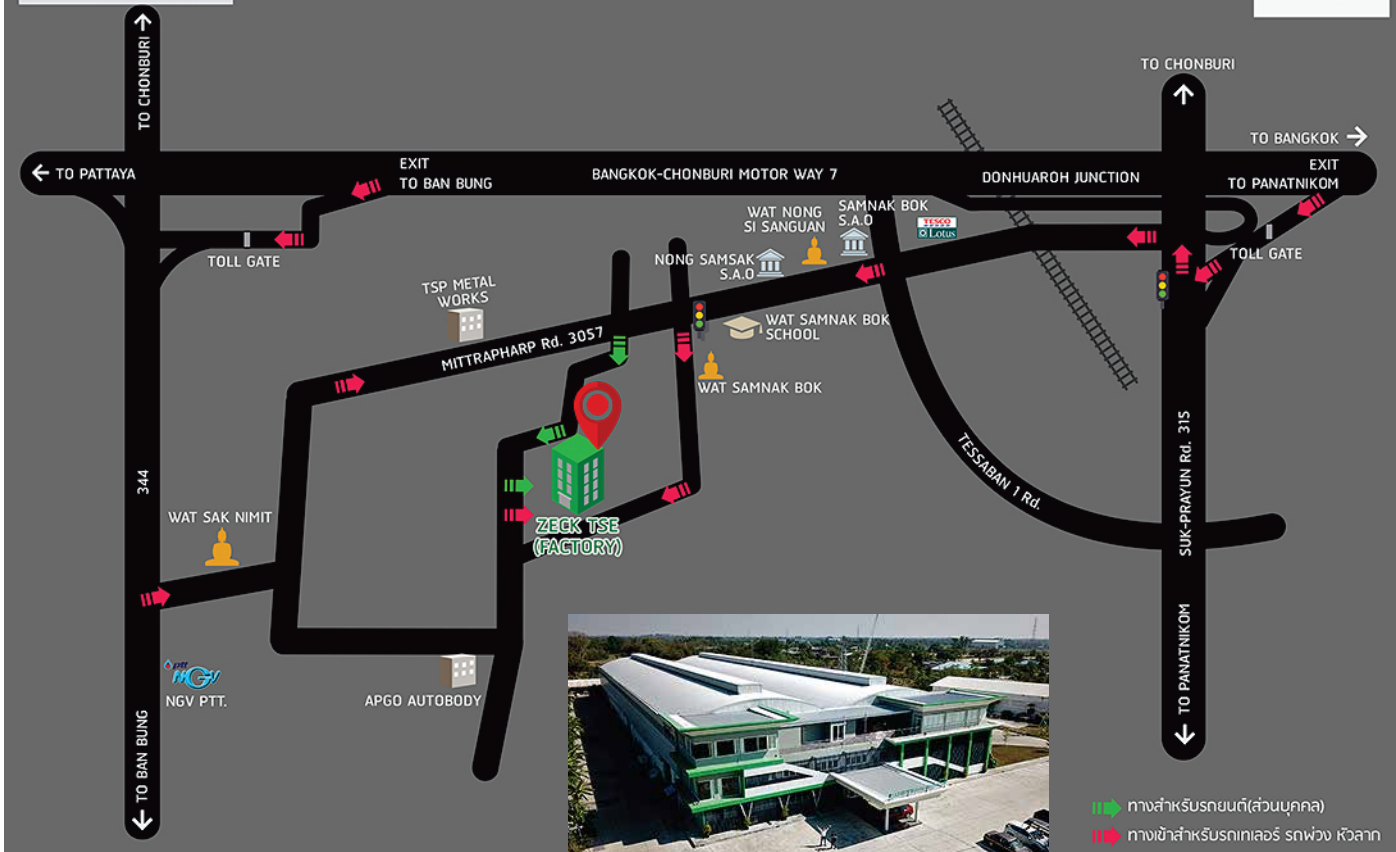




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