



# THINKWELL HARDWARE & MACHINERY

POLE LINE HARDWARE

**Thinkwell**

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# COMPANY

**Thinkwell**

Thinkwell Hardware & Machinery CO.,Ltd is professional manufacturing facility providing Rigging Hardware ,Electric Line Pole power fittings, Trailer Hitches & Pulleys, Ornamental Wrought Iron, Container Fittings, Marine Hardware, Misc hardware and CNC parts .Our TK Brand is widely used in metallurgical machinery, electric power plants, coal operation , port operations, petrochemical industry, engineering, bridges, hydraulic engineering, shipping, cable-ways, overhead & fixed cranes along with portable mobile cranes etc.

Our International Sale Representatives work hand and hand with our inside sale representatives providing customer satisfaction through on-time manufacturing & delivery schedules, proficient documentation for hassle free service and handle questions with solutions for technical issues.

Thinkwell is a fully rounded service manufacture.

## Introduction

Thinkwell is a fully rounded service manufacture.

The factory covers an area of 10,000 square meters and employs over 250 full-time staff . An Engineering department, Design department, Technical department with 15 Technicians and a QC/QA department overseeing all operations. Two forging workshops and a mold workshop.

Our basic equipment includes: 1000T/630T/400T/300T/160T forging machines, air hammers, heating furnace, rolling machines, tapping machines, blasting machines and so on. Our factory has joint venture relationships with the heat treatment factory ,milling factory and galvanizing plant. Through our QC program end users can enjoy safe, reliable and the highest quality TK Brand products they expect.

Thinkwell' s reputation is recognized through worldwide buyers for over 16+ years.

# Production Equipments



Stamping Machine



CNC



Shot Blasting Machine



Forging Press



Cutting Machine



Hardness Machine



Forging Press



Tensile Testing Machine



Drilling Machine

# Socket

Eye/Clevis



Tensile test



Go/no go gauge



Go



Not go

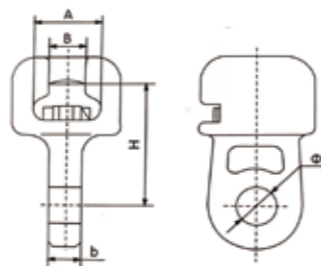
Thinkwell

Type: Socket Eye, Socket Clevis  
Failure load(KN): 30kn~320kn  
Surface: Hot Dip Galvanized  
Material: 45#, Q235, Q345, 40Cr



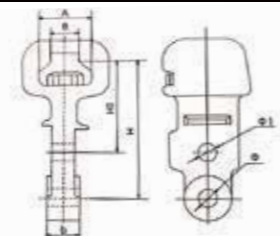
# Socket Eye/Clevis

## 1. Socket Clevis ( I )

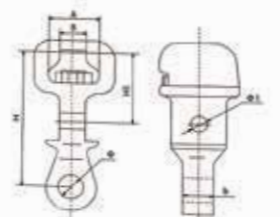


Part No.	Breaking Load (kn)	Weight (kg)	Coupling Designated Size	Dimension (mm)				
				$\phi$	b	H	A	B
TKP001	70	0.8	16	20	16	70	34.5	19.2
TKP002	70	0.92	16	20	16	115	34.5	19.2
TKP003	100	0.9	16	20	18	85	34.5	19.2
TKP004	100	1.1	16	20	16	85	34.5	19.2
TKP005	120	1.3	16	24	16	90	34.5	19.2
TKP006	120	1.3	16	24	20	90	34.5	19.2
TKP007	120	1.4	20	24	20	90	42.5	23
TKP008	120	1.3	16	24	18	85	34.5	19.2
TKP009	160	1.9	20	26	18	95	42.5	23
TKP010	300	3.5	24	39	32	110	51	27.5
TKP011	320	4.2	24	39	28	110	51	27.5

## 2. Socket Clevis ( II )

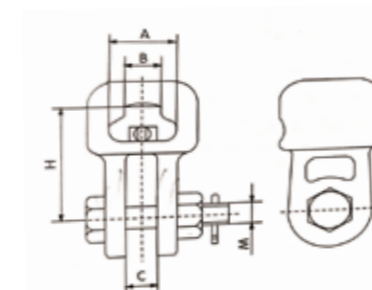


Part No.	Coupling Designated Size	Breaking Load (kn)	Weight (kg)	Dimension (mm)						
				b	H	$\phi$	H1	$\phi 1$	A	B
TKP012	XP-7 XP-4.5	70	1	20	120	18	70	14	34.5	19.2
TKP013	XP-12	120	1.3	22	120	24	70	14	34.5	19.2



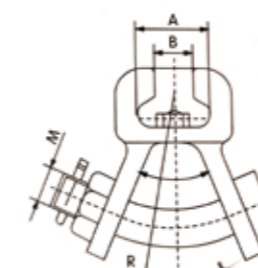
## 3. Socket Clevis ( III )

Part No.	Coupling Designated Size	Breaking Load (kn)	Weight (kg)	Dimension (mm)						
				b	H	$\phi$	H1	$\phi 1$	A	B
TKP014	XP-7 XP-4.5	70	1	18	120	18	65	14	34.5	19.2
TKP015	XP-12	120	1.3	22	120	22	70	14	34.5	19.2



## 4. Socket Clevis ( IV )

Part No.	Breaking Load (kn)	Weight (kg)	Coupling Designated Size	Dimension (mm)				
				C	H	M	A	B
TKP016	70	0.97	16	20	70	16	34.5	19.2
TKP017	100	1.7	16	20	85	18	34.5	19.2
TKP018	120	1.7	16	20	90	22	34.5	19.2
TKP019	120	3.81	16	24	85	22	34.5	19.2
TKP020	120	3.1	16	24	90	22	34.5	19.2
TKP021	120	1.8	16	20	85	22	34.5	19.2
TKP022	160	2.6	20	22	95	24	42.5	23
TKP023	210	4.3	20	24	100	24	42.5	23
TKP024	200	3.6	20	30	100	30	42.5	23
TKP025	320	2.64	24	32	110	30	51	27.5
TKP026	160	5.2	20	22	95	24	42.5	23
TKP027	210	3.5	24	24	100	24	51	27.5
TKP028	320	4.8	24	32	110	30	51	27.5
TKP029	420	5.6	28	36	120	36	59	32



## 5. Socket Clevis ( Type WS )

Part No.	Breaking Load (kn)	Weight (kg)	Suitable insulator	Dimension (mm)			
				R	M	A	B
TKP030	210	4.1	20	100	27	42.5	23
TKP031	300	4.9	24	110	30	51	27.5

# Ball Eye



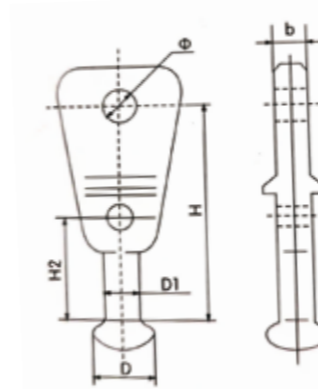
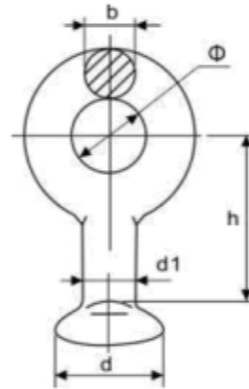
Type: Ball Eye, Ball Eye for Arcing Horn  
Failure load(KN): 120kn~320kn  
Surface: Hot Dip Galvanized  
Material: 45#, Q235, Q345, 40Cr



# Ball Eye

## 1. Ball Eyes ( I )

Part No.	Breaking Load (kn)	Weight (kg)	Coupling Designated Size	Dimensions (mm)				
				d1	Φ	b	d	h
TKP032	50	0.22	11	11.9	18	12	22.8	50
TKP033	70	0.3	16	17	22	16	33.3	50
TKP034	100	0.3	16	17	22	16	33.3	50
TKP035	120	0.32	16	17	25.5	16	33.3	53
TKP036	70	0.3	16	17	22	16	33.3	50
TKP037	120	0.34	16	17	24	16	33.3	60
TKP038	160	0.5	20	21	26	20	41	60
TKP039	210	0.87	24	25	30	24	49	80
TKP040	300	1.05	24	25	29	28	49	80

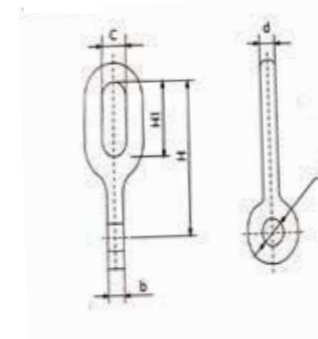
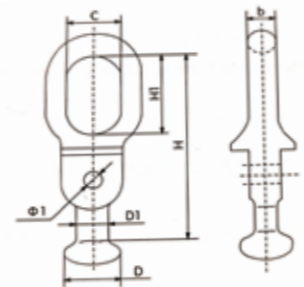


Part No.	Breaking Load (kn)	Weight (kg)	Dimensions (mm)		
			b	D	D1
TKP045	70	1.1	16	33.3	17
TKP046	120	1.3	18	33.3	17

## 4. Ball Eyes ( IV )

## 2. Ball Eyes( II )

Part No.	Breaking Load (kn)	Weight (kg)	Dimensions (mm)				
			C	b	H1	D	D1
TKP041	70	1	18	16	130	33.3	16
TKP042	120	1.3	22	18	145	33.3	18

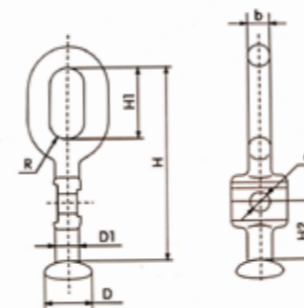


Part No.	Breaking Load (kn)	Weight (kg)	Dimensions (mm)				
			b	C	Φ	H1	H
TKP047	70	0.85	16	24	20	57	100
TKP048	100	1.12	16	20	20	57	100
TKP049	120	1.2	16	22	24	65	115
TKP050	160	1.8	18	26	26	75	135
TKP051	210	1.9	27	30	30	75	150

## 5. Ball eyes(Parallel type)

## 3. Ball Eyes ( III )

Part No.	Breaking Load (kn)	Weight (kg)	Coupling Designated Size	Dimensions (mm)					
				b	H	H1	Φ1	D	D1
TKP043	100	0.7	16	16	152	51	14	33.3	17
TKP044	120	0.8	16	18	165	68	14	33.3	17





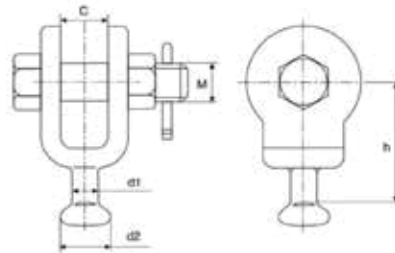
# Y Ball Clevis



Type: Y Ball Clevis  
Failure load(KN): 70kn~160kn  
Surface: Hot Dip Galvanized  
Material: 45#, Q235, Q235, 40Cr

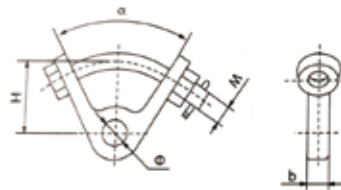


# Y Ball Clevis



## 1. Y Ball Clevis( I )

Part No.	Breaking Load (kn)	Weight (kg)	Coupling Designated Size	Dimension (mm)				
				C	M	h	d1	d2
TKP052	70	0.56	16	20	16	75	17	33.3
TKP053	120	0.85	16	22	22	94	17	33.3
TKP054	160	0.98	20	24	18	78	21	41
TKP055	160	1.12	20	26	24	80	21	41
TKP056	210	1.35	20	30	27	102	21	41
TKP057	300	2.14	24	38	36	110	25	49



## 3. Y Ball Clevis( III )

Part No.	Breaking Load (kn)	Weight (kg)	Dimension (mm)				
			b	$\phi$	M	H	a
TKP061	70	1.8	40	18	20	75	60°
TKP062	70	1.4	28	18	20	75	60°

# Link Eye



Link Eye

Type: Link Eye  
Failure load(KN):120kn~320kn  
Surface: Hot Dip Galvanized  
Material: 45#, Q235, Q345, 40Cr



Twisted Eye Tongue

Type: Twisted Eye Tongue  
Failure load(KN):70kn~120kn  
Surface: Hot Dip Galvanized  
Material: 45#, Q235, Q345, 40Cr

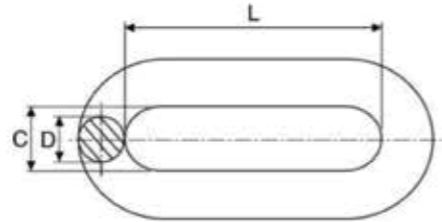


# Deadend Clamp

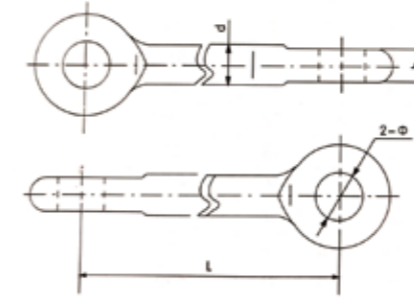


# Link Eye

## 1. Link Eye ( I )



Part No.	Model	Breaking Load (kn)	Weight (kg)	Dimensions (mm)		
				C	D	L
TKP063	PH-7	70	0.4	20	16	80
TKP064	PH-10	100	0.6	22	16	100
TKP065	PH-12	120	0.81	24	18	120
TKP066	PH-16	160	1.13	26	20	130
TKP067	PH-21S	210	0.87	26	20	120
TKP068	PH-25S	250	1.3	32	24	140
TKP069	PH-32S	320	2	36	28	160
TKP070	PH-42S	420	3	40	32	160
TKP071	PH-21	210	1.53	30	24	160
TKP072	PH-25	250	1.84	34	26	160
TKP073	PH-30	300	2.8	38	30	180



## 2. Extension rods

Part No.	Breaking Load (kn)	Weight (kg)	Dimensions (mm)			
			$\phi$	d	L	b
TKP074	70	1.5	18	18	430	16
TKP075	100	0.8	20	18	120	16
TKP076	100	1.1	20	18	400	16
TKP077	100	1.4	20	18	500	16
TKP078	100	1.7	20	18	660	16
TKP079	100	1.9	20	18	690	16
TKP080	120	1.6	24	22	430	18
TKP081	160	1.6	26	22	400	18
TKP082	160	1.6	26	22	430	18
TKP083	160	2.5	26	22	550	18
TKP084	160	2.7	26	22	570	18
TKP085	200	3	30	24	430	20
TKP086	210	3.1	30	26	550	20
TKP087	210	3.1	30	26	650	20

# Shackle



Shackle  
**Type: Shackle**  
**Failure load(KN): 30kn~630kn**  
**Surface: Hot Dip Galvanized**  
**Material: 45#, Q235, Q345, 40Cr**



Twist Shackle  
**Type: Twist Shackle**  
**Failure load(KN): 70kn~240kn**  
**Surface: Hot Dip Galvanized**  
**Material: 45#, Q235, Q345, 40Cr**



Tensile test



Tensile test report



Mass cargo



Mass cargo



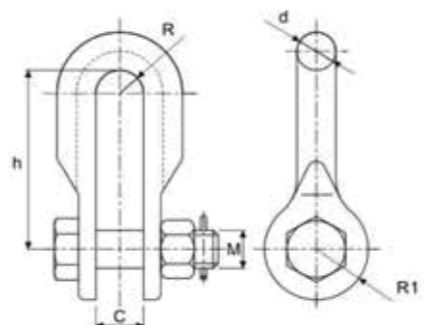
Mass cargo



Mass cargo

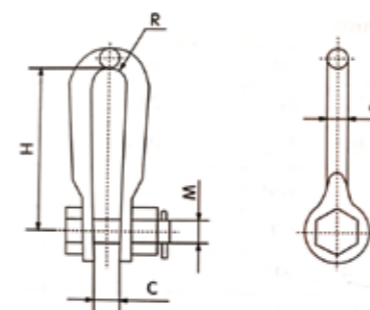
# Shackle

## 1. U Type Shackle ( I )



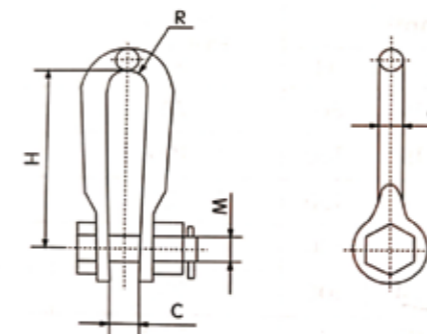
Part No.	Breaking Load (kn)	Weight (kg)	Dimension					
			C	M	d	h	R	R1
TKP088	70	0.44	20	16	16	80	10	22
TKP089	70	0.5	20	16	16	70	10	22
TKP090	70	0.54	22	18	18	85	11	24
TKP091	100	0.6	20	18	16	85	10	24
TKP092	120	0.95	24	22	20	90	12	30
TKP093	120	1	22	22	20	90	12	30
TKP094	120	1	22	22	18	90	11	24
TKP095	160	1.39	26	24	22	95	13	32
TKP096	160	1.5	24	24	20	95	12	32
TKP097	210	2.2	30	24	24	100	15	36
TKP098	100	1.43	26	24	20	100	13	32
TKP099	100	1.8	24	24	20	100	12	32
TKP100	250	2.79	34	30	26	110	17	40
TKP101	250	2.1	28	27	24	110	14	36
TKP102	300	3.7	38	36	30	130	19	46
TKP103	500	7	44	42	36	150	22	55
TKP104	320	3.2	32	30	28	120	16	40
TKP105	420	4.55	36	36	32	130	18	50
TKP106	420	4.47	38	36	32	120	19	45
TKP107	210	1.45	30	24	20	100	15	32
TKP108	320	3	32	30	28	115	16	40
TKP109	320	3.2	34	30	28	130	17	40
TKP110	320	3.4	36	30	28	130	18	40
TKP111	420	4.5	36	36	32	140	18	40
TKP112	500	4.9	36	36	32	150	18	55
TKP113	550	4.9	36	36	32	150	18	55

## 2. U Type Shackle ( II )



Part No.	Breaking Load (kn)	Weight (kg)	Dimension (mm)				
			C	M	d	H	R
TKP114	70	0.65	20	16	16	120	15
TKP115	100	0.92	22	18	18	140	17
TKP116	120	1.43	24	22	20	140	18
TKP117	160	1.78	26	24	22	140	19
TKP118	210	2.6	30	27	24	160	18
TKP119	250	3.5	34	30	26	170	25
TKP120	300	4.83	38	36	30	170	20

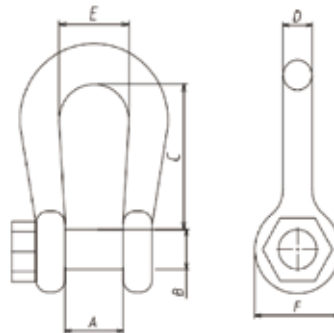
## 3. U Type Shackle ( III )



Part No.	Breaking Load (kn)	Weight (kg)	Dimension (mm)				
			C	M	d	H	R
TKP121	70	0.5	20	16	16	60	10
TKP122	100	0.54	22	18	18	70	11
TKP123	120	0.96	24	22	20	80	12
TKP124	160	1.47	26	24	22	90	13
TKP125	200	2.2	30	27	24	100	15
TKP126	250	2.79	34	30	26	110	17
TKP127	300	3.7	38	36	30	130	19
TKP128	400	7	42	42	36	150	21
TKP129	500	7	44	42	36	150	22

# Shackle

## 4. Electric power shackle



Part No.	Breaking Load (kn)	Dimensions (mm)					
		A	B	C	D	E	F
TKP130	120	24	17.5	64	17	32	38
TKP131	160	26.4	19.5	62.8	19	32	42
TKP132	210	27	22	73.5	21	32	44
TKP133	240	27	24	73.5	21	32	44
TKP134	500	40	35	90	29	48	60
TKP135	630	42	38	129	32	60	70

# Anchor Rod



Specifications marked



Angled single strand eyelet





# Anchor Rod

### 3. Triple Eye Anchor

#### 1. Thimble Eye Anchor

Part No.	Rod Diameter Inch	Length Ft.	Weight KG/100
TKP330	5/8	6	270
TKP331		7	310
TKP332		8	340
TKP333		9	388
TKP334		3/4	6
TKP335	7		443
TKP336	8		501
TKP337	9		559
TKP338	10		616
TKP339	1	8	935
TKP340		9	1056
TKP341		10	1168



Part No.	Rod Diameter Inch	Length Ft.	Weight KG/100
TKP354	5/8	6	-
TKP355		7	-
TKP356		8	-
TKP357		9	-
TKP358	3/4	6	412
TKP359		7	476
TKP360		8	530
TKP361		9	608
TKP362	1	10	670
TKP363		8	1030
TKP364		9	1120
TKP365		10	1210

#### 2. Twin Eye Anchor

Part No.	Rod Diameter Inch	Length Ft.	Weight KG/100
TKP342	5/8	6	272
TKP343		7	312
TKP344		8	351
TKP345	3/4	9	390
TKP346		6	396
TKP347		7	453
TKP348		8	510
TKP349	1	9	567
TKP350		10	624
TKP351		8	973
TKP352		9	1090
TKP353		10	1207



#### 4. Angle Eye Anchor

Part NO.	Weight kg/100pcs	Thread Per Inch	Standard Pkg.Qty/ Carton
TKP366	52.5	11	30
TKP367	58	11	30
TKP368	65	11	30
TKP369	75	11	30
TKP370	81	11	30
TKP371	90	10	25
TKP372	100	10	25
TKP373	110	10	25
TKP374	113	10	25

# Anchor Rod

## 5. Forged Eye Shaft Screw Anchor

Thimble Eye		Twin Eye		Triple Eye		Shaft Diameter Inch	Length Feet	Helix Diameter Inch
Part No.	Weight KG/100pcs	Part No.	Weight KG/100pcs	Part No.	Weight KG/100pcs			
TKP375	474	TKS385	464	TKS395	-	3/4	6	6
TKP376	530	TKS386	540	TKS396	-		7	
TKP377	588	TKS387	548	TKS397	-		8	
TKP378	543	TKS388	552	TKS398	568		6	
TKP379	598	TKS389	609	TKS399	632		7	
TKP380	657	TKS390	665	TKS400	685		8	
TKP381	918	TKS391	1012	TKS401	-	1	7	8
TKP382	1091	TKS392	1129	TKS402	-		8	
TKP383	1212	TKS393	1245	TKS403	-		9	
TKP384	1324	TKS394	1362	TKS404	-		10	



## 6. Anchor Assemble

Part No.	Diameter Inch	Length Feet	TPI	Weight kg/100pcs	Package /Carton
TKP405	5/8	6	11	260	5
TKP406		7		310	5
TKP407		8		350	5
TKP408	3/4	7	10	398	5
TKP409		8		456	5
TKP410		9		512	5



## 7. Eye Nut

Part No.	Type	Bolt Diameter (inch)	Strand Size (inch)	Weight kg/100pcs	Package / Carton
TKP411	Thimble Eye Nut	5/8	1/2	40	100
TKP412		3/4	1/2	40	100
TKP413	Twin Eye Nut	5/8	1/2	83.5	30
TKP414		3/4	1/2	79.1	30

## 8. Square Lock Nut

Part No.	Nominal Size inch (mm)	Thread Length inch (mm)	Weight kg/100pcs	Package / Carton
TKP415	3/8(9)	16(400)	7.9	1000
TKP416	1/2(13)	13(325)	8.8	1000
TKP417	5/8(16)	11(275)	9.9	1000
TKP418	3/4(19)	10(250)	10.8	1000

## 9. Square Nut

Part No.	Bolt Size inch (mm)	Thread Length inch (mm)	Weight kg/100pcs	Package / Carton
TKP419	0.375 (9)	16(400)	1.2	2000
TKP420	0.5 (13)	13(325)	2.5	1000
TKP421	0.625 (16)	11(275)	4.2	500
TKP422	0.75 (19)	10(250)	6.5	400
TKP423	0.875 (22)	9(225)	11	250

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