



# online information: www.indef.com

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Hercules Hoists Limited a company established in

1962 is renowned corporate entity, having expertise in manufacture of material handling equipments. A diverse product range that encompasses Manual Hoists, Electric Hoists, Cranes, Ratchet Lever Hoist, Pulling & Lifting Machine, Automated Storage and Retrieval System, Conductors, etc. that fulfills the storage, retrieval and material handling needs of companies globally.

An integral part of the eminent Bajaj group, one of India's top business houses, the company has continuously outshined its standards of excellence. Its reputation of trust and reliability is bolstered by the testimony of its clientele.

#### MANUFACTURING EXCELLENCE AT HERCULES HOISTS LIMITED

Hercules Hoists Limited has set up a modern manufacturing plant having ISO 9001-2008 certification is equipped with the latest technological know-how, CNC machines, ultra modern assembly lines and accurate testing equipment.

With work force of over one hundred employees comprising workers, officers and engineers, the company enforces strict quality control at every stage of manufacturing process, right from selection of raw material to the inspection of the finished products, which bears the **indef** mark of quality and reliability.



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## MARKETING STRATEGY FOR A GLOBAL REACH

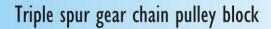
Aiming of reaching a global market, marketing division supported by business facilitators stationed at strategic locations interact directly with customers globally for material handling application solutions. Its products are marketed throughout India by 40 authorized marketing associates and network of dealers, representatives and liaison agents.



The company has registered sales of approximately ₹ 1.2 billion, \$ 23 million and € 17 million making it an undisputed No. 1 brand with the largest market share. The company has also made its mark on the global scene by exporting material handling equipments to European, Middle East, Africa and South East Asian countries.



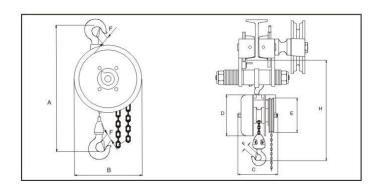
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## Model-P

- Manufactured in ISO 9001 : 2008 certified company Assured quality & interchangeability of parts
- ▶ Tested as per ISI procedure for 50% over load Assured safety
- Grade 80 load chain & zinc plated hand chain Longer chain life
- Rugged German design, in use for more than 30 years Assured reliability
- Double ball bearing supported load wheel Smooth operation
- Precision machine case hardened alloy steel gears Long life, noseless operation
- Fully pocketed S.G. iron cast load chain wheel Long life, safe and smooth running
- Anti corrosive powder coated zinc plated parts
  Anti rust & better aesthetics



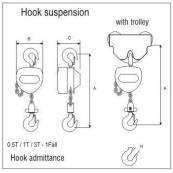
Capacity	MT	0.5	1	2	3	5	7.5	10
No. of falls		1	1	2	2	2	3	4
Running pull on hand chain	Kgs.	13	26	28	43	49	50	61
Weight at 3 metre lift (approx.)	Kgs.	21	21	30	35	60	88	126
Extra weight per additional metre lift (approx.)	Kgs.	2.9	2.9	4.3	4.3	5.2	7.0	14.4

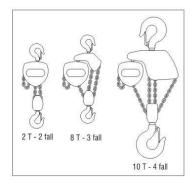
Capacity MT	A	В	С	D	E	F	Н	Mono blocks (not shown) H	Thrust bearing in bottom block H
0.5 T	460	210	180	210	195	31	550	500	580
1 T	460	210	180	210	195	31	550	500	580
2 T	560	240	180	210	195	37	665	620	760
3 T	625	240	200	210	195	42	759	635	825
5 T	810	320	225	275	270	51	885	780	1010
7.5 T	910	455	225	275	270	75	1017	952	1135
10 T	990	515	225	275	270	75	1120	1025	1240



# Model-M

- Light weight & sturdyEase of handling
- Lifelong lubricationMinimal maintenance required
- Surface hardened gears Extended working life
- Use of needle roller bearings
   High operating efficiency
- Smooth passage of load chain Machined guide rollers
- Smooth hand chain operation Unique cover design
- Self sustaining maintenance free friction brake Reduced downtime
- Grade 80 load chain for strength & wear resistance Longer chain life
- Anti corrosive powder coated finish Better aesthetics





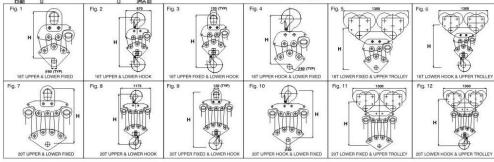


Capacity	МТ	0.5	1	2	2.5	3	5	8	10
Number of falls of load chain	No.	1	1	2	1	1	2	3	4
Dimensions									
A Hook suspension	mm	335	400	461	530	575	805	880	950
with trolley, ranges 1&2	mm	365	430	500	560	705	690	980	950
with trolley, range 3	mm	405	470	540	605	720		-	-
В	mm	155	180	180	238	230	280	430	480
C	mm	144	153	153	209	182	209	220	220
H Hook admittance	mm	27	32	32	42	42	51	75	75
Weight at 3 M	kg	10	13	19	29	27	59	94	130
Extra weight per additional M lift	kg	1.4	1.8	2.6	3.0	3.0	5.7	7.9	10.1
Running pull on hand chain	kg	28	30	33	37	36	41	46	43



## Model-M

- Light weight & sturdy Ease of handling
- Lifelong lubrication
   Minimal maintenance required
- Surface hardened gears Extended working life
- Use of needle roller bearings
   High operating efficiency
- Smooth passage of load chain Machined guide rollers
- Smooth hand chain operation Unique cover design
- Self sustaining maintenance free friction brake Reduced downtime
- Grade 80 load chain for strength & wear resistance Longer chain life
- Anti-corrosive powder coated finish Better aesthetics
- Compact design Low headroom & light weight



Capacity MT	No. of falls	For each hand chain* *Hand chain required to be passed over for lifting load through one metre metres (approx.)	Running pull on hand chain	Hook opening	Weight for 1M addl. lift (approx.)
16T	6	468	45 Kg.	95 mm	14.5 Kg.
20T	8	624	46 X 2 Kg.	95 mm	20.2 Kg.

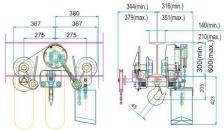
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	Fi	g.		16	Tonne			20 T	onne	
Combinations	16T	20T	Length mm	Width mm	Headroom 'H' mm	Weight for 3 M lift (kg.) (approx.)	Length mm	Width mm	Headroom 'H' mm	Weight for 3 M lift (kg.) (approx.
Upper fixed eye suspension and lower fixed	1	7	670	220	640	138	1175	220	640	200
Upper & lower swivelling hook	2	8	670	220	1175	218	1175	220	1175	280
Upper fixed eye suspension and lower swivelling hook	3	9	670	220	985	178	1175	220	985	240
Upper swivelling hook and lower fixed	4	10	670	220	700	178	1175	220	700	240
Trolley suspension and lower fixed	5	11	1300	*F+360	795	440	1300	*F+360	795	500
Trolley suspension and lower swivelling hook	6	12	1300	*F+360	1140	470	1300	*F+360	1140	540

<sup>\*</sup>F=Flange width of 'I' beam

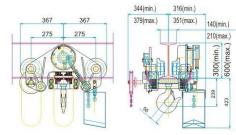


# Model-USH (Ultra short headroom)

- Compact design Low headroom applications
- Integral trolley
   Ultra short headroom design for maximum clear lift
- Grade 80 load chain & zinc plated hand chain Longer chain life
- Double ball bearing supported load wheel Smooth operation
- Precision machine case hardened alloy steel gears Long life, noiseless operation
- ▶ Fully pocketed S.G. iron cast load chain wheel Long life, safe and smooth running
- Anti corrosive powder coated zinc plated parts Anti rust & better aesthetics

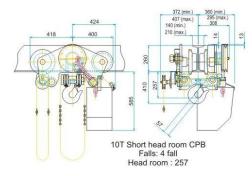


1T / 2T / 3T Short head room CPB Falls: 2 fall Head room: 205



6T Short head room CPB Falls: 4 fall Head room : 239

# JFICATIONS / DIMENSIONS (m)

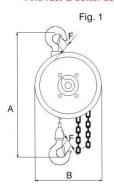


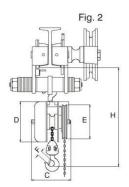
Capacity	MT	1T/2T	ЗТ	6T	10T
No. of falls		2	2	4	4
Chain dia	mm	8	8	8	12
Headroom	mm	205	205	239	350
Weight at 3M Lift	kg	110	125	210	350
Weight per additional 1 meter lift	kg	4.3	4.3	7	14.4
Min. I-beam height		300	300	300	300



# Model-SP (Spark proof)

- ► Tested as per ISI procedure for 50% over load Assured safety
- ▶ Grade 80 load chain & zinc plated hand chain Longer chain life
- Rugged German design, in use for more than 30 years Assured reliability
- Double ball bearing supported load wheel Smooth operation
- Precision machine case hardened alloy steel gears Long life, noiseless operation
- Non-ferrous parts like chain wheels, chain guides, ratchet wheel and stripping fork
   Eliminates spark generation possibilities during rubbing of mating components
- Anti-corrosive powder coated zinc plated parts
  Anti rust & better aesthetics





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Capacity	MT	0.5	1	2	3	5	7.5	10
No. of falls		1	1	2	2	2	3	4
Running pull on hand chain	Kgs.	13	26	28	43	49	50	61
Weight at 3 metre lift (approx.)	Kgs.	21	21	30	35	60	88	126
Extra weight per additional metre lift (approx.)	Kgs.	2.9	2.9	4.3	4.3	5.2	7.0	14.4

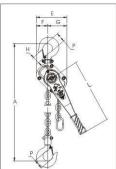
Capacity MT	A	В	С	D	E	F	н	Mono blocks (not shown) H	Thrust bearing in bottom black H
0.5 T	460	210	180	210	195	31	550	500	580
1 T	460	210	180	210	195	31	550	500	580
2 T	560	240	180	210	195	37	665	620	760
3 T	625	240	200	210	195	42	759	635	825
5 T	810	320	225	275	270	51	885	780	1010
7.5 T	910	455	225	275	270	75	1017	952	1135
10 T	990	515	225	275	270	75	1120	1025	1240

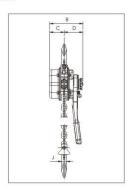
# Ratchet lever hoist



# Link chain type

- ▶ Use of link chain Allows more flexibility
- Superior asbestos free brake For safe operation
- Low operating effort Less fatigue to operator
- Robust steel construction Sturdy design
- Light weight and compact Ease of handling
- ▶ Grade 100 load chain Longer life & high safety
- > Anti corrosive powder coated finish Better aesthetics
- > Safety latch on hooks Safe operation
- ▶ Ergonomically design lever Ease of operation





Capacity	*250 kg.	750 kg.	1.5 T	3 T	6 T
Number of falls	1	1	1	1	2
Dimensions (mm)					00
'A' minimum headroom	*	275	345	420	570
'A' maximum for STD. lift	*	1500	1500	1500	1500
В	97	150	163	200	200
С	22	53	63	90	90
D	75	97	100	110	110
Е	83	126	148	189	247
F	32	41	47	55	72
G	51	85	101	134	175
Н	22	31	37	44	51
P	28	40	50	52	68
J	14	18	25	28	36
L	162	290	405	405	405
Lift (STD. chain) (m) +	1.5	1.5	1.5	1.5	1.5
Effort to raise full swl kg.	*	22	32	39	44
Weight kg. STD. chain	*	6.2	9.5	16.0	27.0
Safety factor	*	5	5	5	5

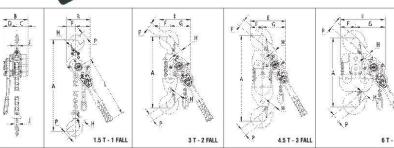
+ any height of lift is available on request
\* under development, details available on request

# Ratchet lever hoist



# Roller chain type

- Use of roller chain High strength, no twist
- Superior asbestos free brake For safe operation
- Low operating effort Less fatigue to operator
- Robust steel construction Sturdy design
- Light weight and compact Ease of handling
- Anti corrosive powder coated finish Better aesthetics
- Safety latch on hooks Safe operation
- Ergonomically design lever Ease of operation



Capacity	1.5 T	3 T	4.5 T	6 T
Number of falls	1	2	3	4
Dimensions (mm)				
'A' minimum headroom	345	465	598	451
'A' maximum for STD. lift	1500	1500	1500	1500
В	176	176	176	176
С	70	70	70	70
D	106	106	106	106
E	148	204	245	292
F	47	71	83	100
G	101	133	162	192
Н	37	38	45	45
Р	50	48	53	53
J	25	30	33	33
L	405	405	405	405
Lift (STD. chain) (m) +	1.5	1.5	1.5	1.5
Effort to raise full swl kg.	36	40	42	44
Weight kg. STD. chain	15	22	28	40
Safety factor	5	5	5	5

<sup>+</sup> any height of lift is available on request

# Pulling & lifting machine



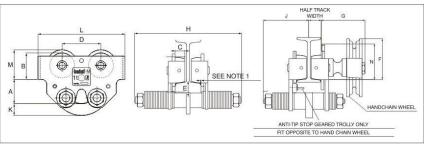
- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Rugged and light weight steel body Assured reliability in difficult conditions, easier to handle
- Anti corrosive powder coated, zinc passivated parts Anti rust & better aesthetics
- Alloy steel heat treated jaws Long life, prevents slipping
- Shear pin in forward/lifting lever, Prevents over loading, safety ensured
- Ergonomically designed lever Ease of operation

	Specification		Unit		Model	
$\equiv$	opeomeation		Oint	PL - 1	PL - 2	PL - 3
2	Normal agnacity	Lifting	МТ	0.8	1.6	3.2
	Normal capacity	Pulling	МТ	1.25	2.5	5.0
DIMENSION	Wire rope diameter		mm	8/8.3	11/11.3	16/16.3
$\leq$	Rope breaking load	ži	Kg	4000	8000	16000
S/L	Length of telescopic operating handle	;	mm	650	620/1040	620/1040
	Effort on operating h	nandle	Kg	30 - 45	40 - 65	50 - 80
3	Overall dimensions	(L x W x H)	m	0.44 x 0.1 x 0.28	0.56 x 0.13 x 0.36	0.70 x 0.15 x 0.4
	Weight of unit		Kg	7.5	15	30
H	Wire rope weight pe	er metre	Kg	0.27	0.51	1

# Push-pull/geared travelling trolley



- Available in push or hand geared travel.
- > Anti drop and de-railing guide
- Precision-machine runners mounted on sealed ball bearings.
- Available in three basic range with further adjustment of flange width.
- Anti-corrosive powder coated finish.



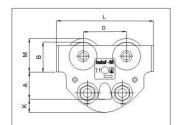
			Push	Push	Geared	Geared	Geared
Capacity	30	МТ	0.5	1	3	5	10
Inside of	Ra	nge 1	50-130	58-150	90-160	110-150	140-180
wheel flanges	Ra	nge 2	140-200	150-210	160-220	160-210	190-210
mm	Ra	nge 3	210-305	210-305	220-305	215-265	215-245
A Seat of susp. pla	te to Ra	nge 1 & 2 mm	75	89	110	84	107
runner tread/beam be	ottom Ra	nge 3 mm	115	129	155	84	137
B Runner tread dian	neter mm		50	65	90	175	225
C Runner tread widt	h mm		20	25	30	45	50
D Runner centres	(pt	ush) mm	70	90	125	-	
	(ge	eared) mm	#3	128	157	253	313
E Underside of runn	er to susp	ension plate	18	28	28	2	14
F Underside of runn wheel, geared tra		of hand chain mm	101	106	123		
G Beam flange to sh	naft end	mm		124	124	180	275
H Overall width,	Ra	nge 1 mm	210	248	276		
push travel only	Ra	nge 2 mm	320	320	340	2	
	Ra	nge 3 mm	410	410	425		
J Crossbolt	Range 1	track	20	58-100	100-126		
to track		widths J mm	-	132	152		
centreline on		track	27	100-140	126-153	170	210
ungeared side		widths J mm		120	134		
(geared trolleys	Range 2	track	-	140-166	153-192		
only)		widths J mm	-	164	184	0223	
		track	- 8	166-210	192-216	200	225
		widths J mm	27	152	166		
	Range 3	track		210-263	216-263		
	1973	widths J mm	23	238	205		
		track	-:	263-305	263-305	225	240
		widths J mm	ж.	205	213		
K Depth of plate ran	ge 1, 2 & 3	3 mm	21	21	34	-	
L Overall length	(push)	mm	160	200	275		
	(geared)	mm	2/	238	350	550	690
M Underside of runr	ner to flang	e (push) mm	60	75	105	-	
N Underside of runn		tip (geared) mm	-	90	115	- 4	14
Minimum radius			1250	2000	2500	-	
of track curve mm			#I	1500	1500	2600	3200
725-300 G/S	Ra	nge1	4.0	10.5	18.5		
Push travel	Ra	nge 2	4.5	11.0	20.0	-	
weight in Kg	Ra	nge 3	6.5	14.5	25.5		
	Ra	nge 1	- 5	11.5	20.0	70	151
Geared travel	Ra	nge 2	29	12.5	21.5	72	153
weight in Kg		nge 3	T:	16.0	27.0	75	155

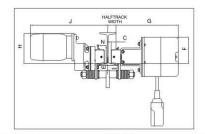
# Electric travelling trolley



SPECIFICATIONS / DIMENSIONS (mm)

- Anti drop and de-railing guide
- Precision-machine runners mounted on sealed ball bearings
- Available in three basic range with further adjustment of flange width
- Anti corrosive powder coated finish
- Non standard speeds, dual speeds available on request
- ▶ Compatible to VVVF designs





			Electric	
Capacity		MT	1	3
Inside of	Rar	nge 1	58-150	90-160
wheel flanges	Rar	nge 2	150-210	160-220
mm	Rar	nge 3	210-305	220-305
A Seat of susp. plate	Rar	nge 1 & 2	89	110
to runner tread m	m Rar	nge 3	129	155
B Runner tread dian	neter mm		65	90
C Runner tread widt	h mm	(	25	30
D Runner centres	mm		128	157
E Underside of runn	er to suspens	sion plate	28	28
F Underside of runn	ers to top			
of control panel	mm		120	120
G Beam flange to Pa	nel end mm	l,	287	287
<b>H</b> Underside of runn	er to top of m	notor	138	138
J Track centreline	Range 1	track	58-150	90-160
and to motor		widths J mm	350-390	360-395
	Range 2	track	150-210	160-220
		widths J mm	390-420	395-425
	Range 3	track	210-305	220-305
		widths J mm	420-470	425-470
K Depth of plate	Range 1,2	%3 mm	21	34
L Overall length	mm		238	350
M Underside of runn	er to flange (	push) mm	75	105
N Underside of runn	er to gear tip	(geared) mm	90	115
Minimum radius o	f track curve	mm	2000	2500
Photographic and the control of the	Rar	nge 1	22	31
Electric travel weight in kg	Rar	nge 2	23	33
weight ill kg	Rar	nge 3	26	38
Speed M/Min.			10	10
motor HP/RPM			0.5/1500	0.5/1500

# All purpose chain electric hoist

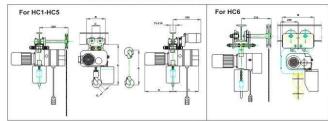


#### Add on features:

- Remote control, VVVF drive, special lower blocks, PLC.
- Multiple hoist tandom automated operation.

## Model - HC

- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Rugged European design Assured reliability
- Overload slipping clutch Safety assured
- Compact aluminium alloy cast body Light weight precision engineered
- Anti corrosive powder coated finish Better aesthetics
- Imported grade 80 surface hardened load chain for strength & wear resistance Longer chain life
- Built in electrical control panel Ready to use
- Ergonomically designed pendent control Easy of usage
- Swiveling bottom block Free rotation handling of loads
- Precision machine cut case hardened alloy steel gears and load chain wheel Long life, noiseless operation



	Chain	FEM	ISO	Capacity	Lifting spe	ed mpm	No. of	Motor kw	Motor	'A'	Headr	oom		
	Diameter in mm	duty	duty	in kg.	Single	Dual	falls	main/creep	RPM	HOOK SUSP	PT	GT/ET	В	
HC1 012NH				105	8		ONE	0.25	1500	360	400	420		
HC1 012DH		, ,		125		8/2.6	ONE	0.25/0.08	1500/410	360	400	420		
HC1 025NL	4				4		ONE	0.25	1500	360	400	420		
HC1 025DL		1Am	M4	250		4/1.3	ONE	0.25/0.08	1500/410	360	400	420		
HC2 025NH		1Am	M4	250	8		ONE	0.55	1500	440	460	460		
HC2 025DH	6					8/2.6	ONE	0.55/0.18	1500/410	440	460	460		
HC2 050NL	7 6				4		ONE	0.55	1500	440	460	460		
HC2 050DL		1Am	M4	500		4/1.3	ONE	0.55/0.18	1500/410	440	460	460	238	13
HC3 050NH		IAm	IVI4	500	8		ONE	0.9	1500	440	460	460		
HC3 050DH	7					8/2.6	ONE	0.85/0.3	1500/460	550	560	560		
HC3 100NL		0			4		ONE	0.9	1500	550	560	560		
HC3 100DL	7	Section		4000		4/1.3	ONE	0.85/0.3	1500/460	550	560	560		
HC4 100NH		1Am	M4	1000	8		ONE	1.84	1500	600	625	625		
HC4 100DH						8/2.6	ONE	1.7/0.6	1500/460	600	625	625		
HC4 200NL	1	12			4		ONE	1.84	1500	600	625	625		T
HC4 200DL		1Am	M4	2000		4/1.3	ONE	1.7/0.6	1500/460	600	625	625		
HC4 250NL	10				4		ONE	2.2	1500	600	625	625		
HC4 250DL	7	1Am	M4	2500		4/1.3	ONE	2.5/0.8	1500/490	600	625	625	350	15
HC5 300NL		1902	2003	200/210	4		TWO	3.5	1500	950	870	870		
HC5 300DL	1	1Am	M4	3000		4/1.3	TWO	3.5/1.2	1500/460	950	870	870		
HC6 500NL					4		TWO	4.5	1500	1000	NA	1000		$\vdash$
HC6 500DL	-	1Am	M4	5000		4/1.3	TWO	4.5/1.5	1500/460	1000	NA	1000	490	22

- Key abbreviations used in models are :
- H- High Hoisting speed(8 & above) L- Low Hoisting speed (4 & below)
- N- Single speed (Normal speed) D- Dual speed
- All Dimensions in mm. Data is subjected to change without prior notice. \* Standard chain collector upto 9.0m lift only.

53 300 400 160 250 Data tolerance ± 10%

445 380 94 37.5 445 380 90 150 37.5 445 380 98 158 45.5 300 400 125 185 45.5 300 400 135 200

G H L susp. 3 m lift 3 31.5 250 230 30 31.5 250 230 35

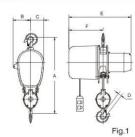
37.5

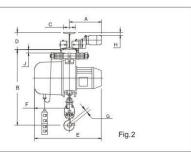
# Medium duty chain electric hoist



# Model - Baby

- Manufactured in ISO 9001:2008 certified company Assured quality & interchangeability of parts
- Grade 80 load chain
   Higher safety factor & longer chain life
- Rugged German design in use for more than 30 years Assured reliability
- Precision machine case hardened alloy steel gears Long life noiseless operation
- Light weight simple mounting design Ease of installation
- Built in electrical control panel Ready to use
- Precision machine & hardened load chain wheel Longer life of LCW & chain smooth operation





Capacity	MT	0.5	1	2		0.5	1	2
Chain falls	No.	2	2	4	A	750	750	860
Hoisting speed	m/min	4.8	4.8	2.4	В	150	150	150
Hoist motor	H.P.	1.5	1.5	1.5	C	120	120	120
*Height of max. lift (Std. 3 m)	m	9.6	9.6	4.8	D	31	31	37
Length of control cable	m	At	your choice		E	525	525	525
Approx. wt. with chains for 3 m. lift	kg.	63	63	65	F	285	285	285
Approx. wt. per metre additional lift	kg.	2.6	2.6	5.2			0	

<sup>\*</sup> Higher lifts offered on request

SPECIFICATIONS / DIMENSIONS (mm)

Capacity	MT	0.5	1	2		0.5	1	2
Travelling speed	m/min.	10	10	10	A for C Max A for C Min.	493 370	493 370	500 395
Travelling motor	H.P.	0.25	0.25	0.25	B C Max. C Min.	840 305 58	840 305 58	965 305 90
Min. runaway bend (radius of curvature)	mm	1500	2000	2500	D Min. E	150 525 285	150 525 285	200 525 285
Approx. weight with chain for 3 mtr. lift	kgs.	87	87	96	H Min.	31 23 28	31 23 28	37 14 28
Approx. weight per metre additional lift.	kgs.	2.6	2.6	5.2	* J Max.	20	20	20

 $<sup>^{\</sup>star}\text{To}$  calculate clearance under beam subtract beam flange thickness from 'J'

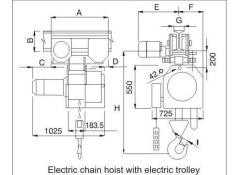
Data tolerance ± 10%

# Robust chain electric hoists



## Model - CH-III

- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Grade 80 load chain
  Higher safety factor & longer chain life
- Truly modular constructor Easily accessible separate brake, motor, gearbox & panel unit
- Rugged design in use for more than 20 years Assured reliability
- Precision machine cut hardened alloy steel gears and load chain wheel
   Long life, noiseless operation
- Built in control panel with std. electricals Ready to use
- Fail safe disc brake
  Trouble free operation and case of adjustment



## Add on features:

- Remote control, VVVF drive,
- Special lower blocks, PLC.
- Multiple hoist tandom automated operation.

# SPECIFICATIONS / DIMENSIONS (mm)

Т	уре			C	H-III	
С	lass				II	
S.W.L	. (Tonne)	MT	2.5	5.0	7.5	10
No.	of falls	-	1	2	3	4
	Fixed suspension	Kg.	328	381	402	427
Appr. weight at	with electric trly.	Kg.	500	525	550	600
3 mt. lift	with geared trly.	Kg.	376	451	553	578
Extra weight per a	add. mt. lift (approx.)	Kg.	3.3	6.6	9.9	13.2
Hoisting speed m	ts./min	MPM	5.2	2.6	1.7	1.3
*Travelling speed	mts./min.	MPM	17	17	17	17
Hoisting motor		HP (kw)	5 (3.7)	5 (3.7)	5 (3.7)	5 (3.7)
Travelling motor		HP(kw)	0.25 (0.18)	0.5 (0.37)	0.75 (0.55) x 2	0.75 (0.55) x 2
Α	Electric trolley	mm	730	730	730	930
	Geared trolley	mm	496	496	616	616
B - min.	Electric trolley	mm	250	250	250	250
(ISMB)	Geared trolley	mm	200	200	300	300
С	Electric trolley	mm	345	345	345	164
D	Electric trolley	mm	60	60	60	72
**E (minmax.)	Electric trolley	mm	425-468	425-468	425-468	425-468
F (minmax.)	Electric trolley	mm	260-303	325-368	385-428	325-368
G	Electric trolley	mm	125-210	125-210	125-210	125-210
(minmax.)	Geared trolley	mm	125-160	125-150	140-180	140-180
Н	With electric trly.	mm	1050	1375	1500	1500
(Head room)	With electric trly.	mm	1175	1425	1550	1550

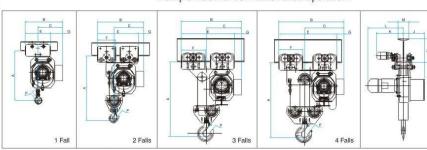
# Robust chain electric hoists



## Model - CH-IV

- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Grade 80 load chain Higher safety factor & longer chain life
- Truly modular constructor Easily accessible separate brake, motor, gearbox & panel unit
- Rugged design in use for more than 20 years Assured reliability
- Precision machine cut case hardened alloy steel gears and load chain wheel Long life, noiseless operation
- Built in control panel with std. electricals Ready to use
- Fail safe disc brake Trouble free operation and case of adjustment

- Add on features: Remote control, VVVF drive, special lower blocks, PLC.
  - Multiple hoist tandom automated operation.



Type Class				CH	I-IV	
Class				0)	ĬI .	
S.W.L.		MT	5	10	15	20
No. of falls			1	2	3	4
Hoisting speed		M/MIN.	8	4	2.66	2
Hoisting motor K	W.	Kw	9.3	9.3	9.3	9.3
Travelling speed		M/MIN.	17	17	17	17
Travelling motor	KW.	Kw.	0.37	0.55 (2 Nos.)	0.75 (2 Nos.)	0.75 (2 Nos.)
Dimn. A (head ro	om)	mm	985	1240	1600	1600
Dimn. B		mm	721	895	1170	1260
Dimn. C		mm	480	570	680	760
Dimn. E		mm	486	795	1030	1120
Dimn. F (ref)		mm	486	356	462	462
Dimn. G		mm	235	100	140	140
Dimn. J		mm	425	425	425	425
Dimn. K		mm	400-460	410-450	480-510	480-510
Dimn. L (BBL mo	otor)	mm	680	680	680	680
Dimn. L (COEL n	notor)	mm	770	770	770	770
Dimn. M		mm	90-210	125-210	150-210	150-210
Dimn. N (min.)		mm	175	250	450	450
Dimn. P		mm	45	53	95	95
Approx. weight	Hoist	Kg	550	625	700	750
	Trolley	Kg	85	140	180	180
	Total	Kg	635	765	880	930

# Compact wire rope hoist



## Model - HW

- Planetary gear box
  Giving smooth & low noise operation
- Gear box inside the drum Compact design
- Geared couplings
  Better transmission
- Overload sensor
   Safety ensured
- Ring type rope guide Rugged design
- Optional rotary limit switch Limits hoisting motion positively
- Imported brake motor Long life multispeed options
- Seamless tube drumsLong life engineered product

#### Add on features:

- Remote control, VVVF drive, special lower blocks, PLC.
- Multiple hoist tandom automated operation.
- Short headroom model.

### **Capacity Range**

500 kgs. - 40000 kgs.

Lifts

3 mtrs. - 42 mtrs.

### Mountings

Fixed

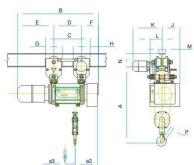
Trolley suspension Short headroom

### **Types**

Standard Twin hook Double drum LH/RH

<sup>\*</sup> Flame proof versions available.

# HW - 2 (L) Wire rope hoists



SPECIFICATION & DIMENSIONS (APPROX.) (±10%)

PECIFICATION &	DINIENSION	io (AFFN	UA.) (± 10	70)			az										
TYPE										2 (L)				MADON			
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7	
DRUM LENGTH.		MM	583	699	832	1032	1232	1432	1631	583	699	832	1032	1232	1432	163	
150000	ASS - II	TONNES				1.5							3				
SWL CL	ASS - IV	TONNES				1.25						A	2.5				
LIFT		M	12.8	17	21.8	29.1	36.4	43.7	50.9	6.4	8.5	10.9	14.6	18.2	21.9	25.5	
NO. OF FALLS								2 FALLS			$\subset$	4 FALLS					
WIRE ROPE DIA		mm				8				8							
HOISTING SPEE	D	M/MIN.				5.9				2.95							
HOISTING MOTO	OR KW.	Kw				2.2				2.2							
TRAVELLING SP	EED	M/MIN.				17				17							
TRAVELLING MO	OTOR KW.	Kw				0.18 KV	<b>V</b>					ĺ	0.37 KW				
DIMN. A (HEAD	ROOM)	mm				1230							1180				
DIMN. (B) (Note	:-6)	mm	1356	1472	1605	1805	2005	2205	2404	1356	1472	1605	1805	2005	2205	240	
DIMN. C		mm	873	989	1122	1322	1522	1722	1921	873	989	1122	1322	1522	1722	192	
DIMN. D		mm	553	669	802	1002	1202	1402	1601	553	669	802	1002	1202	1402	160	
DIMN. E		mm	Note -	6	(5	70) ((50	00))					(5	70) ((50	O))			
DIMN. F		mm				233							233				
DIMN. G		mm				320							320				
DIMN. H		mm				320							320				
DIMN. J		mm				210							243				
DIMN. K		mm				400 - 42	5						410 - 46	0			
DIMN. L		mm				321							205				
DIMN. M		mm				90 - 180	)			2			125 - 21	0			
DIMN. N (MIN.)		mm	Note -	5		175				250							
DIMN. P		mm		37							42						
DIMN. a2		mm			-	370							406				
DIMN. a3		mm	158	216	282	382	482	582	682	93	132	176	243	310	37	442	
PPROX. WEIGHT	HOIST	KG	220	234	249	272	303	318	341	242	256	271	294	317	340	363	
	TROLLEY	KG	120	120	120	120	120	120	120	120	120	120	120	120	120	120	
	TOTAL	KG	340	354	369	392	423	438	461	362	376	391	414	437	460	483	

- NOTES:

  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION "E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST & DIMENSION "E' WILL INCREASE BY 165 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED AT EXTRA COST AND DIMENSION X: WILL INCREASE BY 155 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED AT EXTRA COST AND DIMENSION X: WILL INCREASE BY 155 MM.

  4) 2, 2.8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND X: DIMENSION WILL INCREASE BY 46 MM.

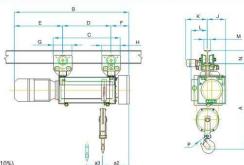
  170 LEY WIN RATING WILL CHANGE.

  5) CHECK "T BEAM MOUNTING ARRANGEMENTS, TROLLEY PLATE WILL PROJECT 10 MM ABOVE "T BEAM.

  6) SPECIFICATIONS IN (1) AIR FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

  7) SPECIFICATIONS IN (1) AIR FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

# HW - 2 Wire rope hoists

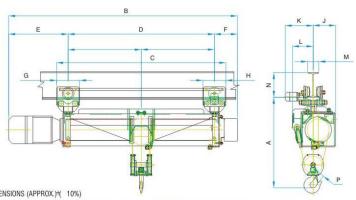


CDECIFICATION	0	DIMENSIONIC	(APPROX.) (+10%)	

SPECIFICATION & D	IMENSIONS	S (APPRO)	X.) (±10%	)		1-	a3 a2	-									
TYPE									HW	- 2							
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7	
DRUM LENGTH.		MM	583	699	832	1032	1232	1432	1631	583	699	832	1032	1232	1432	1631	
SWL CLA	ASS - II	TONNES		111		3						<i>**</i>	6	*			
SWL CLA	ASS - IV	TONNES				2.5							5				
LIFT		M	10.5	14	18	24	30	36	42	5.25	7	9	12	15	18	21	
NO. OF FALLS					(Se	0					$\subset$	- (		0			
						0	2	FALLS					0	4 F/	ALLS		
WIRE ROPE DIA.		MM				10							10				
HOISTING SPEED	)	M/MIN.				8.2							4.1				
HOISTING MOTO	R KW.	KW				5.5				5.5							
TRAVELLING SPE	ED	M/MIN.				17							17				
TRAVELLING MO	TOR KW.	KW				0.37 KW	1						0.55 KW	(			
DIMN. A (HEAD F	ROOM)	MM				1280							1240				
DIMN. B		MM	1461	1577	1710	1910	2110	2310	2509	1461	1577	1710	1910	2110	2310	2509	
DIMN. C		MM	873	989	1122	1322	1522	1722	1921	873	989	1122	1322	1522	1722	1921	
DIMN. D		MM	553	669	802	1002	1202	1402	1601	553	669	802	1002	1202	1402	1601	
DIMN. E		MM	Note-6			(675)	(583))						(675)	((583))			
DIMN. F		MM				233							233				
DIMN. G		MM				320							320				
DIMN. H		MM				320							320				
DIMN. J		MM				210							243				
DIMN. K		MM				400 - 425	5					09	410 - 460	)			
DIMN. L		MM				321							205				
DIMN. M		MM				90 - 180							125 - 210	ס			
DIMN. N (MIN.)		MM	Note-5			175							250				
DIMN. P		MM		42									52				
DIMN. a2		MM				370					-	W	406				
DIMN. a3	,	MM	158	216	282	382	482	582	682	93	132	176	243	310	376	442	
	HOIST	KG	220	234	249	272	303	318	341	242	256	271	294	317	340	363	
APPROX. WEIGHT	TROLLEY	KG	120	120	120	120	120	120	120	120	120	120	120	120	120	120	
	TOTAL	KG															

- NOTES:
  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.
  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 MM.
  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGIGL FEDUCTION GEAR BOX), TROLLEY KW RATING WILL CHANGE.
  4) 2, 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.
  TROLLEY KW RATING WILL CHANGE.
  5) CHECK 'T BEAM MOUNTING ARRANGEMENTS, TROLLEY PLATE WILL PROJECT 10 MM ABOVE 'T BEAM.
  6) SPECIFICATIONS IN (()) ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.
  7) SPECIFICATIONS IN () ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 2 (LH/RH) & HW - 3 (LH/RH) Wire rope hoists



PECIFICATION & D	DIMENSION	IS (APPRO	X.)+( 109	%)		V						-					
TYPE					HW	/ - 2 (LH	I/RH)					HW	- 3 (LH	/RH)			
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7	
DRUM LENGTH.		MM	N.A.	699	832	1032	1232	1432	1631	N.A.	706	836	1030	1225	1419	161	
SWL CLA	ASS - II	TONNES				3							5				
SWL CLA	ASS - IV	TONNES				2.5							4				
LIFT		М	N.A.	6.9	9.3	12.9	16.6	20.2	23.8	N.A.	7.4	10	13.9	17.8	21.7	25.	
NO. OF FALLS						00		4/2 FALI	.S						4/2 FALI	LS	
WIRE ROBE DIA.		MM				8				10							
HOISTING SPEED		M/MIN.				8.2				8.1							
HOISTING MOTO	Name of the State	KW				5.5			-	9							
TRAVELLING SPE		M/MIN.				17						17					
TRAVELLING MO	3	KW		0.37 0.37													
DIMN. A (HEAD F	100000000000000000000000000000000000000	MM				1160							1400				
DIMN. (B) (Note-		MM	N.A.	1577	1710	1910	2110	2310	2509	N.A.	1738	1868	2062	2257	2451	264	
DIMN. C		MM	N.A.	989	1122	1322	1522	1722	1921	N.A.	986	1116	1310	1505	1699	189	
DIMN. D		MM	N.A.	669	802	1002	1202	1402	1601	N.A.	666	796	990	1185	1379	157	
DIMN. E		MM	Note-6			(675)	((583))			Note-5			(650)	((740))			
DIMN. F		MM				233							332				
DIMN. G	Î	MM				320							320				
DIMN. H		MM				320							320				
DIMN. J		MM				210							260				
DIMN. K		MM		400 - 425								-	410 - 46	0			
DIMN. L		MM		321									240				
DIMN. M		MM		90 - 180							125 - 210						
DIMN. N (MIN.)		MM	Note-5	lote-5 175						250							
DIMN. P		MM				42							52				
	HOIST	KG	N.A.	346	361	384	407	430	533	N.A.	522	542	571	600	629	77	
APPROX. WEIGHT	TROLLEY	KG	N.A.	120	120	120	120	120	120	N.A.	120	120	120	120	120	12	
	TOTAL	KG	N.A.	466	481	504			00000000	N.A.	TO STATE OF THE ST	662	691	720	749	898	

- NOTES:

  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 MM.

  3) 13:26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW RATING WILL CHANGE.

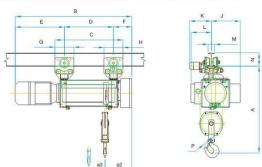
  4) 22:84,89 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

  TROLLEY KW PATING WILL CHANGE.

  5) CHECK "BEAM MOUNTING ARRANGEMENTS, TROLLEY PLATE WILL PROJECT 10 mm ABOVE "BEAM.

  6) DIMENSIONS IN () ARE FOR COEL (IMPORTED) MOTOR AND DIMENSION "B' IS FOR BIGGER LENGTH OF MOTOR.

# HW - 3 Wire rope hoists

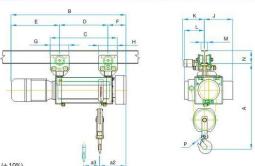


SPECIFICATION &	DIMENSIONS	(APPROX)	(+10%)

PECIFICATION & D	IMENSIONS	S (APPRO)	X.) (± 10%	)			W a3	a2								
TYPE									HW	- 3			5			
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7
DRUM LENGTH.	8	MM	593	706	836	1030	1225	1419	1613	593	706	836	1030	1225	1419	161
SWL CLA	ASS - II	TONNES				5							10			
SWL CLA	ASS - IV	TONNES				4							8			
LIFT		M	10.5	14	18	24	30	36	42	5.25	7	9	12	15	18	21
NO. OF FALLS							)   	FALLS			$\in$		Ę	<b>♦</b> 4 F	ALLS	
WIRE ROPE DIA.		MM				13							13			
HOISTING SPEED	)	M/MIN.				8.1							4.0			
HOISTING MOTO	IR KW.	KW			- (	(9.3)	))					(	(9.3)	))		
TRAVELLING SPI	EED	M/MIN.				17							17			
TRAVELLING MO	TOR KW.	KW				0.37 KW	1					0.55	KW (21	NOS.)		
DIMN. A (HEAD F	ROOM)	MM				1550							1530			
DIMN. ((B)) Note	e-6	MM	1625	1738	1868	2062	2257	2451	2645	1625	1738	1868	2062	2257	2451	264
DIMN. C		MM	873	986	1116	1310	1505	1699	1893	909	1022	1152	1346	1541	1735	192
DIMN. D		MM	553	666	796	990	1185	1379	1573	553	666	796	990	1185	1379	157
DIMN. E		MM	Note-5			(650)	((740))						(650)	((740))		
DIMN. F		MM				332							332			
DIMN. G		MM				320							356			
DIMN. H		MM				320							356			
DIMN. J		MM				512							486			
DIMN. K		MM				410 - 460	0					9	410 - 460	0		
DIMN. L		MM				408							434			
DIMN. M		MM				125 - 210	0						125 - 210	0		
DIMN. N (MIN.)		MM				250							250			
DIMN. P		MM				52							78			
DIMN. a2		MM				484							587			
DIMN. a3		MM	146	202	268	365	462	559	656	63	100	144	209	274	338	403
	HOIST	KG	325	342	362	391	420	449	478	355	372	392	421	450	479	508
APPROX. WEIGHT	TROLLEY	KG	120	120	120	120	120	120	120	140	140	140	140	140	140	140
	TOTAL	KG	445	462	482	511	540	569	598	495	512	532	561	590	619	648

- NOTES:
  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION E' WILL INCREASE BY 165 MM.
  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION X: WILL INCREASE BY 125 MM.
  3) 13; 28 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW RATING WILL CHANGE.
  4) 2; 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.
  TROLLEY KW RATING WILL CHANGE.
  5) SPECIFICATIONS IN (1)ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.
  6) SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 4(L) Wire rope hoists



TYPE									ш	W - 4 (L	١					
TIPE									- 11	444 (L	,					
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7
DRUM LE	NGTH.	MM	695	827	976	1201	1426	1651	1876	695	827	976	1201	1426	1651	1876
SWL	CLASS - II	TONNES				6							12			
SWL	CLASS - IV	TONNES				5							10			
LIFT		M	14.2	19	24.2	32.2	40.2	48.2	56.2	7.1	9.5	12.1	16.1	20.1	24.1	28.1
							0 (	$\bigcirc$						00	)	
NO. OF FA	ALLS												K	A		

SVVL UL/	100 - 11	TOMINES				0							12			
SWL CLA	ASS - IV	TONNES				5			ĺ				10			
LIFT		M	14.2	19	24.2	32.2	40.2	48.2	56.2	7.1	9.5	12.1	16.1	20.1	24.1	28.
NO. OF FALLS								FALLS					Á	00	) FALLS	
WIRE ROPE DIA.		MM				13							13			
HOISTING SPEED	)	M/MIN.				8.2							4.1			
HOISTING MOTO	R KW.	KW				15							15			
TRAVELLING SPE	ED	M/MIN.				17							17			
TRAVELLING MO	TOR KW.	KW				0.55 KW	V.						0.55 K	W (2 N	OS.)	
DIMN. A (HEAD F	ROOM)	MM				1670							1660			
DIMN. ((B))		MM	1911	2043	2192	2417	2642	2867	3092	1911	2043	2192	2417	2642	2867	309
DIMN. C		MM	991	1123	1272	1497	1722	1947	2172	1121	1253	1402	1627	1852	2077	230
DIMN. D		MM	635	767	916	1141	1366	1591	1816	635	767	916	1141	1366	1591	181
DIMN. E		MM	Note-5			(785)	((920))						(785)	((920))		
DIMN. F		MM				356							356			
DIMN. G		MM				356							486			
DIMN. H		MM				356							486			
DIMN. J		MM				539							500			
DIMN. K		MM				410 - 46	)						410 - 48	0		
DIMN. L		MM				381							420			
DIMN. M		MM				125 - 21	)						150 - 210	0		
DIMN. N (MIN.)		MM				250							450			
DIMN. P		MM				78							95			
DIMN. a2		MM				505							597			
DIMN. a3		MM	183	249	324	436	549	661	774	91	135	185	260	335	410	485
	HOIST	KG	480	504	510	550	596	642	688	530	550	570	590	696	742	788
APPROX. WEIGHT	TROLLEY	KG	140	140	140	140	140	140	140	180	180	180	180	180	180	180
	TOTAL	KG	620	644	650	690	736	782	828	710	730	750	770	876	922	968

- NOTES:

  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'WILL INCREASE BY 125 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX); AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

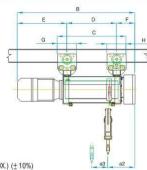
  4) 2, 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX); AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

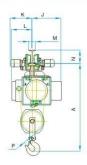
  TROLLEY KW RATING WILL CHANGE.

  5) SPECIFICATIONS IN (1) ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

  6) SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 4(M) Wire rope hoists

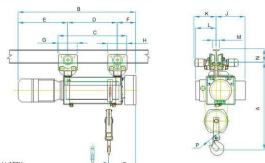




PECIFICATION & D	IMENSION	S (APPRO	OX.) (±10°	%)		a3	a2												
TYPE									HW -	4 (M)									
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7			
DRUM LENGTH.		MM	695	827	976	1201	1426	1651	1876	695	827	976	1201	1426	1651	187			
SWL CLA	ASS - II	TONNES				7.5							15						
SWL CLA	ASS - IV	TONNES				6							12						
LIFT		M	10.5	14	18	24	30	36	42	5.25	7	9	12	15	18	21			
NO. OF FALLS								FALLS			$\subset$		P	4 F/	) ALLS				
WIRE ROPE DIA.	1	MM				18							18						
HOISTING SPEED	)	M/MIN.				8.2							4.1						
HOISTING MOTO	R KW.	KW				15							15						
TRAVELLING SPE	EED	M/MIN.				17							17						
TRAVELLING MO	TOR KW.	KW			0.55	KW (2	NOS.)					0.75	KW (2 l	NOS.)					
DIMN. A (HEAD F	R00M)	MM				1860							1840						
DIMN. ((B)) Note	e-6	MM	1911	2043	2192	2417	2642	2867	3092	1911	2043	2192	2417	2642	2867	309			
DIMN. C		MM	991	1123	1272	1497	1722	1947	2172	1121	1253	1402	1627	1852	2077	230			
DIMN. D		MM	635	767	916	1141	1366	1591	1816	635	767	916	1141	1366	1591	181			
DIMN. E		MM	Note-5			(785)	((920))						(785)	((920))					
DIMN. F		MM				356							356						
DIMN. G		MM				356							486						
DIMN. H		MM				356							486						
DIMN. J		MM				539							500						
DIMN. K		MM				410 - 46	0						410 - 48	0					
DIMN. L		MM				381							420						
DIMN. M		MM				125 - 21	0						150 - 21	0					
DIMN. N (MIN.)		MM				250							450						
DIMN. P		MM				78							95						
DIMN. a2		MM				548							652						
DIMN. a3		MM	99	155	220	317	415	512	609	40	78	121	186	250	315	38			
	HOIST	KG	480	504	510	550	596	642	688	530	550	17 0.75 KW (2 NOS.)  1840  2043 2192 2417 2642 2867  1253 1402 1627 1852 2077  767 916 1141 1366 1591  (785) ((920))  356 486 486 500 410 - 480 420 150 - 210 450 95 652 78 121 186 250 315							
APPROX. WEIGHT	TROLLEY	KG	140	140	140	140	140	140	140	180	180	180	180	180	180	18			
	TOTAL	KG	620	644	650	690	736	782	828	710	730	750	770	876	922	96			

- NOTES:
  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.
  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K WILL INCREASE BY 125 MM.
  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW PATING WILL CHANGE.
  4) 2, 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLEE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.
  TROLLEY KW RATING WILL CHANGE.
  5) SPECIFICATIONS IN (1) ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.
  6) SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 4(H) Wire rope hoists



	TYPE		
1		Ш4	

PECIFICATION & D	DIMENSION	IS (APPRO	OX.) (± 10	%)		4	a3 a2									
TYPE									HW -	4 (H)						
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7
DRUM LENGTH.		MM	695	827	976	1201	1426	1651	1876	695	827	976	1201	1426	1651	187
SWL CLA	ASS - II	TONNES				10							20			
SWL CLA	ASS - IV	TONNES				8							16			
LIFT		М	10.5	14	18	24	30	36	42	5.25	7	9	12	15	18	21
NO. OF FALLS								2 FALLS					P		) FALLS	
WIRE ROPE DIA.		MM				18							18			
HOISTING SPEED	)	M/MIN.				6.7							3.3			
HOISTING MOTO	R KW.	KW				15							15			
TRAVELLING SPI	EED	M/MIN.				17							17			
TRAVELLING MO	TOR KW.	KW			0.55	KW (2 I	NOS.)					0.75	KW (2 I	NOS.)		
DIMN. A (HEAD I	ROOM)	MM				1860							1840			
DIMN. ((B)) Note	e-6	MM	1911	2043	2192	2417	2642	2867	3092	1911	2043	2192	2417	2642	2867	309
DIMN. C		MM	991	1123	1272	1497	1722	1947	2172	1121	1253	1402	1627	1852	2077	230
DIMN. D		MM	635	767	916	1141	1366	1591	1816	635	767	916	1141	1366	1591	181
DIMN. E		MM	Note-5			(785)	((920))						(785)	((920))		
DIMN. F		MM				356							356			
DIMN. G		MM				356							486			
DIMN. H		MM				356							486			
DIMN. J		MM				539							500			
DIMN. K		MM			3	410 - 46	0						410 - 48	0		
DIMN. L		MM				381							420			
DIMN. M		MM			1	125 - 21	0						150 - 21	0		
DIMN. N (MIN.)		MM				250							450			
DIMN. P		MM				78							95			
DIMN. a2		MM				548							652			
DIMN. a3		MM	99	155	220	317	415	512	609	40	78	121	186	250	315	38
	HOIST	KG	480	504	510	550	596	642	688	530	550	570	590	696	742	78
APPROX. WEIGHT	TROLLEY	KG	140	140	140	140	140	140	140	180	180	180	180	180	180	180
	TOTAL	KG	620	644	650	690	736	782	828	710	730	750	770	876	922	968

- NOTES:

  1) 13 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW RATING WILL CHANGE.

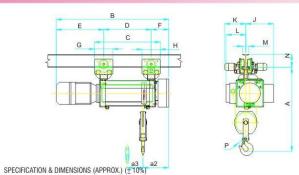
  4) 2, 28, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLER REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

  170 TROLLEY KW RATING WILL CHANGE.

  5) SPECIFICATIONS IN (())ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

  6) SPECIFICATIONS IN () ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 4 High lift wire rope hoists



TYPE				ŀ	HW4 HI	GH LIF	Т	
			H1	H2	НЗ	H1	H2	НЗ
DRUM LENGTH.		MM	1450	1700	1950	1850	2150	2450
SWL CL	ASS - II	TONNES			12			20
SWL CL	ASS - IV	TONNES			10			16
LIFT		М	25	30	35	25	30	35
NO. OF FALLS			(		(		FALLS	
WIRE ROPE DIA.		mm			13			18
HOISTING SPEED	)	M/MIN.			3.	.8		
HOISTING MOTO	R KW.	KW			1	5		
TRAVELLING SPI	EED	M/MIN.			1	7		
TRAVELLING MO	TOR KW.	KW		C	.75 KW	(2 NOS	.)	
DIMN. A (HEAD F	ROOM)	mm			18	00		
DIMN. ((B)) Note	e-5	((mm))	2126	2376	2626	2526	2826	3126
DIMN. C		mm	1770	2020	2270	2294	2594	2894
DIMN. D		mm	1414	1664	1914	1814	2114	2414
DIMN. E		mm	Note-5	(735)			(735)	
DIMN. F		mm			356			356
DIMN. G		mm			356			480
DIMN. H		mm			356			480
DIMN. J		mm			500			500
DIMN. K		mm		4	10 - 460		41	0 - 460
DIMN. L		mm			381		ž.	420
DIMN. M		mm		1	25 - 210		15	0 - 210
DIMN. N (MIN.)		mm			250			450
DIMN. P		mm			78			95
DIMN. a2		mm			548			652
DIMN. a3		mm	99	155	220	91	135	185
	HOIST	Kg	480	504	510	530	550	570
APPROX. WEIGHT	TROLLEY	Kg	140	140	140	180	180	180
	TOTAL	Kg	620	644	650	710	730	750

- NOTES:

  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW RATING WILL CHANGE.

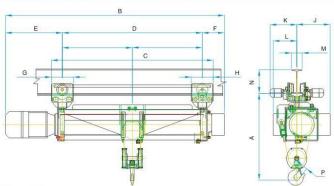
  4) 2, 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

  TROLLEY KW RATING WILL CHANGE.

  5) SPECIFICATIONS IN (1)ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

  6) SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW - 4 (M) & HW - 4 (H) (LH/RH) Wire rope hoists



SPECIFICATION & D	DIMENSION	IS (APPRO	X.) (± 109	%)												
TYPE					н	W - 4 (N	A)					н	W - 4 (H	1)		
			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7
DRUM LENGTH.		mm	N.A.	827	976	1201	1426	1651	1876	N.A.	827	976	1201	1426	1651	1876
SWL CLA	ASS - II	TONNES				7.5							10			
SWL CLA	ASS - IV	TONNES				6							8			
LIFT		М	N.A.	5.9	8.6	12.6	16.6	20.6	24.6	N.A.	5.9	8.6	12.6	16.6	20.6	24.6
NO. OF FALLS							4/2 F/	ALLS						4/2 FA	LLS	
WIRE ROPE DIA.		mm				13			-				13			
HOISTING SPEED	)	M/MIN.				8.2			-				6.7			
HOISTING MOTO	R KW.	Kw				15							15			
TRAVELLING SPE	EED	M/MIN.				17							17			
TRAVELLING MO	TOR KW.	Kw			0.55	KW (21	NOS.)					0.55	KW (2 I	NOS.)		
DIMN. A (HEAD F	ROOM)	mm				1600							1600			
DIMN. ((B)) Note	e-6	mm	N.A.	2043	2192	2417	2642	2867	3092	N.A.	2043	2192	2417	2642	2867	3092
DIMN. C		mm	N.A.	1123	1272	1497	1722	1947	2172	N.A.	1123	1272	1497	1722	1947	2172
DIMN. D		mm	N.A.	767	916	1141	1366	1591	1816	N.A.	767	916	1141	1366	1591	1816
DIMN. E		mm	Note-5			(785)	((920))			Note-5			(785)	((920))		
DIMN. F		mm				356							356			
DIMN. G		mm				356							356			
DIMN. H		mm				356							356			
DIMN. J		mm				347							347			
DIMN. K		mm				410 - 460	ס						410 - 46	0		
DIMN. L		mm				309							309			
DIMN. M		mm				125 - 210	)						125 - 21	0		
DIMN. N (MIN.)		mm				250							250			
DIMN. P		mm				78							78			
	HOIST	KG	N.A.	807	827	847	999	1045	1091	N.A.	807	827	847	999	1045	1091
APPROX. WEIGHT	TROLLEY	KG	N.A.	140	140	140	140	140	140	N.A.	140	140	140	140	140	140
	TOTAL	KG	N.A.	947	967	987	1139	1185	1231	N.A.	947	967	987	1139	1185	1231

- NOTES:

  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM.

  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 MM.

  3) 13, 26 MPM TROLLEYS ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) TROLLEY KW RATING WILL CHANGE.

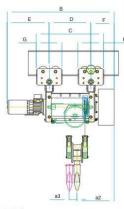
  4) 2, 2, 8, 4, 8, 9 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLE REDUCTION GEAR BOX) AT EXTRA COST AND 'K' DIMENSION WILL INCREASE BY 46 MM.

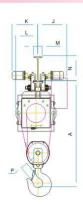
  TROLLEY KW RATING WILL CHANGE.

  5) SPECIFICATIONS IN (1)ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.

  6) SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# HW-5 & HW-5 (H) Wire rope hoists





SPECIFICATION						HW -	5						₩-5 (H	n.				
ITE			H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	Н6	H7		
DRUM LENGTH.		mm	N.A.	858	1003	1222	1440	1658	1877	N.A.	867	1016	1238	1461	1684	190		
	ASS - II	TONNES	14.74.	000	1000	30	1440	1000	1011	143.0	007	1010	40	1401	1004	100		
2000	ASS - IV	TONNES				25							32					
LIFT	100 - 14	M	N.A.	7	9	12	15	18	21	N.A.	6	8	10.5	13.5	16	19		
LII I		IVI	I North			12	() (	10	21	1 Mar Air			10.0	() (	10	- 1		
NO. OF FALLS						Į		4 FALLS					Į		4 FALLS			
WIRE ROPE DIA.		mm				22							24					
HOISTING SPEED	)	M/MIN.				3.5							2.6					
HOISTING MOTO	R KW.	Kw				22							22					
TRAVELLING SPI	EED	M/MIN.	04			12							12					
TRAVELLING MC	TOR KW.	Kw		1.1 (2 Nos.)														
DIMN. A (HEAD I	ROOM)	mm		2550 2700														
DIMN. ((B))		mm	N.A.	2222	2367	2586	2804	3022	3241	N.A.	2465	2614	2836	3059	3282	350		
DIMN. C		mm	N.A.	1347	1492	1711	1929	2147	2366	N.A.	1365	1511	1733	1956	2179	24		
DIMN. D		mm	N.A.	778	923	1142	1360	1578	1797	N.A.	793	942	1164	1387	1610	183		
DIMN. E		mm	(Note-4	)		((930))	W			(Note-4	)		((1310)	)				
DIMN. F		mm	(C)			514							367					
DIMN. G		mm				569							569					
DIMN. H		mm				569							569					
DIMN. J		mm				646							646					
DIMN. K		mm				557 - 67	7						557 - 677	7				
DIMN. L		mm	0			489							497					
DIMN. M		mm				180 - 30	10						180 - 300	)				
DIMN. N (MIN.)		mm				550					600							
DIMN. P		mm				155							168					
DIMN. a2		mm				821							656					
DIMN. a3		mm	N.A	170	218	291	364	437	510	N.A	205	278	351	424	497	57		
	HOIST	Kg	N.A	756	788	820	852	884	916	N.A	760	795	830	865	890	93		
APPROX. WEIGHT	TROLLEY	Kg	N.A	180	180	180	180	180	180	N.A	180	180	180	180	180	18		
	TOTAL	Kg	N.A	936	968	1000	1032	1064	1096	N.A	940	975	1010	1045	1070	11		

- NOTES:

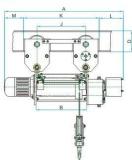
  1) 1:3 CREEP SPEED CAN BE GIVEN AT EXTRA COST & DIMENSION 'E' WILL INCREASE BY 165 MM
  2) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'WILL INCREASE BY 125 MM.
  3) 2:6,8 MPM TROLLEYS ALSO CAN BE SUPPLIED (DOUBLEE REDUCTION GEAR BOX) AT EXTRA COST AND IX DIMENSION WILL INCREASE BY 46 MM.
  TROLLEY KW RATING WILL CHANGE.
  4) SPECIFICATIONS IN ((1) ARE FOR IMPORTED (COEL) MOTOR WITH AC BRAKES.
  SPECIFICATIONS IN (1) ARE FOR LOCAL (BBL) MOTOR WITH AC BRAKES.

# Medium duty wire rope hoist



## Model - WRH NO / N

- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Truely modular constructor
   Easily accessible separate brake, motor, drum, gear box
   panel unit
- Seamless pipe accurately machined rope drum Long life
- Unique and sturdy rope guide arrangement
   Prevents rope slackening and easy change of rope
- Precision machine cut case-hardened alloy steal gears Noiseless operation longlife
- Fail safe disc brake
  Trouble free operation and ease of adjustment
- Built in control panel with std. electricals Ready to use



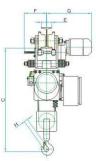
						WR	H NO				0.		WR	H N		
	Capacity (SWL)	MT		0	.5				1		77	2			3	
	Lift	Mtrs.	3.5	6	9	12	3.5	6	9	12	5.2	8.2	11.2	3.4	5.4	7.4
Α		mm	867	974	1103	1232	867	974	1103	1232	990	1119	1248	990	1119	1248
В		mm	316	423	552	681	316	423	552	681	385	514	643	385	514	643
	Approx. Weight	Kg	114	160	170	175	119	164	175	180	225	240	255	300	315	330
	No. of Falls				(				2	FALLS					3	FALLS
	Hoist speed	MPM		5	i			5	i		2	5			3.3	
	Trolley speed	MPM		15	5				15			15			15	
	Hoist motor	HP		1.5 (1.	11 KW)			1.5 (1.	11 KW)		3	(2.2 K)	V)	3	(2.2 KV	V)
	Trolley motor	HP		0.25 (0	.18 KW	)		0.25 (0	.18 KW	')	0.2	5 (0.18	KW)	0.5	5 (0.37 H	(W)
С	Head room	mm		79	0			8	380		0.	1070			1315	
D	Min. beam height	mm		17	5			1	75			175			175	
Е	Min. flange	mm		9	0			9	90			90			90	
_	Max. flange	mm		2	10			2	10		17	210			210	
-	for min. flange	mm		18	39			1	89			189=G	*		189=G	*
F	for min. flange	mm		16	59			1	69			169=G			169=G	*
G	for max. flange	mm		3	81			3	81		0	381			381	
G	for max. flange	mm		4	41			4	41			441			441	
н		mm		3	1.5			3	1.5		88	34			42	
J		mm	300	407	536	665	300	407	536	665	369	498	627	369	498	627
K		mm	524	631	760	889	524	631	760	889	593	722	851	593	722	851
L		mm		1	87			1	87			197			197	
М		mm		1	56			1	56			200			200	
С	Head room (with O.L.D.)	mm		8	90			9	80			1070			(50	

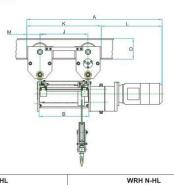
# Medium duty wire rope hoist



## Model - WRH NO-HL/N-HL

- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Truly modular constructor Easily accessible separate brake, motor, drum, gear box
- Seamless pipe accurately machined rope drum Long life
- Unique and sturdy rope guide arrangement Prevents rope slackening and easy change of rope
- Precision machine cut case-hardened alloy steal gears Longlife noiseless operation
- Fail safe disc brake Trouble free operation and ease of adjustment
- Built in control panel with std. electricals Ready to use





						WRH	NO-HL	0						WRH	N-HL			
	Capacity (SWL)	MT		0	.5				0			2	2			;	3	
	Lift	Mtrs.	1	8	25	5	18	В	2	5	17.	.2	2	25	11	4	16.	.5
Α		mm	16	62	196	64	16	62	19	64	16	26	19	964	162	26	196	64
В		mm	93	39	124	41	93	39	12	41	90	13	12	41	90	3	12	41
	Approx. weight	Kg	18	35	21	5	19	90	22	20	28	35	3	15	36	0	39	0
	No. of falls								Q T	4	2 FA	LLS					31	FALLS
	Hoist speed	MPM		5				5				5	5			3	.3	
	Trolley speed	MPM		15				15	;			1	5			1	5	
	Hoist motor	HP	1	1.5 (1.1	11 KW	)	1	.5 (1.1	1 KW)			3 (2.2	KW)			3 (2.2	KW)	
	Trolley motor	HP	(	0.25 (0	.18 KV	V)	0	.25 (0.	18 KW	)	C	.25 (0.	18 KV	/)		0.5 (0.3	37 KW	)
С	Head room	mm		79	90			88	0			107	0			13	15	
D	Min. beam height	mm	1	17	5			17	5			17	5			17	5	
-	Min. Flange	mm		9	0			9	0			90	)			9	0	
E	Max, flange	mm		2	10			21	0			21	0			2	10	
F	for min. flnage	mm		18	39			18	19			189	=G *			189	=G *	
Г	for max. flange	mm		16	69			16	9			169:	=G*			169	=G *	
G	for min. flange	mm		38	31			38	31			38	31			38	31	
G	for max. flange	mm		44	11			44	11			44	11			44	11	
Н	1//	mm		31	1.5	y.c.		31	.5			34	4			4.	2	-
J		mm	923	1225	1442	1659	923	1225	1442	1659	887	1225	1442	1659	887	1225	1442	1658
K		mm	1147	1449	1666	1883	1147	1449	1666	1883	1111	1449	1666	1883	1111	1449	1666	1882
L		mm		5	15	V		51	15	100		51	5	**		5	15	
M		mm		1	12			11	12			11	2			1	12	
С	Head room (with O.L.D.)	mm	100	8	90			98	30			10	70			(3)	•0	

# Heavy duty wire rope hoist

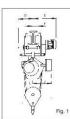


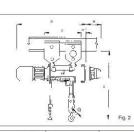
## Model - WRH-I, II, III

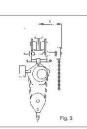
- Heavy duty class IV robust design Smooth operation even in toughest of application.
- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts.
- Truly modular constructor Easily accessible separate brake, motor, drum, gear box & panel unit.
- Seamless pipe accurately machined rope drum
- Unique and sturdy rope guide arrangement Prevents rope slackening and easy change of rope
- Precision machine cut case-hardened alloy steel gears Noiseless operation longlife
- Fail safe disc brake Trouble free operation and ease of adjustment
- Built in control panel with std. electricals Ready to use.

#### Add on features:

- Remote control, VVVF drive, special lower blocks, PLC.
- Multiple hoist tandom automated operation.
- Flame proof models.







Туре	WRH I				WRH I	I	WRH III *				WRH I			WRH II		WRH III *			WRH III *		
Model	NP101			NP 201			P301			NP102			NP202			P302			P303		
Class	IV		IV II		IV			IV			IV II		II	IV			IV	Ш			
S.W.L. MT.	1.0		2.0 2.5		3.0			2.0			4.0 5.0			6.0			7.5	10.0			
Lift (Mtrs.)	6 12 20		6.6	11.4	19.2	7	12	20	3	6	10	3.3	5.7	9.6	3.5	6	10	4	6		
Approx. Wt. (Kg.)	264	286	322	386	414	459	533	546	568	296	318	354	478	497	563	638	818	828	900	1000	
Dim. B	1075	1285	1555	1170	1340	1610	1255	1425	1695	1075	1285	1555	1170	1340	1610	1255	1425	1695	1425	1695	
Dim. C	552	752	1022	588	758	1028	635	805	1075	552	752	1022	635	805	1075	635	805	1075	1050	1295	
Hoisting speed m/min	9			8			8			4.5			4			4			2.66		
Hoisting motor H.P. (K.W.)	3 (2.2)			5 (3.7)			7.5 (5.5)			3 (2.2)			5 (3.7)			7.5 (5.5)			7.5 (5.5)		
Travelling speed • m/min	17			17			17			17			17			17			17		
Travelling motor H.P. (K.W.)	0.25 (0.18)			0.25 (0.18)			0.5 (0.37)			0.25 (0.18)			0.5 (0.37)			0.75 (0.55)			0.75 (0.55)		
Min. Height of 'I' beam (mm)	175			175			250			175			250			250			300		
F min max.	. 9	90 - 180	)	<b>90 - 180</b>			125 - 210			<b>90 - 180</b>			125 - 210			125 - 210			**		
A Headroom		1170		1370			1480			1110			1345			1460			1825		
D min max.	- 1	51 - 19	6	151 - 196			163 - 178			151 - 196			163 - 178			1	63 - 17	8	452 - 487		
E * min max.	399 - 444		4	399 - 444			412 - 457			399 - 444			412 - 457			412 - 457			452 - 487		
G		31		37 -42			42			37			51			67			89		
Н	130		143			140			130			120			140			371			
1	230		290			330			320			405			480			371			
J	270			315			365			305			350			395			625		
K				305									305						495		
M +					380									380						80	
No. of falls construction	2 Falls									4 Falls									6 Falls		

NOTE:

- NOTE:

  Higher travelling speed of 26 m/min. can be offered.

  For 7.5T / 10T capacity trolley is not adjustable at site exact flange width (within 140 to 210 mm) to be given.

  Add 125 mm if CT with brake (Brake is at extra cost.)

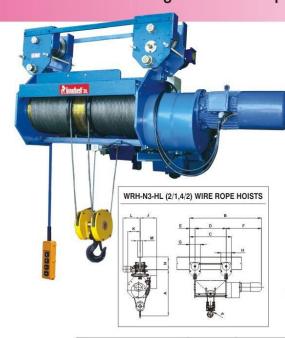
  Applicable for creep speed model only.

  For monoralis stiffened width plates, please check up for operating clearance in trolley.

  Check IT Beam mounting arrangements, trolley plates will project 10 mm above IT beam.

  Model available only for flame proof design.

# Higher lift wire rope hoist



- LH/RH (4/2 Falls) grooves on drum Gives true vertical lifts
- Fail safe disc / shoe brake Trouble free operation and ease of adjustment Precision machine cut case hardened alloy steel gears Long life noise less operation
- Geared couplings Better transmission
- Compact design Best suited for crane & higher lift application
- Truly modular design Easily accessible separate brake, motor, drum, gear
- box & panel unit

Manufactured in ISO 9001:2008 certified company Assured quality and inter changeability of parts

#### Add on features:

- Remote control, VVVF drive, special lower blocks, PLC.

TYPE		WRH-N3-HL														
		НЗ	H5	H6	H7	H8	H9	H10	H11	H12	H13	H14	H15	H16		
DRUM LENGTH.	MM	713	885	1057	1229	1400	1572	1744	1916	2088	2260	2432	2604	2690		
SWL CLASS - II	TONNES	NNES 3.0														
SWL																
LIFT for 4/2 Fall	M	11.5	16.0	20.5	25.0	29.5	34.0	38.5	43.0	47.4	51.5	56.4	60.5	63.0		
LIFT for 2/1 Fall	М	25.0	32.5	40.0	47.5	54.5	62.0	69.5	77.0	84.7	91.5	99.0	106.5	110.0		
NO. OF FALLS			<del>-</del>			- () 2/1 FAL	LS			1		4/2	FALLS	3		
WIRE ROPE DIA.		Ø1	0 FOR	2/1 FA	LL			(	08 FOF	R 4/2 F	ALL					
HOISTING SPEED	M/MIN.															
HOISTING MOTOR KW.	Kw 3.7 M/MIN. 17															
TRAVELLING SPEED																
TRAVELLING MOTOR KW.	Kw	Kw 0.37 KW														
DIMN. A (HEAD ROOM)	mm	n 1195 FOR 2/1 FALL 1078 FOR 4/2 FALL														
DIMN. B	mm	1697	1869	2041	2213	2384	2556	2728	2900	3072	3244	3416	3588	3674		
DIMN. C	mm	988	1160	1332	1504	1675	1847	2019	2191	2363	2535	2707	2879	2965		
DIMN. D	mm	738	910	1082	1254	1425	1597	1769	1941	2113	2285	2457	2629	2715		
DIMN. E	mm							125				(/)				
DIMN. F	mm							834								
DIMN. G	mm							250								
DIMN. H	mm							250								
DIMN. J	mm							505								
DIMN. K	mm 390 - 450															
DIMN. L	mm 524															
DIMN. M	mm						12	25 - 21	0							
DIMN. N (MIN.)	mm							250								
DIMN. P (HOOK OPENING)	mm							46								

- Data tolerance ± 10%
- 1) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION 'K' WILL INCREASE BY 125 mm.
  2) 13,26 MPM TROLLIES ALSO CAN BE SUPPLIED (SINGLE REDUCTION GEAR BOX) AT EXTRA COST.
  3) 2,28,48,9 MPM TROLLIES ALSO CAN BE SUPPLIED (DOUBLEE REDUCTION GEAR BOX) AT EXTRA COST AND 'L' DIMENSION WILL INCREASE BY 50 MM

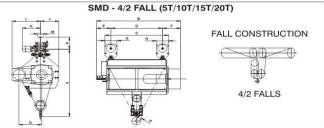
# Steel mill duty wire rope hoist



- Manufactured in ISO 9001:2008 certified company Assured quality and interchangeability of parts
- Heavy duty robust design Smooth operation even in thoughest of application.
- Truly modular design Easily accessible separate brake, motor, drum, gear box & panel unit
- ▶ LH/RH (4/2 Falls) grooves on drum Gives true vertical lifts
- Motor and brake assembly parallel to drum Shorter length and better hook approach
- Brake Shoe/disc, rotary limit switch, built in control panel Truly customized design
- Precision machine cut case hardened alloy steel gears Long life noise less operation
- Seamless pipe accurately machined rope drum Long life

#### Add on features:-

Remote control, VVVF drive, special lower blocks, PLC.



TYPE			j.	SMD	5T-4	/2F		. 1	SMD 10T-4/2F									SMD	15T/20T-4/2F							
		H1	H2	НЗ	H4	H5	H6	H7	H1	H2	НЗ	H4	H5	H6	H7	H5	H6	H7	H8	H9	H10	H11				
SWL CLASS-II	Tones	5								10								15/20								
LIFT	Meter	10.0	20.0	30.0	40.0	50.0	60.0	70.0	12.0	23.0	32.0	40.0	51.0	62.0		15.0	22.0	30.0	37.0	44.0	51.0	58.0				
NO. OF FALLS		4/2							4/2							4/2										
ROPE DRUM PCD	mm		509									509				612										
WIRE ROPE DIA.	mm				11							13				18										
HOISTING SPEED	M/Min.		4.3							4.3							4.3									
HOISTING MOTOR	Kw		5.5							9.3							15.0									
TRAVELLING SPEED	M/Min.		12.0							12.0							12.0									
TRAVELLING MOTOR	Kw		0.37							0.55 (2 Nos.)							0.75 (2 Nos.)									
DIMN. A (HEAD ROOM)	mm	1800							1950							2300										
DIMN. B	mm	1418	1748	2078	2408	2738	3038	3338	1765	2165	2515	2815	3215	3615	3965	2065	2365	2665	2965	3265	3565	386				
DIMN. C	mm	880	1210	1540	1870	2200	2500	2800	1156	1556	1906	2206	2606	3006	3356	1706	2006	2306	2606	2906	3186	3486				
DIMN. D	mm	607	937	1267	1597	1927	2227	2527	628	1028	1378	1678	2078	2478	2828	940	1240	1540	1840	2140	2440	274				
DIMN. E	mm				318				415							415										
DIMN. F	mm		450							550							550									
DIMN. G	mm		250							356							770									
DIMN. H	mm		250							356							770									
DIMN. J	mm		500							700							700									
DIMN. K	mm		445-550							500-600						500-600										
DIMN. L	mm		625							685						775										
DIMN. M	mm		125-210							125-210							125-210									
DIMN. N (MIN.)	mm				250				450							600										
DIMN. P	mm				53							78							9	5						
DIMN. Q	mm				400							554							60	00						

- NOTES:
  1) TROLLEY BRAKE CAN BE SUPPLIED AT EXTRA COST AND DIMENSION K WILL INCREASE BY 125 mm.
  2) 2,2.8,4,8,9 MPM TROLLIES ALSO CAN BE SUPPLIED (DOUBLEE REDUCTION GEAR BOX)
  AT EXTRA COST AND 'L' DIMENSION WILL INCREASE BY 50 MM

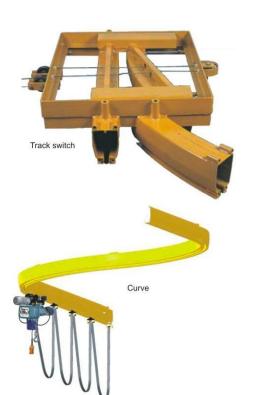
- 3) SHOE BRAKE CAN BE SUPPLIED FOR HOIST IF REQUIRED.

# Light profile crane systems





- Good weight/strength ratio
   User friendly and ergonomic
- Hoist compatibility Improves productivity
- Closed construction Impervious to dust - durable
- ▶ Bolted connections Easy to install and adapt to changing needs
- Standardised components Competitively priced



- The convenient way to solve local lifting and transport problems.
- A versatile solution to enhance productivity and safety.
- Functional and efficient the system can be reconfigured to adapt to changing conditions.
- Designed for easy assembly of specific systems.
- We can also supply custom parts to suit individual needs.

# Shrouded conductor system



## 4 Ductor

The perfect insulated conductor system with continuous conductors for current capacities 50A and 80A

Compact, reliable and safe current supply system for cranes, hoists, monorail systems, conveyor belts etc.

The basic design of shrouded conductor system is a channel housing, in which four slots are prepared to accomodate copper conductors. The flat conductors are installed without the need for joints.

#### **ADVANTAGES**

#### Excellent price/quality ratio.

The concept of the continuous conductors and the use of only high quality components result in a trouble free feeding system against an agreeable price.

#### Continuous copper conductors.

The flat copper conductors can be pulled from rolls into the previously installed PVC housing in long continuous lengths, without any connections in the conductor.

#### High current capacity.

Copper conductors of various capacities can be pulled into the channels in the housing. Standard conductor capacities are 50A and 80A.

#### > Simple installation.

Due to the light weight of the PVC housing, copper conductors without connections and the design of accessory components, system installation is a quick and easy operation.

#### Virtually maintenance free.

The PVC housing needs no maintenance and as previously mentioned continuous copper conductors ensure minimal brush wear. Thus minimising the presence of carbon deposits. Inspection periods can be scheduled in line with the schedule of the apparatus to be fed (i.e. a crane).

#### > Volt drop absolute minimum and constant.

Due to continuous copper conductors, thus avoiding problems associated with added resistance at joints and increased volt drop characteristics when joints loosen or corrode

#### Description Compact design.

By virtue of design, the 4-ductor system utilises an absolute minimum of space.

#### High mechanical strength.

The PVC housing has a combination of high flexural yield, impact, tensile strength and is complemented by the design of associated components.

#### Maximum power transmission.

The brushes are positively located in the PVC housing and contact with the flat copper conductors is maintained by spring pressure. This guarantees a positive contact and excellent power transmission.

#### Exceptionally long carbon brush life.

Is achieved due to the absence of conductor joints and connections which ensures trouble free operation.

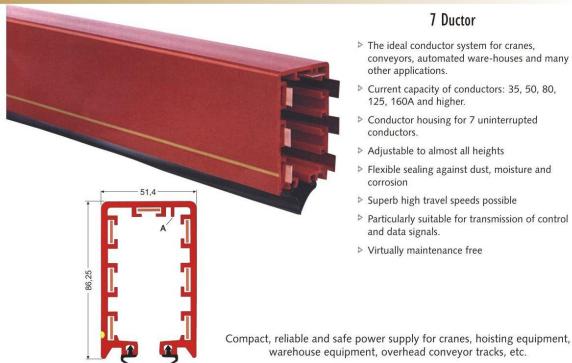
#### > Safety to personnel.

The high level of volume resistivity of the PVC housing ensures absolute safety to personnel.

#### No expansion problems.

Due to the clearance that exists between the conductors and their location and the clearance between the PVC housing and sliding hangers, expansion due to changes in ambient temperature is accommodated without affecting the operation of the system. This also applies to extra long installations where standard components eliminate expansion problems often experienced with alternative systems.

## Shrouded conductor system



Optimum transmission of control and data signals. Because of the continuous copper conductors combined with the constant and efficient contact between carbon brushes and flat copper conductors.

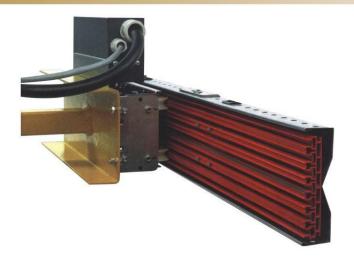
7 ductor is ideally suited and proven for both control and data signal transmission e.g. very important for automated/computerised ware house systems.

- Dust, humidity and corrosion protection. For these conditions the 7 ductor housing can be totally closed by the use of special flexible sealing strips.
- No expansion problems. Due to the clearance that exists between the conductors and their location and the clearance between the PVC housing and sliding hangers, expansion due to changes in ambient temperature is accommodated without affecting the operation of the system. This also applies to extra long installations where standard components eliminate expansion problems often experienced with alternative systems.

- 7 Ductor
- > The ideal conductor system for cranes, conveyors, automated ware-houses and many
- Current capacity of conductors: 35, 50, 80, 125, 160A and higher.
- Conductor housing for 7 uninterrupted
- Adjustable to almost all heights
- > Flexible sealing against dust, moisture and
- > Superb high travel speeds possible
- Particularly suitable for transmission of control
- Virtually maintenance free

- Indoor and outdoor installation. 7 ductor can be installed both indoors and outdoors under widely varying weather conditions.
- Track lengths unlimited. Extremely long track lengths are possible when required either indoors/ outdoors, by utilizing the expansion joint, which still incorporates continuous copper conductors.
- High travel speeds. Standard up to 250 meter/ minute. Higher speeds on request.
- High current capacity. Copper conductors with a variation of sections can be pulled into the channels in the housing. Standard up to 320 A. For higher ratings please consult the sales office.
- 7 ductor installations. Systems up to 7 conductors are available as standard and by parallel mounting of systems practically all circumstances, particularly control systems, can be catered for, where the continuous conductors again are of particular importance.

## Shrouded conductor system



#### Ski-Ductor

- ▶ The ideal flat conductor system for automated ware houses and many other applications.
- Current capacity 50A, 80A, 125A, 160A, 200A and higher.
- ▶ Housing for 7 uniterrupted conductors.
- Adjustable to almost all heights.
- Self-correcting collector trolleys without pantograph arms.
- ▶ High travel speeds.
- Particularly suitable for transmission of control and data signals.
- Low maintenance.



The ski-ductor system is specifically designed for heavyduty tasks such as those performed in automated ware houses.

The most important details are mentioned below.

#### 7 copper channels

Due to the clearance between the conductors and their location, the copper channels offer sufficient room for 2 up to 7 uninterrupted, loose spaced conductors. As required, without plug connectors.

**No expansion problems** and ideally suited for both control and data signal transmission.

#### 5 different types of copper conductors

The flat copper conductors are available for current capacities upto 50 A, 80A, 125A, 160A, and 200A. With parallel-mounted systems the maximum current capacity is 400A.

#### Chute for conductor-wheels

The perfect mechanical conduction enhances the life span of the trolleys and brushes. It also ensures optimal transmission of line and control voltage.

#### Feed and control in a single housing

Feed and control strips are safely separated from one another by the earth conductor.

### Cranes



#### E.0.T.

- Modular construction Standardised - assemblies
- Proven design
   Crab fitted with time tested Indef hoist, CT/LT drives
- Crane kits available
   Saving on transportation of structural parts
- Standard range
   0.5 T, 1 T, 2 T, 3 T, 4 T, 5 T, 6 T, 7.5 T, 10 T, 12.5 T, 15 T, 20 T, 25 T, 30 T, 40 T
   (Single/double girder rail mounted/underslung)

#### **SPECIFICATIONS**

The crane is designed and manufactured in accordance to IS 3177 / IS 807. Design of the crane structure as well as components/parts of the cranes are confirm to class - II duty of the above codes.

Bridge : It is as per IS 807 / IS 3177 / IS 800. These are standard I beams of M.S. rolled steel

sections/Plate Box Girders (wherever required) bolted to end carriages.

End Carriages : Box type in construction & fabricated from rolled sections/plate box (wherever required).

L. T. Wheels : Two nos. straight tread type, En8/En9 forged steel, double flanged LT wheels are provided

in each of the two end carriages. These wheels are supported on steel axles (either fixed axle design or rotary axle design). For underslung cranes S.G.I tapered type single flanged

wheels are provided.

Pinion/Axle : Made from En9/16MnCr5, heat treated carbon alloy steel.

L.T. Wheel Gears : They are as per IS 4460, made from EN8/EN9 and are supported on ball bearings and

secured in well designed bearing housings.

L.T. Wheel Bearings: Heavy duty sealed ball bearings are used thus regular lubrication is eliminated. Two ball

bearings are provided in each wheel for smooth running.

Hook : It is as per IS 15560. Made from forged steel - C20, C30 or equivalent. It is collar or shank

type in construction with spring loaded safety latch.

Brakes : Brakes are heavy duty A.C. electromagnetic disc type. D.C. brakes can also be provided on

request.

Control Panel : Mounted on hoist, sheet metal clad in totally enclosed construction with IP-55 Protection. It

consists of control transformer, isolator, master contactor for mains ON/OFF; MPCB/MCB,

contactors and overload relays for all motors.

Pendant : Consists of push buttons housed in dust proof housing and suspended from hoist movable

on independent monorail. Steel Wire rope is provided to prevent pull on pendant cables.

Safety : Electrical interlocking is provided to avoid accidental simultaneous motions of crane due to

activation of multiple push buttons at the same time. Limit switches are provided against

over hoisting / over lowering and over travel in cross and longitudinal direction.

Hoist : INDEF brand Wire rope electric hoist.

Hoist is generally conforming to IS 3938. Externally mounted TEFC, Squirrel cage, S4 Crane duty induction motor is provided for hoisting and lowering. Wire rope is as per IS 2266 and Hoist motor is as per IS 325 with class 'F' insulation and IP-55 protection. Hoist drum is of

seamless steel pipe. For other details refer wire rope hoist catalogue

Special features: • Cabin operated cranes • Remote controlled pendent • VVVF drive for speed control.



### SPECIFICATIONS

The crane is designed and manufactured in accordance to IS 3177 / IS 807. Design of the crane structure as well as components/parts of the cranes are confirmed to class - I duty of the above codes.

Bridge : It is as per IS 807 / IS 3177 / IS 800. These are standard I beams of M.S. rolled steel

sections bolted to end carriages.

**End carriages** : Box type in construction & fabricated from rolled sections.

L.T. Wheels : Two nos. straight tread type, En8 forged steel, double flanged LT wheels are

provided in each of the two end carriages. These wheels are supported on steel axles. For underslung cranes S.G.I tapered type single flanged wheels are provided.

H.O.T.

Pinion/Axle : Made from En9, heat treated carbon alloy steel.

L.T. Wheel Gears : They are as per IS 4460, made from EN8 and are supported on ball bearings.

L.T. Wheel Bearings : Heavy duty sealed ball bearings are used thus regular lubrication is eliminated. Two

ball bearings are provided in each wheel for smooth running.

Hook : It is as per IS 15560. Made from forged steel - C20, C30 or equivalent. It is collar or

shank type in construction with safety latch.

Hoist : INDEF brand Chain pulley block.

The block is as per IS 3832 with triple spur gear and friction disc brake (self actuating type construction). Load chain wheel is made of heavy duty S.G.I casting with accurately cast chain pockets. Load chain wheel is mounted on two ball bearings for smooth operation. Bottom block is made of heavy duty malleable

casting. Each block is tested to 50% over load.

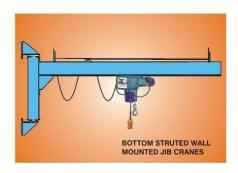
For other details refer CPB catalogue.

Load chain: Grade 80 alloy steel as per IS 6216.Hand chain: Grade 30 M.S. chain as per IS 2429.

### Cranes







### lib crane

Jib crane consists of jib arm made from light profile section and are supported on anti friction bearing to ensure long trouble free service. The arm can swing 270°. The arm is provided with end stoppers to limit the travel of trolley for lifting equipment. And supports the trailing cable system which supplies power to lifting equipment. The braking system is provided to prevent the arm from swing at higher speeds due to inertia of load, structure.

The arm is supported on a robust pillar fabricated from steel plates.

The pillar is tapering so that the increased section at the base provides good rigidity to the structure. The pillar and arm are designed to ensure minimum deflection at loaded conditions. Jib arm of wall mounted jib cranes is supported by brackets bolted on wall, or on column of existing structure.

The jib cranes are designed to suit all the required specifications of our customers.

We provide our standard electric hoists manually operated hoists as per the requirements of our customers.

Jib cranes are available in two types in following range.

- 1) Self supported pillar mounted.
- 2) Wall mounted

Capacity : 250 Kg. to 6000 Kg.

Jib Radius : upto 6M. Lift : 10 Mtrs.

Seen : Manual / Electric

## Automated storage and retrieval system



- Serves upto 20m rack height Increased space utilisation
- Use of telescopic forks
   Very narrow aisle operation, saves floor space
- Fast speed operation Very high throughput rate, more efficiency
- Cabin controlled operation
   Makes storage and retrieval quick, also enables order picking
- ASRS compatibility for computerised ware house management Complete automation possible

#### Stores cube utilisation

- a) Manual storing methods
- b) Using ladder or forklift
- c) Multiple storage systems
- d) Using stores stacker

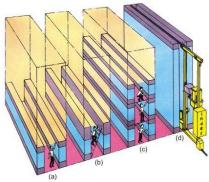
#### Less space more access

The Stores Stacker Crane utilises all available height of stores area. It can be designed to serve racks upto 20 mtrs. height. Stores Stacker combines operating efficiency with maximising the throughput per square metre of space. Suitable for today's competitive manufacturing, processing and distribution centres.

Rack supported ware house can be built by cladding the racks externally from all the sides. Thus there is no need of constructing stores building.

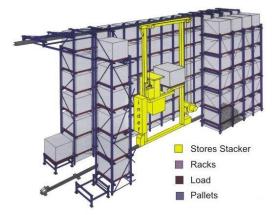
#### The benefits are many:

- Maximum utilisation of space
- Higher storage capacity
- Direct access to each storage unit
- · Reduced manpower
- Higher product picking rates
- Reduced product damages
- Lower operating and maintenance cost



- Favourable area
- Unvarourable area
- Wasted area
- Unproductive area

## Automated storage and retrieval system



#### How does the stores stacker work?

The goods to be handled are kept on pallets or in bins and stacked in high racks. Each individual pallet can be stored / retrieved individually in any order, without disturbing other stored material. Racks with height upto 20 mtrs. and any length can be serviced. Multiple rows of racks can be served via transfer car.

#### Hoist

Operator cabin with fork moves vertically guided between the two masts, pulled by two wire ropes on single hoist. Each rope is capable of holding cabin and load with recommended safety factor. The wire rope hoist has a motor with two speeds. Fast speed for travelling to vertical rack location and slow speed for accurate positioning. The palletized load is lifted and lowered on supports in the racks using slow speed only.

#### Long travel

Two different motors are provided for horizontal long travel of the entire stores stacker. Fast speed motor is coupled via fluid coupling for smooth operation and used for travelling to desired horizontal rack location. Slow speed motor is for accurate positioning. Fast motor is fitted below the electrical panel at the rear of the carriage. Slow motor is fitted below the hoist at the front end of the carriage. Simultaneous hoisting motion and long travel motion are possible.

#### Fork

Motorised telescope fork is provided to handle the load. Fork extends in the racks on both the sides. Other types of load, handling devices can be fitted to serve a variety of unit loads based on requirement.

Technical specifications*				
Capacity		1	1T	2T
(incl. pallet weight)				
Long Travel Speed M/min	Fast	:	96	96
	Slow		3	3
Hoisting Speed M/min	Fast	1	21	21
	Slow	:	2	2

(\*We reserve the right to change any specification without prior notice.)

#### Safety considerations

Fork Speed M/min

System is designed in general as per safety requirements of FEM standards. Fault indicating lamps indicate any fault occurrence, to facilitate corrective action.

#### Safety in operation

- · Dual hand operation based on dead man principle.
- Emergency door at bottom of cabin along with emergency rope ladder.
- Fail safe brakes for all motors.
- · Limit switch for centering and dwelling of fork.
- When fork is out of centre position, only vertical slow or fork movements are possible.
- · All conflicting commands are electrically interlocked.

#### Safety while hoisting / lowering

- · Over-hoisting limit switch.
- · Over-lowering limit switch.
- · Master cut-off in case over hoisting limit switch fails.
- Hoisting operation always starts only in slow speed and then switches over automatically to fast speed when operated by fast lever.
- Limit switches in uppermost and lowermost mast position to switch automatically from fast to slow hoisting speed.
- Hoist slack wire limit switches for both the wire ropes. The master cut off is activated in the event of slacking of any of the two wire ropes.

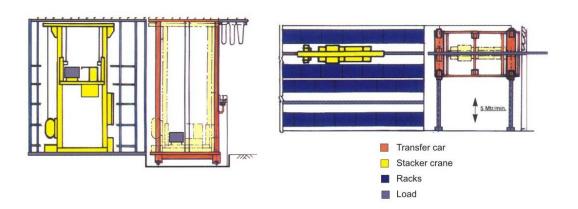
#### Safety against rope failure

- Cabin is suspended by two wire ropes on single hoist, each rope is capable to hold cabin and load with recommended safety factor.
- Additional over-speed governor to actuate emergency breaking system if both hoisting ropes fail
- Over-speed governor also actuates master cut-off for electrical circuits.
- Limit switch to sense overspeed governor system is working and operating within designed hoisting / lowering speed limits.

#### Safety in long travel

- Limit switches to cut-off fast horizontal motion in front and rear extreme positions of aisle.
- Limit switches to cut-off even slow motions when mechanical stoppers at extreme ends are reached.
- Master cut-off limit switch in case of failure of other limit switches.

## Automated storage and retrieval system



#### Transfer car - for multiple aisle crane transfer system

Store stacker operates in a single aisle between two rows of racks. It is dedicated to serve two rows of racks on either sides between which it operates. To serve other aisles, the stacker has to be moved from present rack aisle to other desired rack aisle with a transfer car.

The transfer car has a twin drive. Cross travel (perpendicular to crane rails) speed of 5 M/min. All transfer car operations are possible by operating push buttons, remaining seated inside stacker cabin after stacker is fully positioned on transfer car.

Stacker can transfer on transfer car only in slow speed. Fast long travel speed gets switched off automatically while approaching transfer car. Sensing system ensures that the stacker being transferred does not carry any pallet with load and that the cabin is at the lowermost position.

Safe operation is ensured in such a way that cross travel motion of transfer car is possible only when stacker is fully secured inside transfer car without any load or electrical power. All the mechanically locking devices are electrically operated.

Transfer car has to be locked in place again before re-transferring the stacker from transfer car to desired rack aisle. Approx. transfer time from one aisle to other without any live load on crane is 6-10 minutes based on system configuration.

## Floor operated stacker cranes



- Serves upto 8 m rock height with narrow aisle Maximum utilisation of floor and space area
- No derating of capacity at any level

  Ease of operation to keep any load anywhere
- Double deep and multi aisle storage system Increased storage capacity
- 360° turntable for rotation Permits rotation in narrow aisle

Electric hoist

Turn table

Fully electrical system
Lower operating and maintenance cost

The stacker cranes are used for high density storage of material. The goods to be handled are kept on pallets or in bins and stacked in high racks. Each individual pallet can be used/retrieved independently, in any order, without disturbing other stored pallets.

End carriage

#### **Features**

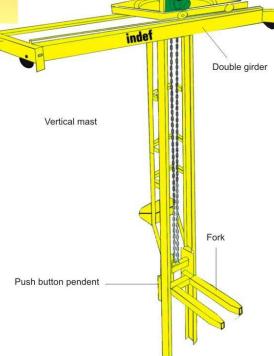
- Rugged structural steel construction.
- Single crane can serve multiple aisles/racks.
- · Materials can be stored / retrieved in any order.
- · Safe operations with improved accessibility.
- Lift capacity of 1000 and 2000 kgs.
- Approx. 50-60% saving of floor space.
- Reduced storage / retrieval time.
- High density of storage achieved.

#### Storage system

In floor operated stacker crane the operator operates the crane standing on the shop floor. The storage consists of high racks upto 8 meter (max.) height. The last loading level of pallet being at 6.5 meter (max). due to visibility limitations. Racks are segmented into horizontal bays and vertical tiers.

#### Equipment

The stacker crane is an electrically operated equipment proven in use in rugged industrial environments. It is a single operator system designed to handle different types of loads on pallets (certain loads can be directly stacked).



The equipment has a fork attached to the vertical masts. These masts at the upper end are connected to a turn table which enables circular motion. The whole assembly is suspended on an overhead double girder. FLAME PROOF versions in 1t/2t models are available on request.

## Floor operated stacker cranes

#### Movements

Circular The turn table at the upper end of the mast facilitates 360 degree rotation in steps of 90 degrees.

Long travel The two ends of overhead double girders are supported on a pair of end carriages. The end carriages runs on rails laid throughout the length of the racks. This motion can be manual or motorised. The rails can be supported

on racks or on RCC columns.

The assembly with turn table can be Cross travel moved across the entire length of the overhead double girder. This enables

crane movement across rows of racks. Consequently same stacker can now service multiple rows of racks. This motion can be manual or motorised.

Hoisting Load is handled with the fork

provided. A motor is provided to lift/lower the load. Overload clutch provided in models.

#### Electric chain hoist:

- Well known "Indef" brand using very high factor of safety (16 for 1 Ton capacity.)
- FREE FALL LIMITER, in case of chain failure to limit free fall to max. 500 mm.
- Upper and lower limit switches for hoist, limits switches for long travel and chain guides are standard supply.
- Integral fail safe brake.
- Grade 80 Alloy Chain.

#### Specifications:

1. Capacity : 1000/2000 kgs. (including pallet) 2. Height of racks : 8 M max. (6.5 M highest loading level)

3. Length of racks : Custom built to any length

4. Span : 20 M / (max.)

5. Hoisting speed : Motorised 4.8 M / min.

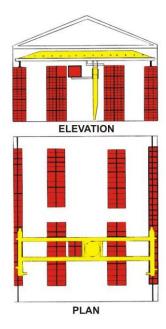
6. Long travel speed : Manual / motorised 15 M/min

7. Cross travel speed : Manual / motorised 6 M/min

8. Circular motion : Manual / motorised

#### Multiple aisle system

This is facilitated by cross travel motion. As the assembly with turn table can be moved across the entire length of the double girder. The same stacker can now serve multiple rows of racks. Cross travel motion can be manual or motorised. The crane can serve any other rack by moving out of the present aisle, cross travelling and then entering the appropriate aisle of rack which is to be served. The number of rows of racks served by a single crane, depends primarily on the throughput requirement of the storage system. Other factors are rack depth and aisle width between racks. Maximum span is 20M.



#### Electrical:

Safe to handle, 24 volts push button station mounted on mast with emergency stop.

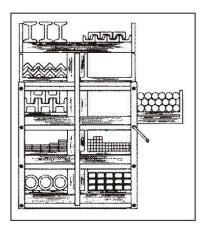
Electrical interlocking to prevent conflicting commands. Electrical supply 415 V, 3 phase, 50 cycles A.C.

#### Options:

- FLAME PROOF model
- We reserve the right to change any specification without prior notice

### Roll out racks





Roll out rack is a compact storage equipment, ideal for long bars, channels, flats, pipes and tubes. It stores material vertically upto 5 levels freeing most of the stores area for other useful purpose. The stores is organised and occupies lesser area, as compared to other conventional storage systems. ROR increases productivity, since each item can be accessed individually without disturbing other stored material. All item in ROR, can be accessed independently in FIFO manner or any desired order. All material in ROR have to loaded or removed by overhead crane.

#### Specifications:

Total capacity
 Top fixed shelf (1 no.)
 Side sliding trays (4 x 2 nos.)
 Capacity per sliding tray
 Handle force required for cranking
 25 Tons
 25 Tons

6. RCC flooring (min. 150 mm. depth) :  $15/20 \text{ Tons}/M^2$ 

#### Construction:

ROR is made of structural steel. It has one fixed shelf at the top, having a capacity 5 tons. And it has four sliding trays each on two sides having capacity of 2.5 tons per tray. Individual hand cranking arrangements for each sliding trays are provided at one end of the ROR to move the trays individually.

#### Working:

The sliding tray arrangement makes the system extremely easy to use and operate, as compared to other welded structures or the commonly used tree structure. For handling material from sliding trays, the desired tray is extended out by cranking its respective hand crank. Each sliding tray moves individually without disturbing other sliding trays or the fixed top shelf. After the sliding tray is extended the desired material is conveniently lifted or lowered by overhead crane.

As there is no overhead obstruction over ROR, material in the top fixed shelf can be handled directly via overhead crane. Oversized loads can be conveniently stored on the top fixed shelf.

#### Safety:

All sliding trays are provided with gravity operated locking links which locks hand cranks shaft after the tray is driven inside ROR and the cranking handle is removed. This prevents accidental sliding of trays. A wide base of ROR facilitates grouting and one by one sliding of trays. ROR does not allow overturning even when partially imbalanced loads are kept. Precaution has to be taken that capacity of each tray and shelf does not exceed its specified limit.

# **NOTES**

