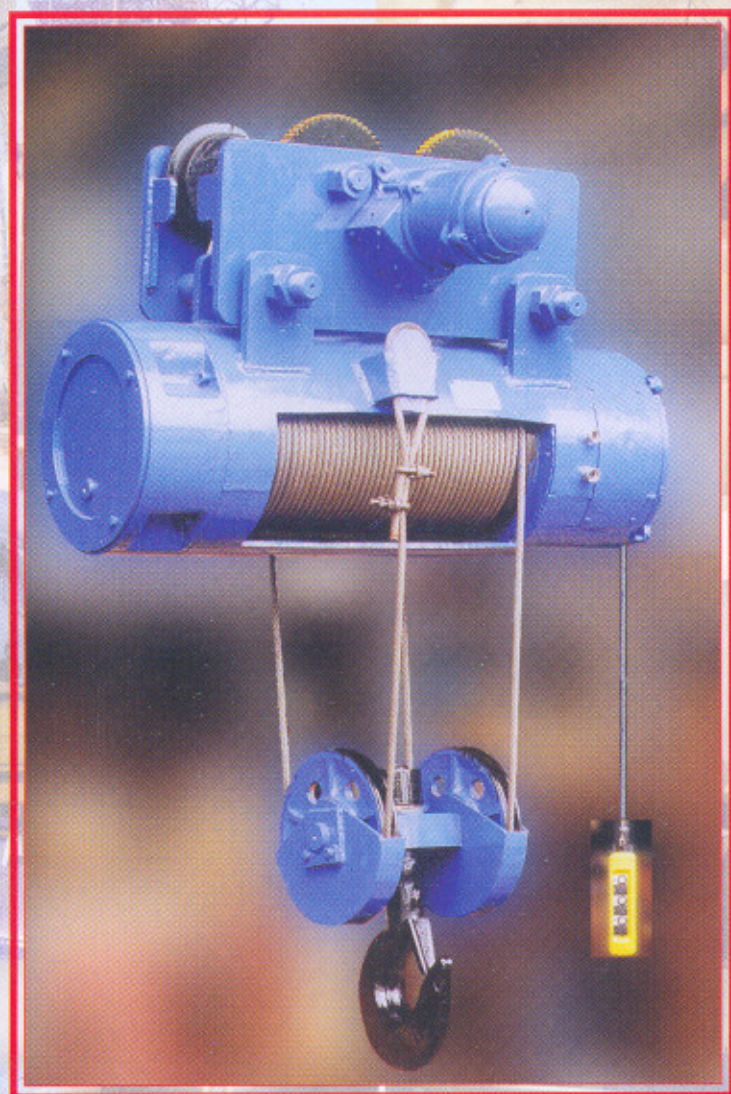




ELMECH



ELECTRIC HOISTS



Move up to the best *Move up to ELMECHTM*

With a reputation for quality and reliability, Elmech Electric Hoists feature the most advanced engineering concepts with special emphasis on safety and versatility.

Gearbox

The precision spur gears are made of high quality steel and are machined from solid blanks. Hardened gears and the use of lubricants reduce wear to a minimum. The gears are enclosed in a cast iron housing and ball or roller bearings are used at all points of friction.

Rope drum

The rope drum is rolled, welded, and precision machined from high grade steel. It is driven by the gearbox through an internal gear rim and supported by a large diameter roller bearings. Machined rope grooves and ample drum diameter ensure the best possible working conditions for the rope.

Motor

The 3 phase squirrel cage motor used in the Elmech hoist is of the conical type. It is insulated in class F and specially designed for crane and hoist duty with starting and stalling torque's of approximately 220 % and 290 % respectively.

Wire Rope

The Wire Rope is made of high quality improved plow steel with pre-formed strands. Large drum-to-wire-rope ratios assure long cable life.

Main Housing

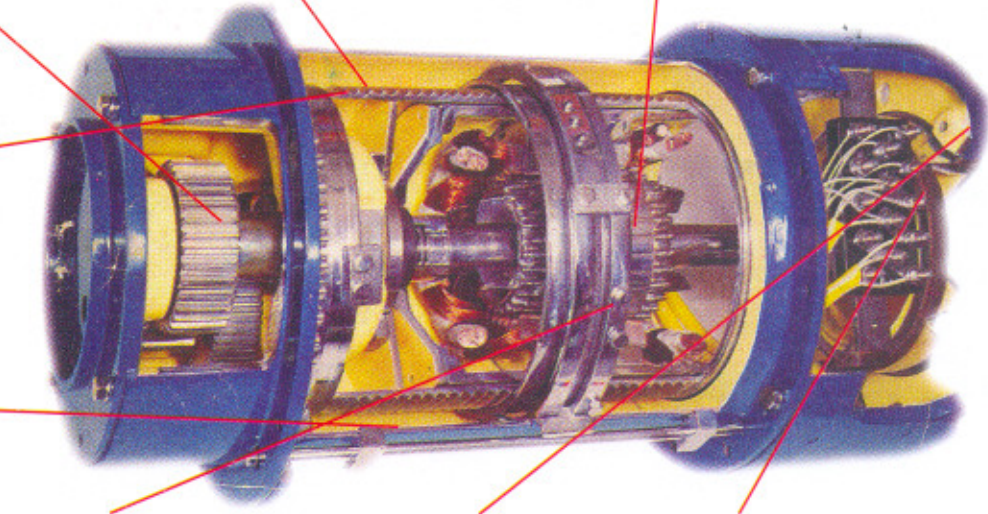
All parts of the hoist unit are enclosed in the main housing thus forming an integral unit. The main housing is of welded steel construction equipped with mounting brackets for various types of mounting.

Bearings

Anti-friction, precision ball or roller bearings support both ends of all shafts.

Wiring

All electrical wires are totally enclosed and conform to national electrical codes.



Rope guide

A rope guide with a built in rope tightener is delivered as a standard item to ensure correct winding of the wire rope under all conditions

Limit Switch

A limit switch with adjustable stops for top and bottom position of the hook is incorporated in the hoist. The switch is activated by the rope guide.

Brake Adjustment

This "Unique" feature of the Elmech motor greatly reduces down time and maintenance because only one adjustment is required for wear, and that is made externally. Adjustment is made simply by removing the same amount of shim from each of the bolts holding the brake end-cover.

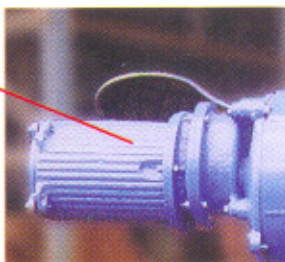
Brakes

Motors of the conical rotor type have an axial movement of the rotor which is used to activate the brake. It is designed to be the most simple and trouble free system available. The brake is automatically applied when the power is off. This provides a fail-safe system and eliminates solenoids, adjustable air gaps, etc. Elmech conical brakes are designed to withstand 200 % of full load motor torque.

Additionally, the inherent characteristics of the squirrel cage motor will not allow a motor on power to overrun its synchronous speed by more than 5 %. This creates a backfeed of electromagnetic force thereby giving the hoist regenerative braking as the second means of braking.

Micro Speed

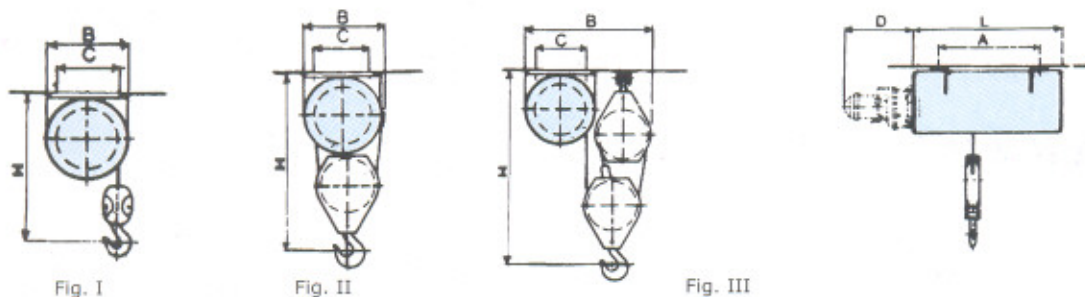
The Elmech "Micro Speed" unit cuts normal lifting speed to about 1/10th. This feature can be invaluable in manoeuvring heavy or delicate loads. Once installed, the Micro-Speed becomes an integral part of the motor although it operates independently of the normal lifting speed. The micro-speed remains constant regardless of load size. This valuable feature is available on all Elmech hoists.



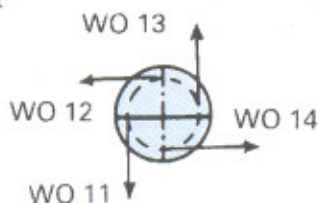
ELECTRIC HOISTS

Load KG	Height of lift (appr.) M	Hoisting Speed m/min	Motor BHP (appr.)	Hoist Type	Wire Rope dia mm	No. of falls of rope	MOTORISED TROLLEY TYPE								FIXED MOUNTING TYPE										
							Headroom H mm	FIG No.	L mm	A mm	B mm	C mm	E/F mm	Weight kgs	Min Radius of Curvature in Mtrs	Headroom H mm	FIG No.	L mm	A mm	B mm	C mm	E/F mm	Weight Kgs		
500	7.5	5.5	1	EL-1102	6	2	800	II	590	195	145	200	395	200	2	750	II	600	318	340	260	18	135		
	7.5	5.5	1	EL-1102SH	6	2	400	V	600	395	590	200	395	200											
	12	5.5	1	EL-1202	6	2	800	II	680	195	145	200	395	240	2	750	II	720	408	340	260	18	145		
	12	5.5	1	EL-1202SH	6	2	400	V	720	395	590	200	395	240											
	15	20	3	EL-2101	8	1	750	I	675	285	285	200	395	160	2	690	I	675	380	340	260	18	135		
	24	20	3	EL-2201	8	1	750	I	790	285	285	200	395	180	2	690	I	790	495	340	260	18	145		
750	5	3.6	1	EL-1103	6	3	900	III	635	400	545	200	395	200	2	900	III	600	318	515	260	18	135		
	8	3.6	1	EL-1203	6	3	900	III	680	400	545	200	395	240	2	900	III	720	408	515	260	18	145		
1000	3.5	2.7	1	EL-1104	6	4	850	III	635	400	545	200	395	200	2	900	III	600	318	515	260	18	135		
					6	4	800	IV	590	195	250	200	395	188											
	3.5	2.7	1	EL-1104SH	6	4	400	V	635	400	545	200	395	200											
	6	2.7	1	EL-1204	6	4	850	III	680	400	545	200	395	240	2	900	III	720	408	515	260	18	145		
					6	4	800	IV	680	195	250	200	395	228											
	6	2.7	1	EL-1204SH	6	4	400	V	680	400	545	200	395	240											
	7.5	10	3	EL-2102	8	2	800	II	675	195	145	200	395	160	2	750	II	675	380	340	260	18	140		
	7.5	10	3	EL-2102SH	8	2	400	V	755	395	590	200	395	295											
	12	10	3	EL-2202	8	2	800	II	790	195	145	200	395	180	2	750	II	790	495	340	260	18	150		
				8	2	400	V	790	395	590	200	395	320												
1500	5	6.6	3	EL-2103	8	3	920	III	675	370	545	200	395	295	2	925	III	675	380	340	260	18	150		
	8	6.6	3	EL-2203	8	3	920	III	790	370	545	200	395	315	2	925	III	790	495	340	260	18	160		
	22.5	14	6.5	EL-6101	12	1	850	I	965	385	655	200	400	590	3	950	I	965	530	500	310	25	385		
	34.5	14	6.5	EL-6201	12	1	850	I	1125	385	655	200	400	620	3	950	I	1125	690	500	310	25	425		
2000	3.5	5	3	EL-2104	8	4	900	III	675	400	545	200	395	300	3	900	III	675	380	515	260	18	155		
					8	4	800	IV	675	195	250	200	395	285											
	3.5	5	3	EL-2104SH	8	4	400	V	780	425	590	200	395	350											
	6	5	3	EL-2204	8	4	900	III	790	400	545	200	395	320	3	900	III	790	495	515	260	18	165		
				8	4	800	IV	790	195	250	200	395	305												
				8	4	400	V	790	425	590	200	395	380												
2500	26.5	10	8	EL-30101	16	1	1250	I	1150	485	640	250	395	750	10	1145	I	1165	710	580	400	35	650		
	43	10	8	EL-30201	16	1	1250	I	1410	485	640	250	395	860	12	1145	I	1420	966	580	400	35	770		
	73	20	15	EL-30301	16	1	1250	I	1870	485	640	250	395	1080	20	1145	I	1870	1415	580	400	35	890		
3000	11	7	6.5	EL-6102	12	2	1050	II	965	250	210	200	400	525	3	1015	II	965	530	500	310	25	400		
	11	7	6.5	EL-6102SH	12	2	600	V	965	530	785	200	400	710											
	17	7	6.5	EL-6202	12	2	1050	II	1125	250	210	200	400	675	3	1015	II	1125	690	500	310	25	440		
	17	7	6.5	EL-6202SH	12	2	600	V	1125	530	785	200	400	775											
5000	6.5	4.6	6.5	EL-6103	12	3	1450	V	965	510	800	200	410	760	4	1450	III	965	530	815	310	25	460		
	10.5	4.6	6.5	EL-6203	12	3	1450	V	1125	510	800	200	410	830	4	1450	III	1125	690	815	310	25	500		
	13	5	8	EL-30102	16	2	1450	II	1165	295	285	250	415	840	10	1300	II	1165	710	580	400	35	665		
	13	5	8	EL-30102SH	16	2	750	V	1150	670	805	250	415	1230											
	21.5	5	8	EL-30202	16	2	1500	II	1410	295	285	250	415	950	12	1300	II	1410	966	580	400	35	785		
	21.5	5	8	EL-30202SH	16	2	750	V	1410	670	805	250	415	1410											
	36.5	10	15	EL-30302	16	2	1500	II	1870	295	285	250	415	1670	20	1300	II	1870	1415	580	400	35	905		
36.5	10	15	EL-30302SH	16	2	750	V	1870	640	815	250	415	1730												
6000	5.5	3.5	6.5	EL-6104	12	4	650	V	965	510	800	200	410	760	4	1450	III	965	630	815	310	25	500		
					12	4	1050	IV	965	250	300	200	410	740											
	8.5	3.5	6.5	EL-6204	12	4	650	V	1125	510	800	200	410	830	4	1450	III	1125	690	815	310	25	504		
				12	4	1050	IV	1125	250	300	200	410	810												
7500	8.5	3.3	8	EL-30103	16	3	1800	III	1150	670	815	250	415	1340	10	1760	III	1165	710	1035	400	35	730		
	14	3.3	8	EL-30203	16	3	1800	III	1410	670	815	250	415	1520	12	1760	III	1410	966	1035	400	35	850		
	24	6.6	15	EL-30303	16	3	1800	III	1870	670	815	250	515	1790	20	1760	III	1870	1415	1035	400	35	970		
10000	6.5	2.5	8	EL-30104	16	4	700	V	1150	670	815	250	415	1490	10	1775	III	1165	710	1035	400	35	750		
					16	4	1350	IV	1150	295	350	250	415	1465											
	10.5	2.5	8	EL-30204	16	4	700	V	1410	670	815	250	415	1670	12	1775	III	1410	966	1035	400	35	870		
					16	4	1350	IV	1410	295	350	250	415	1645											
				16	4	700	V	1870	670	815	250	515	1940	20	1775	III	1870	1415	1035	400	35	990			
				16	4	1350	IV	1870	295	350	250	515	1910												
12500	5.5	2	8	EL-30105	16	5	1700	III	1160	675	925	250	515	1200	10	2230	III	1165	710	1035	400	35	830		
	8.5	2	8	EL-30205	16	5	1700	III	1445	675	925	250	515	1300	12	2230	III	1410	966	1035	400	35	950		
	14.5	4	15	EL-30305	16	5	1700	III	1895	675	925	250	515	1500	20	2230	III	1870	1415	1035	400	35	1050		
15000	4.5	1.6	8	EL-30106	16	6	1700	VI	1160	800	925	250	510	1500	10	2300	III	1165	710	1035	400	35	880		
	7	1.6	8	EL-30206	16	6	1700	VI	1445	800	925	250	510	1600	12	2300	III	1410	966	1035	400	35	1000		
	12	3.3	15	EL-30306	16	6	1700	VI	1900	800	925	250	510	1800	20	2300	III	1870	1415	1035	400	35	1100		
20000	5.5	1.2	8	EL-30208	16	8	1800	VI	1630	850	990	250	510	1780	12	2500	III	1410	966	1035	400	35	1050		
	9	2.5	15	EL-30308	16	8	1800	VI	1900	850	990	250	510	1900	20	2500	III	1870	1415	1035	400	35	1150		
25000	4.5	1.0	8	EL-30210	16	10	1800	VI	2250	837	1050	250	510	1800	12	2600	III	1410	966	1035	400	35	1100		
	7.5	2.0	15	EL-30310	16	10	1800	VI	2250	837	1050	250	510	1900	20	2600	III	1870	1415	1035	400	35	1200		
30000	3.5	0.8	8	EL-30212	16	12	18																		

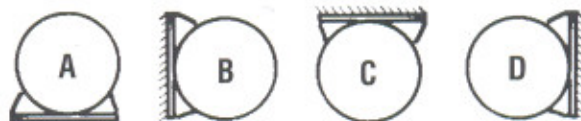
Fixed Mounted Hoist



Wire Outlet



Mounting Position



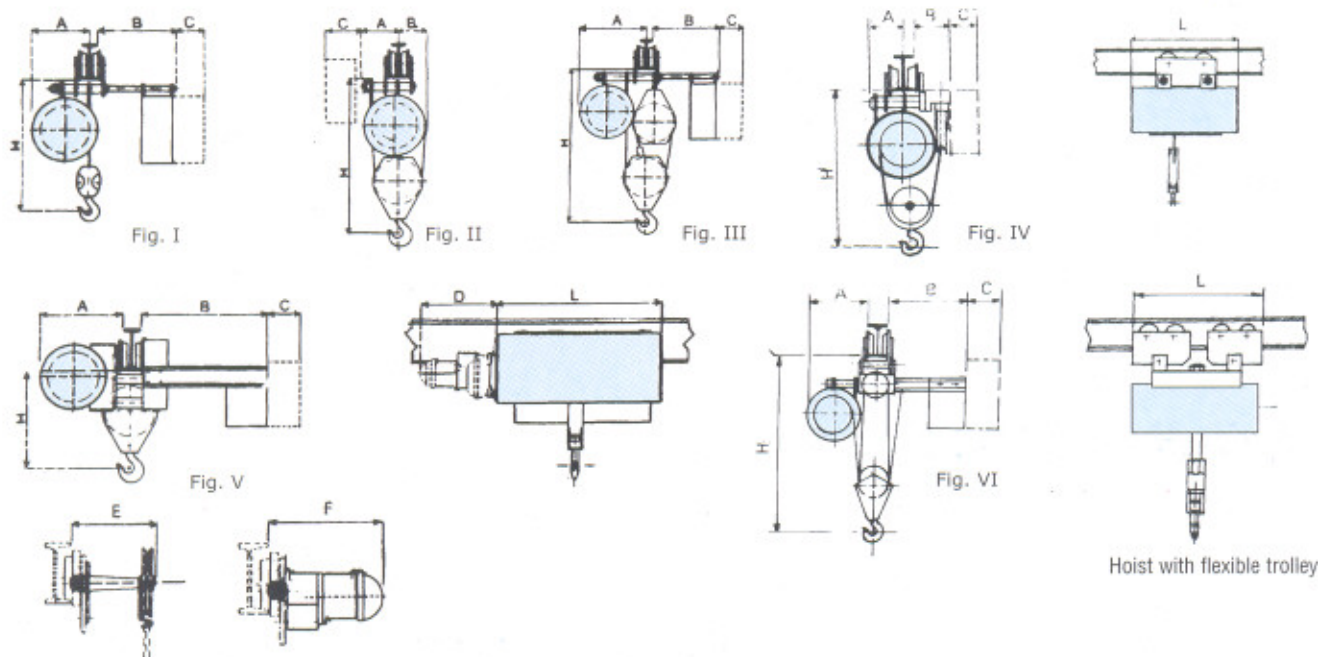
All wire outlets and mounting positions can be combined

The 'ELMECH' Fix Mounted Hoists are supplied with a mounting base, adjustable for wide range of installations-floor, wall or ceiling. The wire rope can be arranged in any of four positions (refer figure). The controls for Fix Mounted Hoists are shipped separately to be mounted as per customer's specifications. Sheaves for various reving applications are also available.

'ELMECH' Fix Mounted Hoists are used for loading & unloading of transportation vehicles, cage hoists arrangement, production machinery etc.

Please state mounting position and wire outlet required, while ordering.

Hoist With Trolley



'ELMECH' Hoist can be supplied with push pull type trolley, hand geared trolley or motorised trolley for horizontal travelling. The trolley is fabricated from structural steel and is carried by travelling wheel supported on ball bearing.

Smaller loads are moved with push pull type trolley, whereas, heavier loads are handled by hand geared trolley or motor driven trolley, depending upon the length of the travel. The motor driven trolley is exceptionally suitable for handling of heavier load over long lengths.

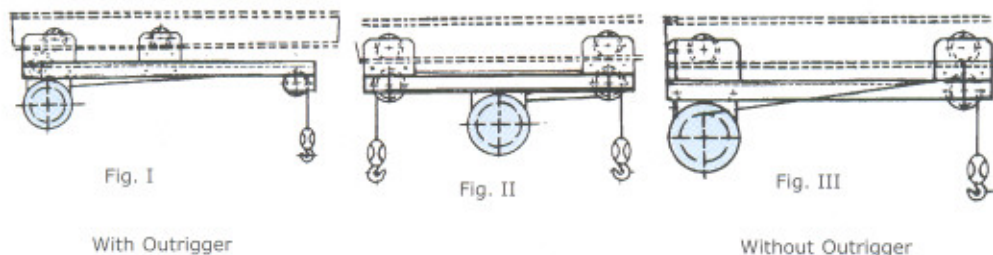
The cross traverse motors, as in case of Hoist, is of Squirrel Cage type with built in brake. The output geared motor pinion, drive one or more of the trolley wheels gear rim.

Wherever there is a limitation to the available head room (dimension H) trolley with short head room arrangement can be supplied at an extra cost (refer figure V above).

Hoist On Flexible Trolley

Where the trolley has to negotiate a curved track, or the material movement is from one bay to another, this type of arrangement fulfills the requirement. The minimum radius of curvature the flexible trolley can negotiate is 1 meter up to 6 tons capacity. For other hoists please refer to us for minimum radius of curvature.

Extended Trolley

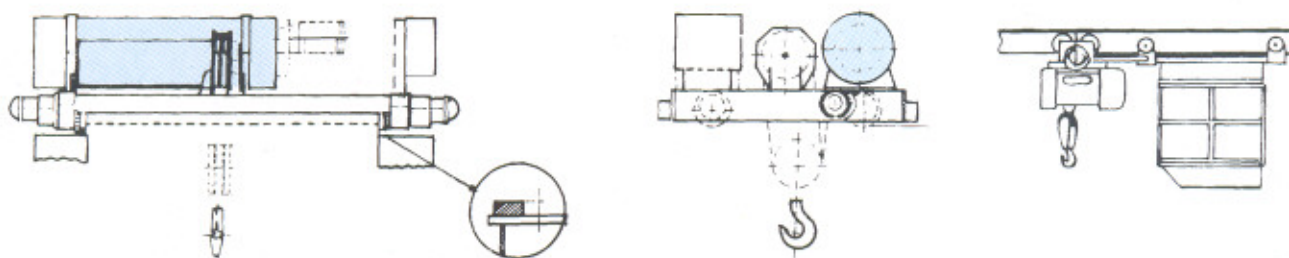


'Elmech' extended arm trolley arrangement are particularly required for handling bulky load or handling material from furnaces/chemical bath. Extended trolley can also be provided with two hooks to deal with paper rolls, ladles, logs, etc., etc.

When the loads go beyond the overhead track, an over hanging type extended trolley becomes indispensable. (Refer Fig 1)

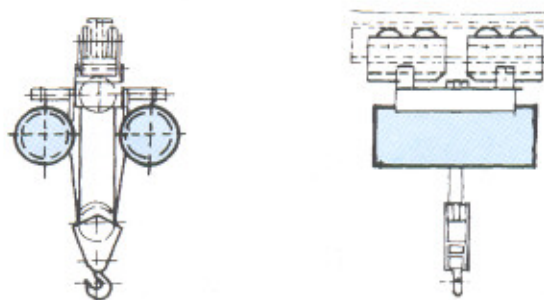
'Elmech' Hoist can also be provided with driver's cabin positioned at one end for easy operation (Refer Fig. IV).

Crab & Hoist With Drivers Cabin



Two rail crab is designed for use on top running Double Girder Cranes with 'ELMECH' hoists of standard wheel gauges. 'ELMECH' crabs are equipped with rubber buffers as standard item. Crab can be provided with hand chain drive or motorised trolley with controls from floor. Further options are two speed hoist motor micro speed arrangement. The trolley motor can also be single speed or two speed in design. 'Elmech' Two rail crabs are easily adaptable to existing crane bridges.

Twin Hoists On Monorail Trolley



For exceptional height of lift 'ELMECH' twin hoist arrangement can be provided with option of Single speed or Two speed arrangement. The maximum height of lift offered is 74 meters on 5 ton load for 303 model.

Elmech Electric Hoist

ELMECH electric hoist are available in a wide range of lifting capacities varying from 0.5 ton to 30 tons. They conform to class II duty laid down in IS:3938-1983. Some of the special features are:

- Totally enclosed Class F insulated conical rotor, crane duty motor.
- Simple & robust braking system.
- Built in conical disc brake for hoist and cross travel completely mechanical. There is no magnetic coil therefore no chance of coil burning. No downtime, and no need to keep stock of brake coils.
- A large number of starts per hour, because starting against a delayed brake release is impossible and the motor is not additionally heated by a brake coil.
- No additional connections for the braking system; the normal motor connection suffices.
- Modular construction and assembly facilitate easy maintenance.
- Trolley is so designed, that is adaptable to wide variations in I-Beam sizes.
- Limit switches to prevent accidental overhoisting and overlowering are standard features.
- All shafts mounted on anti friction bearings.
- Micro speed attachment to get 1/10th or 1/7th of main hoisting speed on request at extra price.
- Hoist conforming to class III and class IV duty as per IS 3938-1983 can also be supplied.

OUR OTHER PRODUCTS:

Grab Buckets

*SGEOT/UNDERSLUNG GEOT
Cranes*

Steel Mill / Grabbing Duty Cranes

Double Girder EOT Cranes

HOT Single Girder Cranes

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Consultancy for Material Handling

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