

JIS

JAPANESE INDUSTRIAL STANDARD

Glossary of Terms Relating to Mobile Cranes

JIS D 6304 1973

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JAPANESE INDUSTRIAL STANDARD

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Glossary of Terms Relating to
Mobile CranesD 6304-1973
(Reaffirmed: 1984)

1. Scope

This Japanese Industrial Standard specifies the main terms used for the mobile cranes, hereinafter referred to as the "term" and their readings and meanings.

Further, the conventional terms and corresponding American and English terms are shown for reference.

2. Classification

The terms are classified into the following 4 classes.

- (1) Types
- (2) Parts and devices
 - (a) Completed mobile cranes
 - (b) Revolving super structure
 - (c) Revolving suspension
 - (d) Base carrier
- (3) Specification, performance and operation
- (4) Front attachment

3. Numbers, Terms, Readings and Meanings

The numbers, terms, readings and meanings shall be as follows.

- Remarks 1. For terms in the column of term, the part given in parentheses shall, in general, be abridged.
2. Those terms in the column of American and English term not indicated separately are used commonly in America and Britain.

Applicable Standards:

- JIS B 8809-Calculated Capacity for Unloader
- JIS D 6301-Standard for Construction and Performance of Truck Cranes, Wheel Cranes and Crawler Cranes
- JIS D 6302-Standard Form of Specifications for Truck Cranes, Wheel Cranes and Crawler Cranes

Reference Standards:

- JIS B 0118- Glossary of Terms for Oil Hydraulics
- JIS B 0135-Glossary of Terms Relating to Cranes (Part 1 Kinds of Cranes)
- JIS D 6303-Test Code of Truck Cranes, Wheel Cranes and Crawler Cranes

(1) Types

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
1001	JISŌ KURĒN	Crane equipped with wheels or crawlers and mobile without rails.	MŌIRU KURĒN, IDŌSHIKI KURĒN	mobile crane
1002	YUATSUSHIKI JISŌ KURĒN	Mobile crane in which the all or bulk of motions of crane are performed by the oil hydraulic mechanism.		(oil) hydraulic mobile crane
1003	KIKAISHIKI JISŌ KURĒN	Mobile crane in which the all or bulk of motions of crane are performed by the mechanical mechanism.		mechanical mobile crane
1004	KURŌRA KURĒN	Mobile crane whose base carrier is crawler type (Fig. 1004).		crawler crane
1005	TORAKKU KURĒN	Mobile crane in which the base carrier with wheels supported by two or more axes is equipped and loaded with revolving super structure and whose base carrier is truck type. Truck type crane has, in general, prime mover and operator cab in the base carrier and revolving super structure respectively and its running operation is performed from the operator cab in base carrier (Fig. 1005).		truck crane

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
1006	HOIRU KUREN	Mobile crane in which the revolving suspension is equipped to the base carrier with wheels supported by two or more axes and loaded with revolving super structure and its base carrier is wheel type. Wheel type crane has, in general, prime mover and operator cab in revolving super structure and its running operation is performed from operator cab (Fig. 1006).		wheel crane

(2) Parts and Devices(a) Completed Mobile Crane

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2101	KANSEIKI	Mobile crane in which the revolving super structure, revolving suspension, base carrier and front attachment are connected completely and maintained so as to be in the state capable of operating.		completed mobile crane
2102	DORYOKU TORIDASHI SOICHI	Device to take off the power from the prime mover. However, it designates up to the output axis.	P.T.O.	power take-off

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No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2103	ANZEN SŌCHI	Device for protection of risks equipped for ensuring the safety during operating, travelling and rest, and warning device. Example: Over-hoisting limit Over-hoisting alarm Boom backstop		safety device
2104	KEIHŌ SŌCHI	Device for the operator to warn or to signal.		warning device
2105	ROKKU SŌCHI	Device for locking the motion of each device. Example: Swing locking device		locking device
2106	KYABU	Enclosure for the protection of inner apparatus, operator etc. of mobile crane from wind and rain.		cab

(b) Revolving Super Structure

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2201	JŌBU SENKAITAI	All parts conducting revolving motion at the time of working. However, front attachment is not included (Fig. 2201).		revolving super structure
2202	SENKAI FUREMU	Frame loaded with all mechanisms of revolving super structure (Fig. 2202).	SENKAIDAI	revolving frame
2203	KURĒN GENDŌKI	Prime mover for crane work. Examples: Diesel engine Gasoline engine	ENJIN	power unit
2204	DAI ICHIDAN GENSOKU SŌCHI	Device to reduce power primarily through clutch, torque converter, speed change gear, etc. from power unit (Fig. 2204). It is usually performed by roller chain or gear. For hydraulic types, these are not used so often.		primary reduction gear
2205	MAKIAGE SŌCHI	Device to conduct hoisting and lowering of load (Fig. 2205). It consists of hoisting drum and its operating mechanism. Lowering is performed either with power or without power.		hoisting winch

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2206	MAKIAGE DORAMU	Drum to wind the wire rope for hoisting and lowering, hereinafter referred to as the "rope" (Fig. 2206).	MAKIDŌ	hoisting drum
2207	BŪMU KIFUKU SŌCHI	Device to derrick the boom. There are device with wire rope and that with hydraulic cylinder (Fig. 2207).	FUGYŌ SŌCHI	boom derricking device
2208	KIFUKU DORAMU	Drum to wind the rope for derricking of boom.	FUGYŌ DORAMU	boom derricking drum
2209	BŪMU KIFUKU SHIRINDA	Hydraulic cylinder for derricking of boom.		boom derricking cylinder
2210	BŪMU SHINSHUKU SŌCHI	Device to extend and contract the boom.		boom telescoping device
2211	BŪMU DŌRYOKU KŌKA SŌCHI	Device for conducting the lowering of the boom by power. One part of boom derricking device.		boom power lowering device
2212	SENKAI SŌCHI	Device for revolving the revolving super structure. It consists of the revolving circle and power transmission mechanism as well as the operating mechanism of hydraulic cylinder, hydraulic motor, clutch, brake, etc. (Fig. 2212).		swing gear (American) slewing gear (English)

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2213	SENKAI RŌRA	In the revolving circle by roller path method, roller for rolling the upper or lower surface of roller path.		swing roller (A) slewing roller (E)
2214	BŪMU ORIMAGE SŌCHI	Device for folding the boom.		boom folding device
2215	KAJŪ DŌRYOKU KŌKA SŌCHI	Device for conducting the lowering of load by power.		power lowering device
2216	SENKAI ROKKU	Device for fixing the revolving super structure to the base carrier (Fig. 2216).		swing lock
2217	TAWĀ KIFUKU SŌCHI	Device to derrick the tower at the time of travelling, etc.		tower derricking device
2218	EI FURĒMU	Frame to support the mechanical boom derricking rope or the tower derricking rope of tower crane and to be attached to the upper part of revolving frame. There are fixed type and climbing (adding) type. It shall comply with JIS D.6301 (Fig. 2218).	GANTORI	A-frame, gantry
2219	HAI EI FURĒMU	Climbing (adding) part of the climbing (adding) A-frame (Fig. 2219).		high A-frame, high gantry

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No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2220	KAUNTA UEITO	Balancing weight to be equipped for countering the moment due to load. Usually, it is equipped with the rear end of revolving super structure. There is too that to be used for control of completed mobile crane.	TSUIAI OMORI, BARANSU UEITO	counter weight
2221	MAKISUGI BŌSHI SŌCHI	Safety device for protection of over winding of rope.	KAMAKI BŌSHI SŌCHI	over-hoisting limit
2222	MAKISUGI KEIHŌ SŌCHI	Device to alarm the over-winding of rope to the operator.	KAMAKI KĒIHŌ SŌCHI	over-hoisting alarm
2223	KAPUKA BŌSHI SŌCHI	Safety device to protect so that the load may not exceed limit. There are that for alarming the overload and that for autostop.		over-load cut-out device, over-load limit

(c) Revolving Suspension

No.	Term	Meaning	Reference	
			Everyday Japanese	English equivalent
2301	SENKAI SHIJITAI	Part to support the revolving super structure installed on base carrier. There are (a) that by revolving circle only, (b) that by subframe and revolving circle, (c) that by subframe and revolving suspension frame, and (d) that by revolving suspension frame only and others (Fig. 2301).		revolving suspension
2302	SENKAI SAKURU	Device installed on the base carrier or subframe to support the revolving super structure. There are that using tapered rollers, that using cylindrical rollers, that using tapered and cylindrical rollers in mix or that using spheres (Fig. 2302).		revolving circle, slewing circle
2303	RŌRA PASU	In the revolving circles of roller path type, the part installed on base carrier or subframe to support and roll the swing roller.		roller path
2304	SABU FURĒMU	Reinforced frame to be used in the case where the general truck chassis, and the like, are converted to mobile crane.		sub-frame