

JIS

JAPANESE INDUSTRIAL STANDARD

Glossary of Terms Relating to Parts of Machine Tools and Operation

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JAPANESE INDUSTRIAL STANDARD

J I S

Glossary of Terms Relating to Parts of
Machine Tools and Operation

B 0106-1978

1. Scope

This Japanese Industrial Standard specifies the glossary of terms relating to parts of machine tools and operation to be used mainly in metal cutting.

Furthermore, the terms relating to names of machine tools are in accordance with JIS B 0105.

2. Classification of Terms

The classification of terms shall be in accordance with the following.

2.1 Parts of Machine Tools The classification of terms relating to parts of machine tools shall be in accordance with the following:

(1) Fundamentals	(0)
(2) General machine tools	
(2.1) Lathes	(100)
(2.2) Drilling machines	(200)
(2.3) Boring machines	(300)
(2.4) Milling machines	(400)
(2.5) Planing machines	(500)
(2.6) Shaping machines	(600)
(2.7) Slotting machines	(700)
(2.8) Broaching machines	(800)
(2.9) Sawing machines and cut-off machines	(900)
(2.10) Grinding machines	(1000)
(2.11) Surface finishing machines	(1100)
(2.12) Gear cutting machines	(1200)
(2.13) Gear grinding machines	(1300)
(2.14) Gear finishing machines	(1400)
(3) Unit constituted machine tools	(3000)
(4) Numerically controlled machine tools	(4000)

Remark: The numbers given in () on the right of the names of types of machines of (2) correspond to the classification numbers of JIS B 0105, as well as express the classification numbers of the glossary for machine tools.

Applicable Standard:

JIS B 0105-Glossary of Machine Tools

2.2 Methods of Operation

3. Numbers, Terms, How to Read and Definitions

The numbers, terms in Romanized Japanese and definitions shall be in accordance with the following.

Furthermore, equivalent English and conventional terms are given for informative reference.

3.1 Parts of Machine Tools

3.1.1 Fundamentals

3.1.1.1 Relative to Main spindle

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.1100	SHUJIKU	A spindle by which a work piece or a tool, being attached to it, is rotated. Remarks 1. See 100.1100, 200.1100, 300.1100, 400.1100, 906.1100, 1101.1100. 2. In the main spindles, the following parts are included. Milling spindle (see 301.1101) Cutter spindle (see 1202.1102) Drill spindle (see 204.1103) Hob spindle (see 1201.1104) Wheel spindle (see 1000.1105) Buff spindle (see 1104.1106) Work spindle (see 1000.1107) Work spindle (see 1202.1108) Work arbor (see 1200.1109)	Main spindle	
0.1200	SHUJIKU TAN	On the end-face part of the front-face side* of the main spindle, a threaded part to which the face plate, chuck and others are attached, or a part on which a taper hole and the like for attaching the cutter arbor is provided. Remarks 1. See 100.1200. 2. In the spindle noses, the following parts are included. Spindle taper hole (see 100.1201) Hole through spindle (see 100.1202) Drill key hole (see 200.1203) Spindle sleeve (see 200.1204) Spindle bush (see 100.1205)	spindle nose	

* Working side

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.1300	SHUJIKU TŌ	A part on which the main spindle that rotates a tool is provided. Remarks 1. See 200.1300, 300.1300, 400.1300, 411.1300. 2. In the spindle heads, the following parts are included. Vertical milling head (see 412.1301) Horizontal milling head (see 412.1302) Cutter head (see 1202.1303) End mill head (see 1201.1304) Drill Head (see 204.1305) Hob head (see 1201.1306) Double helical gear cutter head (see 1202.1307) Slide head (see 201.1308) Wheel head (see 1000.1309) Side grinding head (see 1004.1310) Horizontal spindle grinding head (see 1004.1311) Swivel grinding head (see 1004.1312) Ram type wheel head (see 1004.1313) Saw head (see 903.1314) Wheel head (see 905.1315) Multi spindle head unit (see 3000.1316)	spindle head	
0.1400	SHUJIKU DAI	A part which furnishes the main spindle that rotates the work. Remarks 1. See 100.1400, 1401.1400. 2. In the headstocks, the following parts are included. Work head (see 1000.1401) Swivel work head (see 1002.1402) Spindle guide (see 1101.1403) Spindle drum (see 110.1404)	headstock	
0.1500	SHIN'OSHI DAI	A table which supports the work at its one end, using the center. It consists of a tailstock base, tailstock body, tailstock spindle, center, and others. Remarks 1. See 100.1500, 1000.1500, 1300.1500, 1401.1500. 2. In the tailstocks, the following parts are included. Tailstock spindle (see 100.1501, 1000.1501) Center (see 100.1502, 1000.1502)	tailstock	

3.1.1.1.2 Relative to Slides

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.2100	OKURI DAI	A table which travels on the slideway. Remark: In the slides, the following parts are included. Cross slide (see 100.2101) Upper slide (see 100.2102) Tool slide (see 100.2103) Front slide (see 104.2104) Back slide (see 104.2105) Tool slide (see 500.2106) Side tool slide (see 500.2107) Front tool slide (see 500.2108) Cutter head slide (see 1401.2109) Carriage (see 100.2110) Carriage (see 105.2110) Carriage (see 104.2111) Cross slide (see 1000.2112) Vertical slide (see 1004.2113) Upper tool slide (see 1205.2114) Lower tool slide (see 1205.2115) Cutter slide (see 1205.2116) Cutter tilting slide (see 1205.2117) Dividing head (see 400.2118) Wheel spindle stock (see 1000.2314) Swivel wheel head (see 1002.2315) Regulating wheel slide (see 1009.2121) Regulating wheel lower slide (see 1009.2122) Trunnion unit (see 3000.2123) Shuttle unit (see 3000.2124) Rotary unit (see 3000.2125)	slide	
0.2200	SENKAI DAI	A stand which has the slideway of cutting tool, table, etc. on its upper part, capable of swiveling and fixing this in any angle. Remarks 1. See 100.2200, 404.2200, 1202.2200. 2. In the swivel slide, the following part is also included. Tool swivel slide (see 500.2201)	swivel slide	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.2300	HAMONO DAI	A table to which cutters, rack cutter and others are attached. Remarks 1. See 100.2300, 500.2300, 600.2300, 700.2300, 1202.2300. 2. In the tool rests, the following parts are included. Longitudinal tool carriage (see 110.2301) Cross tool carriage, side head (see 110.2302, 116.2302) Rail head (see 116.2303, 500.2303) Upper tool holder (see 1205.2304) Lower tool holder (see 1205.2305) Back tool rest (see 107.2306) Square tool rest (see 100.2307) Multi-tool rest (see 107.2308) Cutting-off tool rest (see 107.2309) Compound rest (see 100.2310) Turret (see 105.2311) Drum (see 105.2312) Turret head (see 116.2313) Stone head (see 1102.2314)	tool rest	
0.2400	TEBURU	A table on which the work is fixed directly or by using various types of attaching devices. Generally, it imposes feed motion or cutting motion on the work by travelling on the slideway. Remarks 1. See 116.2400, 300.2400, 400.2400, 500.2400, 600.2400, 900.2400, 1000.2400, 1101.2400, 1300.2400, 1401.2400. 2. In the tables, the following parts are included. Vertical surface table (see 411.2401) Swiveling angular table (see 411.2402) Fixed angular table (see 411.2403) Swiveling table (see 1000.2404) Sliding table (see 1000.2405) Work table (see 1200.2406) Rotary table (see 400.2407, 1004.2407) Reciprocating table (see 1004.2408) Square dividing table (see 301.2409) Circular dividing table (see 306.2411) Tilting index circular table (see 200.2412) Compound table	table	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.2500	SADORU	A table which travels straddling over the slideways of the beds, knees and others. On its upper part, a surface which guides the table or cross slide is furnished. Remarks 1. See 100.2500, 105.2500, 116.2500, 301.2500, 400.2500, 600.2500, 700.2500, 1004.2500, 1014.2500. 2. In the saddles, the following parts are included. Hob saddle (see 1201.2502) Table saddle (see 1200.2502) Work saddle (see 1205.2503)	saddle	
0.2600	RAMU	A slide which travels along the slideway, having the built-in main spindle or a tool rest. Generally, those of square section are dominant. Remarks 1. See 105.2600, 600.2600, 700.2600, 802.2600, 901.2600, 1202.2600. 2. In the rams, the following parts are included. Quill (see 301.2601) Ram head (see 600.2602)	ram	
0.2700	NI	A table which moves upwards and downwards along the slideway of the column with carrying table, saddle, etc. Remark: See 400.2700, 1014.2700, 1401.2700.	knee	
0.2800	OKURI NEJI	A screw whose function is to make the slide, table or others travel. Remark: In the feed screws, the following parts are included. Vertical feed screw (see 400.2801) Longitudinal feed screw (see 400.2802) Cross feed screw (see 400.2803) Cross feed screw (see 500.2804) Radial feed screw (see 1201.2805) Tool feed screw Transverse tool feed screw Side tool feed screw (see 1201.2809) Vertical screw (see 100.2810) Lead screw	feed screw	

3.1.1.1.3 Relative to Bodies

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.3100	BEDDO	A bed which constitutes the body of a machine tool. Generally it furnishes a slideway which guides the table and others. Remarks 1. See 100.3100, 116.3100, 300.3100, 500.3100, 900.3100, 1000.3100, 1101.3100, 1102.3100, 1103.3100, 1201.3100, 1300.3100, 1401.3100. 2. In the beds, the following part is included. Cross bed (see 115.3101)	bed	
0.3200	ANNAI MEN	A surface which constitutes the reference plane of motion of two parts which move relatively being in contact with each other. Remark: In the slideways, the following parts are included. Slideway (see 100.3201) Cross slide (see 700.3202) Main slide (see 801.3203) Straight guide (see 1202.3204) Helical guide (see 1202.3205)	slideway	
0.3300	KORAMU	A column which constitutes the body of machine, being fixed vertically on a bed or base. Also, there is a column which is capable of travelling along the slideway on the bed or base. Remarks 1. See 116.3300, 200.3300, 300.3300, 400.3300, 500.3300, 700.3300, 900.3300, 1004.3300, 1014.3300, 1015.3300, 1101.3300, 1103.3300, 1201.3300, 1300.3300, 1401.3300. 2. In the columns, the following parts are included. Circular column (see 200.3301) Square column (see 200.3302) Column sleeve (see 202.3303) Wheel head column (see 1014.3304)	column	
0.3400	KUROSU RĒRU	A horizontal beam which has been attached to the column, having a slideway for horizontal travelling of the tool rest or spindle head. There are one which is capable of moving upwards and downwards along the column slideway, and one which is fixed. Remarks 1. See 116.3400, 305.3400, 306.3400, 412.3400, 500.3400, 600.3400, 1004.3400, 1202.3400. 2. In the cross rails, the following parts are included. Upper beam (see 110.3401) Arm (see 202.3402)	cross rail	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.3500	TOPPU BĪMU	A fixed beam which connects two columns at the upper parts. Remarks 1. See 116.3500, 412.3500, 500.3500, 1004.3500. 2. In the top-beams, the following parts are included. Overarm (see 400.3501, 1201.3501)	topbeam	
0.3600	BĒSU	A table on which a machine is fixed, being at the lowermost part of the machine, to be installed on floor surface. Remarks 1. See 200.3600, 400.3600, 600.3600, 700.3600, 1101.3600. 2. In the bases, the following part is included. Base plate (see 115.3601)	base	
0.3700	FURĒMU	A framework which constitutes the body. Remark: See 600.3700, 700.3700, 900.3700.	frame	

3.1.1.4 Others

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
0.4100	MOJURA YUNITTO	A unit which constitutes the machine tools, consisting of a head unit, base unit, column unit, slide unit, etc.	modular unit	

3.1.2 Lathes

3.1.2.1 Lathes in General

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
100.1100	SHUJIKU	That spindle which gives cutting rotation on a work.	main spindle	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
100.1200	SHUJIKU TAN	That part of the main spindle on which the face plate, chuck, center and others are mounted.	spindle nose	
.1201	SHUJIKU ANA	A taper hole by which a center or collet is attached to the main spindle.	spindle taper hole	
.1202	SHUJIKU KANTSŪ ANA	In a main spindle, that hole which is used when a bar-shaped work is to be passed through.	hole through spindle	
.1205	SHUJIKU BUSSHU	A part which is used when the center is to be attached to the spindle taper hole.	spindle sleeve, spindle bush	
.1400	SHUJIKU DAI	A part which is provided with the main spindle and its driving device, speed change gear, and others.	headstock, spindle stock	
.1500	SHIN'OSHI DAI	A table which supports the one end of the work with its center, being positioned on the opposite side of the headstock on the bed, consisting of a tailstock body, tailstock base, tailstock center, etc.	tailstock	
.1501	SHIN'OSHI JIKU	A spindle which is capable of getting in and getting out the hole of the tailstock body. Substantially, a spindle, being attached with the center, which pushes and supports the work.	tailstock spindle, tailstock barrel	
.1502	SENTA	A part which supports the work at its center of rotation.	center	
.1901	BAKKU GIYA	A gear which reduces speed, by returning to the initial axial line.	back gear	
.1902	PURI SEREKUTA	During the working process, a device through which the motion is preliminarily changed over to the next motion (such as rotational motion).	preselector	
.1903	KAHAGURUMA SŌCHI	A device with which the ratio of number of rotations is changed, using change gears.	change gear device	
.1904	KŌDORANTO	A plate to which intermediate change gear shaft is attached.	quadrant	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
100.1905	SHIDŌ JIKU	A shaft for starting and stopping of machine.	starting rod	
.1906	TANBURA	The supporting arm of an intermediate gear which changes the ratio of number of rotations stepwise.	tumbler	
.1907	CHAKKU	A part which grips the work, being attached to the spindle nose.	chuck	
.1908	KORETTO	A part which grips the work, being attached to the spindle taper hole.	collet	
.1909	MENBAN	A part to which any work of complicated shape also can be attached, being attached to the spindle nose.	face plate	
.1910	MAWASHI GANE	A part which transmits rotation of the main spindle to the work, being attached to the work.	work carry, lathe dog	KERE, KERI
.1911	MAWASHI ITA	A part which transmits rotation to the work carry, being attached to the spindle nose.	driving plate	
.1912	KOTEI FUREDOME	A part which supports the work in radial direction, being attached on the bed.	steady rest	
.1913	IDŌ FUREDOME	A part which supports the work in radial direction, being attached to the carriage.	follow rest	
.2101	YOKO OKURI DAI	A table which travels in cross direction on the saddle, and generally of which upper part is provided with grooves for attaching the swivel slide.	cross slide	
.2102	JŌBU OKURI DAI	The slide of the upper part of the carriage.	upper slide	
.2103	HAMONO OKURI DAI	The slide of the uppermost part to which tools are attached.	tool slide	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
100.2110	ŌFUKU DAI	The generic term of part which performs the feeding motion of tools, reciprocating on the bed, consists of the apron, saddle, cross slide, tool rest, etc.	carriage	
.2200	SENKAI DAI	That part which swivels on the cross slide, having a sliding face on which the upper slide can travel.	swivel slide	
.2300	HAMONO DAI	A table on which the cutting tool and others are attached.	tool rest, tool post	
.2307	SHIKAKU HAMONO DAI	A tool rest which is capable of swiveling, attaching cutting tools on four sides.	square tool rest, square turret	
.2310	FUKUSHIKI HAMONO DAI	A generic term of the part which is composed of the swivel slide and upper slide or tool slide.	compound rest, compound tool rest	
.2500	SADORU	That table which travels in longitudinal direction straddling over the sliding face on the bed, constituting the sliding face of the cross slide.	saddle	
.2810	OYA NEJI	A screw to be used for the feed of cutting tool in cutting screw threads.	lead screw, master screw	
.2901	OKURI HENKAN HAGURUMA BAKO	A gear box which changes the amount of feed.	feed change gear box	
.2902	EPURON	That gear box which is attached to the lower side of front part of the saddle, being provided with a longitudinal and traverse feed selector, half split nut putting on and off device, etc.	apron	
.2903	OKURI JIKU	A shaft by which the feed is given to the cutting tool.	feed rod, feed shaft	
.2904	MAIKUROMĒTA KARĀ	A collar having graduation.	micrometer collar	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
100.2905	NEJIKIRI DAIYARU	That dial being engaged with the lead screw, which functions as an index in screw threads cutting.	chasing dial	
.2906	HAYA OKURI SŌCHI	A mechanism which makes the carriage and the like traverse quickly.	quick traverse mechanism, rapid traverse	
.2907	NARAI KEZURI SŌCHI	An attachment which makes the machine tool cut to the same shape, copying after a model, die plate or an actual object.	copying attachment	
.3100	BEDDO	A table on which the body of a machine tool is constructed.	bed	
.3201	BEDDO SUBERI (ANNAI) MEN	That surface along which the carriage or tailstock travels.	slideway, guideway	
.3901	ASHI	A part with which the bed is supported.	leg	
.3902	OIRU PAN	A receptacle of chips and cutting oil agents.	oil pan mechanism	
.3903	GYAPPU PĪSU	A part which fills the gap between the cut ends of the bed.	gap piece bridge	
.3904	KIRIKUZU YOKE	A part which prevents chips from scattering.	splash guard, chip guard	

3.1.2.2 Tool Room Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
102.2908	TĒPA KEZURI SŌCHI	A device which enables the lathe to conduct taper cutting, using the guide plate.	taper attachment	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
102.2909	NIBANDORI SŌCHI	A device with which the lathe conducts relieving by imparting motions in front and rear to the cross slide, using a cam.	relieving attachment	

3.1.1.2.3 Bench Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
104.2111	SESSAKU DAI	That part which conducts feeding motions of cutting tools, being fixed on the bed.	carriage	
.2104	MAE OKURI DAI	That slide which travels being attached with the tool rest, on the front side of center line of the main spindle.	front slide	
.2105	MUKOU OKURI DAI	That slide, being located on the opposite side of the center line of the main spindle, which travels with mounting a tool rest on it.	back slide	
.2910	ŌBAKATTO SŌCHI	An attachment which conducts the feeding motion of cutting tools, being installed on the headstock.	over-cut attachment	

3.1.1.2.4 Turret Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
105.2110	TARETTO KYARIJI	A table which adjusts the position of longitudinal direction depending on the works, embracing the travelling ram.	carriage	
.2311	TARETTO	A tool rest which conducts swiveling indexation, attaching two pieces or more of tools radially.	turret	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
105.2312	DORAMU	A tool rest which conducts swiveling indexation, attaching two pieces or more of tools horizontally to the swivel shaft.	drum	
.2500	SADORU	A table which travels on the bed, holding the turret.	saddle	
.2600	RAMU	A table which travels on the turret carriage, holding the turret.	ram turret slide	
.2911	TSURU HORUDA	A part which supports the cutting tool, being attached to the turret or drum.	tool holder	
.2912	NEJIKIRI SŌCHI	That device which cuts screw threads with the chaser and the like.	thread chasing attachment	
.3905	BŌZAI SUTANDO	A stand which supports bars at the outside of the machine.	bar stand, stock stand	

3.1.2.5 Multi-cut Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
107.2306	MUKŌ HAMONO DAI	A tool rest which is located at the opposite side of the center line of the main spindle.	back tool rest, rear tool rest	
.2308	TAJIN HAMONO DAI	A tool rest which uses the cutting tools, being attached, of two pieces or more at the same time.	multi-tool rest	
.2309	TSUKKIRI HAMONO DAI	A tool rest which conducts cutting-off.	cutting-off tool rest	

3.1.2.6 Automatic Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
110.1404	SHUJIKU DORAMU	In a multi-spindle type automatic lathe, that of a drum type which conducts indexing, incorporating the main spindle.	spindle drum, spindle carrier	
.1914	SŌSA DORAMU	A drum which controls the speed of the main spindle, feed, or other operation	control drum	
.1915	MAGAJIN SŌCHI	An attachment which sends out materials piece by piece into the chuck in each one cycle of operation.	magazine attachment	
.1916	GAIDO BUSSHU	A bush which prevents the deflection of materials, being adjacent to the cutting tool.	guide bush	
.2301	TATE HAMONO DAI	A tool rest which moves in longitudinal direction.	longitudinal tool carriage	
.2302	YOKO HAMONO DAI	A tool rest which moves in traverse direction.	cross tool carriage	
.2913	KAMU JIKU	A shaft to which a cam is attached.	cam shaft	
.2914	KAMU DORAMU	A drum to which a cam is attached.	cam drum	
.2915	ROKINGU AMU	An arm which imparts depth of cut by rocking motion.	rocking arm	
.2916	SURIWARI SŌCHI	An attachment which conducts slitting.	slitting attachment	
.3401	APPA BĪMU	In the upper part, that beam which is provided with the slideway of the tool rest.	upper beam	
.3906	KŌSAKUBUTSU BUNRI SŌCHI	A device which separates the work from cutting chips.	work separator	

3.1.2.7 Face Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
115.3101	KUROSU BEDDO	A bed which has the sliding face of traverse travelling, on the base plate or the bed.	cross bed	
.3601	BĒSU PURĒTO	Generally the plate of iron casting with grooves, being laid on the floor.	base plate	

3.1.2.8 Vertical Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
116.2302	YOKO HAMONO DAI	A tool rest which moves up and down, being attached to the column, and the side tool bar which has been attached to this conducts horizontal motion.	side head	
.2303	SHŌMEN HAMONO DAI	The generic term of a tool rest which has been attached to the side beam, consisting of a saddle, tool bar bearing, tool bar, etc.	rail head	
.2313	TARETTO HEDDO	A part which is attached to the side beam, consisting of a turret, saddle, ram, etc.	turret head	
.2400	TĒBURU	A part which rotates carrying a work, on its surface the attaching groove of claws and T grooves are provided.	table	
.2500	SADORU	A table which travels horizontally along the side beam, composing a part of the rail head.	saddle	
.2801	JŌGE IDŌ YŌ NEJI	A screw for carrying out the elevating motion and the like of the side beam.	elevating screw	
.2917	SHŌMEN HAMONO BŌ	A part having the structure capable of attaching the tool support on its tip, and which moves in elevating motion.	tool bar	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
116.2918	YOKO HAMONO BŌ	A tool bar which has been attached to the side head, and which carries out horizontal motion, attaching a tool support on its tip.	side tool bar	
.2919	SHU HAGURUMA BAKO	A gear box in which the gear mechanism for driving the table is contained.	main gear box	
.2920	KŌBAI KEZURI SOCHI	A device which carries out grade cutting maintaining the amounts of of feed in two directions at a required ratio, generally by attaching a change gear to the quadrant of the feed change gear box.	grade cutting device	
.3100	BEDDO	A part which supports the table, and generally, the parts such as the column and main gear box are attached to its side face.	bed	
.3300	KORAMU	A pillar which supports the side beam horizontally, being connected with the bed at its lower part.	column	
.3400	KUROSU RĒRU	A horizontal beam which has been attached to the column, and which acts as the guide of the horizontal motion of the rail head.	cross rail	
.3500	TOPPU BĪMU	A gate-form beam which connects the columns of both sides at their upper parts.	top beam	
.3907	TSURIAI OMORI	A weight which keeps balance of the weights of the tool bar, side head, etc.	balance weight	

3.1.2.9 Lead Screw Cutting Lathe

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
118.2921	OYANEJI HOSEI SOCHI	A device with which the pitch errors of the lead screw are corrected.	compensator, correcting device	

3.1.3 Drilling Machines

3.1.3.1 Drilling Machines in General

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
200.1100	SHUJIKU	A spindle which makes the drill rotate.	main spindle	
.1203	DORIRU NUKI ANA	A hole which has been provided in the main spindle for inserting a drill extractor.	drill key hole	
.1204	SHUJIKU SURIBU	A portion which allows the main spindle to move upwards and downwards mainly through a rack.	spindle sleeve, rack sleeve	
.1300	SHUJIKU TŌ	A portion to which the total parts or a part of the main spindle and its driving device and feeding device are provided.	spindle head	
.2407	EN TEBURU	A circular-shaped table.	circular table	
.2408	KAKU TEBURU	A square-shaped table.	square table	
.2412	FUKUGŌ TEBURU	A table having the two slideways at right angles with each other. Square shape is dominant.	compound table	
.2701	NI	A stand which moves upwards and downwards along the slideway of the column, carrying the table on it.	knee	
.3300	KORAMU	A pillar which supports the spindle head, arm and others.	column	
.3301	MARU KORAMU	That column of a circular section.	circular column	
.3302	KAKU KORAMU	That column of a square section.	square column	
.3600	BESU	At the lowermost part of the machine, a base plate which is so formed as to be installed on the floor.	base	

3.1.3.2 Upright Drilling Machine

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
201.1308	SURAI DO HEDDO	A part which travels on the column sliding surface, providing with the holding or feeding device of the main spindle.	slide head	

3.1.3.3 Radial Drilling Machine

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
202.1917	TSURU EJEKUTA	A built-in device of the main spindle for the purpose of detaching the tool of Morse taper shank from the spindle taper hole.	tool ejector	
.3303	KORAMU SURIBU	A hollow column which has been fitted with the outside of the column, serving as the guide of the upwards and downwards motions and swivel of the arm.	column sleeve	
.3402	AMU	An arm-shaped part having a sliding face which guides the spindle head.	arm	

3.1.3.4 Multi-Spindle Drilling Machine

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
204.1103	DORIRU SUPINDORU	A main spindle to which drills are attached.	drill spindle	
.1305	DORIRU HEDDO	A part which furnishes plural number of drill spindles rotating simultaneously.	drill head	

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
204.1918	DORIRU SUPINDORU ANA	A spindle taper hole which has been provided in the drill spindle.	drill spindle hole	
.1919	DORIRU SUPINDORU HORUDA	The holder for positioning of the drill spindle.	drill spindle holder	

3.1.4 Boring Machines

3.1.4.1 Boring Machines in General

No.	Term in Romanized Japanese	Definition	Reference	
			Equivalent English	Conventional term
300.1100	SHUJIKU	A spindle to which mainly boring tool is to be attached.	main spindle	
.1300	SHUJIKU TÔ	That part of the main spindle providing with the main spindle and the driving device, etc.	spindle head	
.1920	KUDÔ HAGURUMA BAKO	A gear box into which the mechanism for transmitting rotations to the main spindle, milling spindle and so on is incorporated.	driving gear box	
.2400	TEBURU	A table to which the work is attached.	table	
.2901	OKURI HAGURUMA BAKO	A gear box through which the feeds are given to the spindle head, table, etc.	feed change gear box	
.2922	JIDÔ ICHIGIME SÔCHI	A device which enables an automatic stop at any predetermined position.	automatic positioning device	
.2923	ICHI HYÔJI SÔCHI	A device which indicates the present position or travelled distance of a travelling part.	position read out device	