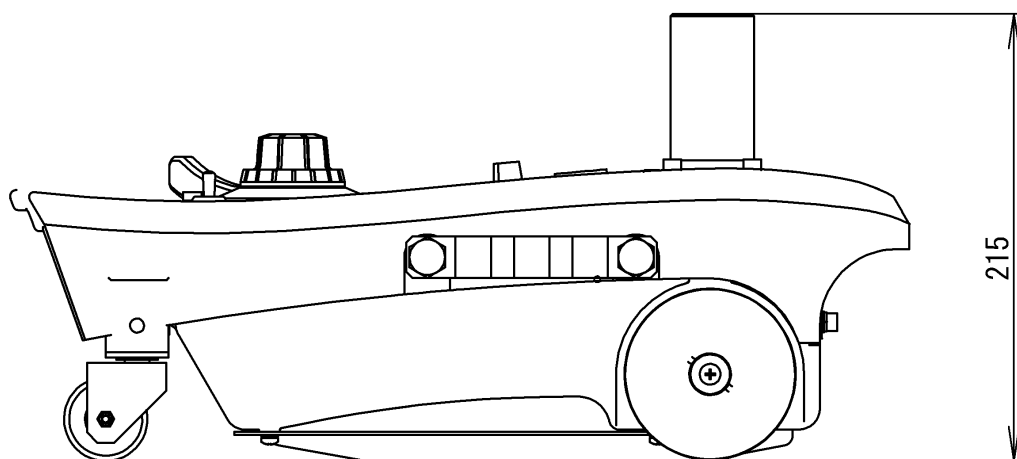
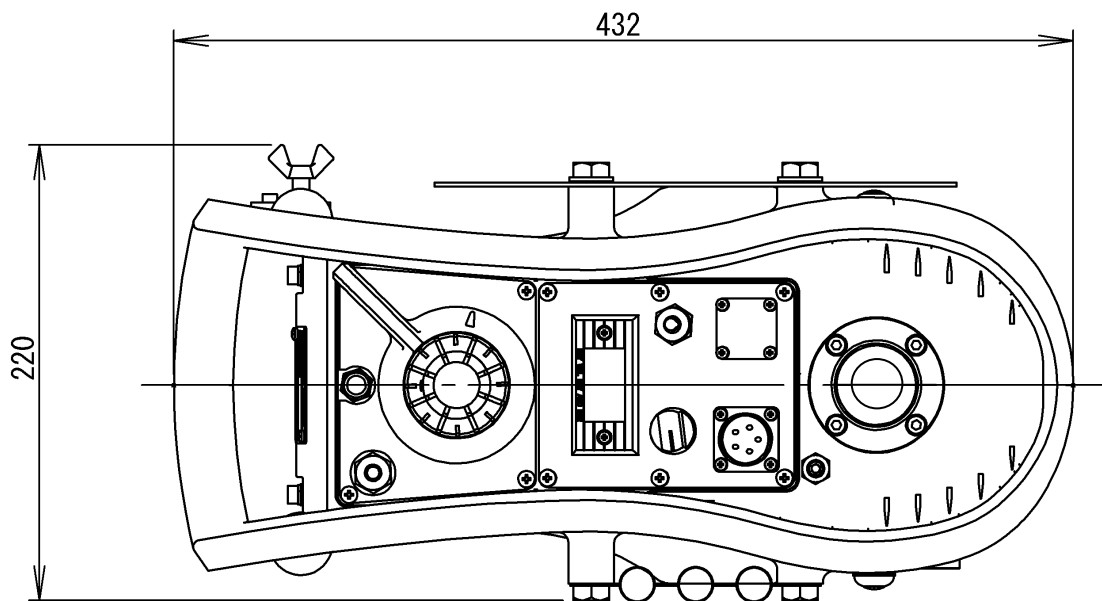


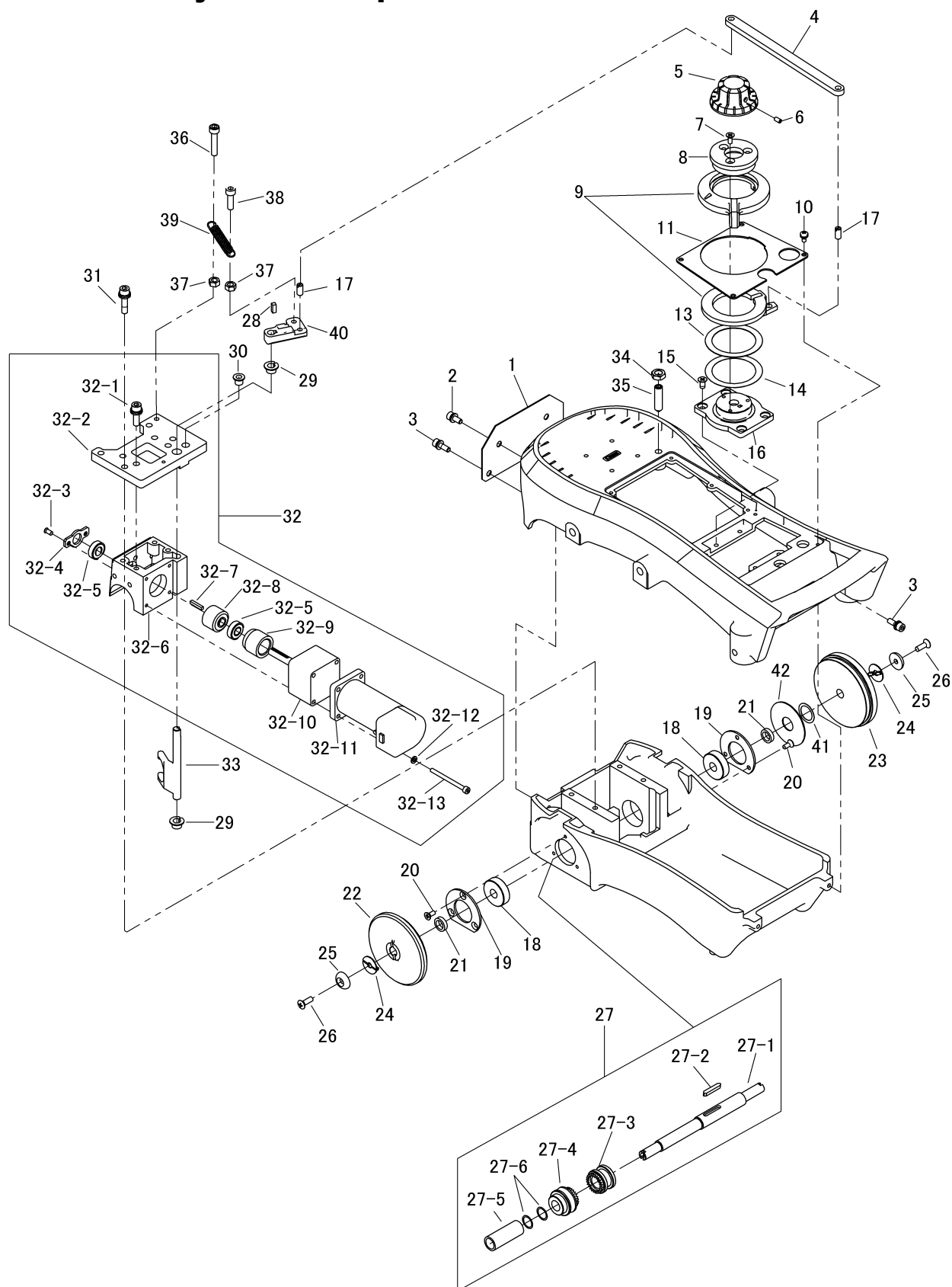
# 11 Assembly drawing of IK-12 NEXT



215mm=8.465inch  
220mm=8.661inch  
432mm=17.008inch

## 12 Parts list

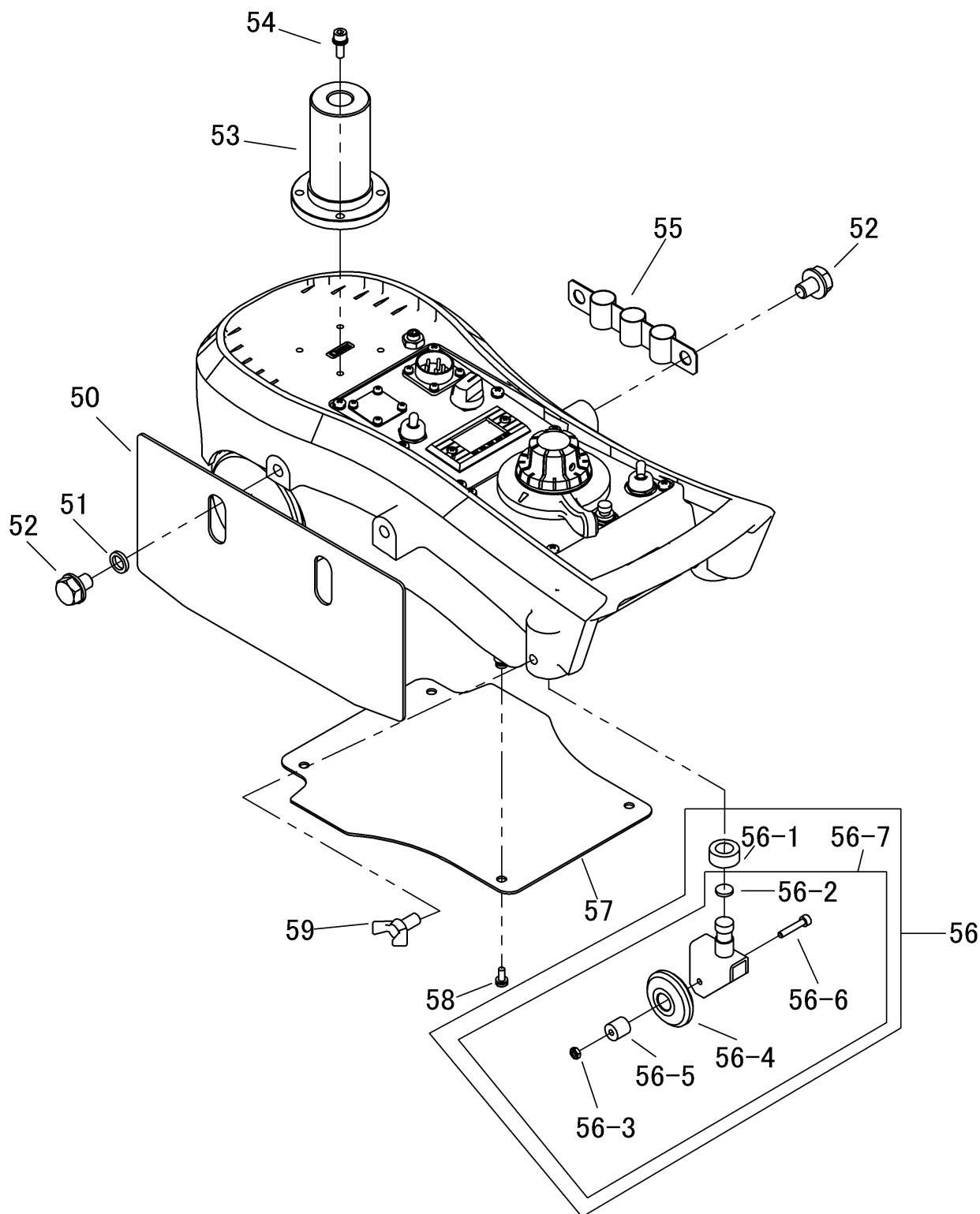
### 12.1 Main body and inside parts



## Main body and inside parts

ITEM No.	PART NAME	QTY	STOCK No	REMARKS	ITEM No.	PART NAME	QTY	STOCK No	REMARKS
1	Cover	1	20506249		30	DU bush	1	6D710607	MB0607-12FDU
2	Hexagon socket head cap screw	2	6C450510	BC-5x10(WS,WF)	31	Hexagon socket head cap screw	4	6C450625	BC-6x25(WS,WF)
3	Hexagon socket head cap screw	4	6C450512	BC-5x15(WS,WF)	32	Gear box assembly	1	20506421	
4	Connecting bar	1	20506222		32-1	Hexagon socket head cap screw	4	6C450625	BC-6x20(WS,WF)
5	Speed dial	1	20506236		32-2	Gear box cover	1	20506229	
6	Hexagon socket setscrew	1	6C560408	SSS-4x8	32-3	Screw	2	20504669-Y	M4x8
7	Screw	3	6C500408	SF-4x8	32-4	Gear box bearing plate	1	20503579	
8	Clutch support	1	20506244		32-5	Bearing	2	6A030698	
9	Clutch lever assembly	1	20507111		32-6	Gear box	1	20503565	
10	Screw	4	6C570408	M4x8(WS,WF)	32-7	Key	1	20503768	
11	Speed plate	1	20506227		32-8	Worm gear	1	61007941	
13	Clutch lever shim (0.2)	(1)	20506670		32-9	Gear box bearing spacer	1	20503575	
14	Clutch lever shim (0.5)	(1)	20506245		32-10	Gear head	1	61007942	IG-43-KS5 1/49
15	Screw	4	6C500510	SF-5x12	32-11	Motor	1	61007939	With the pinion
16	Clutch lever base	1	20506242		32-12	Spring washer	4	6D510040	WS-4
17	Lever pin	2	60032325		32-13	Hexagon socket head cap screw	4	6C030450	BC-4x50
18	Bearing	2	6A036200	6200ZZ	33	Clutch shaft	1	20506220	
19	Bearing plate	2	20503582		34	Nut	1	6D030080	NH-8
20	Screw	6	6C500410	SF-4x10	35	Ball plunger	1	20506237	BST8AL
21	Wheels spacer	2	20506246		36	Hexagon socket head cap screw	1	6C030630	BC-6x30
22	Idler wheel	1	60030244		37	Nut	2	6D030060	NH-6
23	Drive wheel	1	60030243		38	Hexagon socket head cap screw	1	6C030620	BC-6x20
24	Fixed washer	2	60030242		39	Spring	1	20506261	
25	Round washer	2	60030241		40	Connecting bar B	1	20506224	
26	Screw	2	6C510515	SM-5x15	41	Wave shape washer	1	20509327-Y	W-16
27	Drive shaft assembly	1	20506422		42	Metal washer	1	20509328	
27-1	Drive shaft	1	20506221						
27-2	Key for drive shaft	1	20506262						
27-3	Clutch wheel	1	20506225						
27-4	Worm wheel	1	20506232						
27-5	Worm wheel spacer	1	20506228						
27-6	Wave shape washer	2	20509332	PACK-WVWS-V12-D15					
28	Key	1	20506247	4x4x10L					
29	DU bush	2	60038164	MB0806-15FDU					

## 12.2 Outside parts







## Electrical parts

ITEM No.	PART NAME	QTY	STPCK No	REMARKS	ITEM No.	PART NAME	QTY	STOCK No	REMARKS
80	Operation board assembly	1	20506436		88	Push button switch assembly	1	20506474	~ switch harness plaiting
80-1	Operation name plate	1	20507065			Push button switch	1	60036249	SB-221
80-2	Screw	10	6C570308	SP-3x8(WS,WF)	89	Screw	5	6C570308	SP-3x8(WS,WF)
80-3	Screw	2	6C570305	SP-3x5(WS,WF)	90	Ground wire plaiting B	1	20506532	
80-4	Panel spacer	1	20506239		91	Spacer	4	20506525	ASB-306E
80-5	Acrylic plate	1	20503617		92	Power supply	1	64000511	ZWS50B-24/CO2
80-6	Glass	1	20503619		93	Ground wire plaiting A	1	20506531	
80-7	Glass support	1	20503588		94	Harness plaiting A	1	20506483	CN1~ Receptacle assembly
80-8	Operation plate cover	1	20506313		95	Screw	5	6C570306	SP-3x6(WS,WF)
80-9	Dustproof nut	1	60032480		96	L-MD-A substrate	1	20508809	★
80-10	Waterproof cap	1	60032431		97	Harness plaiting B	1	20506482	CN51~ MD-CN1
80-11	Spacer	2	60036469	SP-5	98	Harness plaiting C	1	20506481	MD-CN6~ Receptacle assembly
80-12	Receptacle assembly	1	20506464	~Harness plaiting A ~Harness plaiting C	99	Harness plaiting D(4P ~4P)	1	20506478	MD-CN3~ SW-CN2
	Receptacle	1	64000510	NCS-255-R(square)	100	Terminating resistance assembly 4P	1	61006519	MD-CN2
80-13	L-DSP-A substrate	1	20508806	★	101	Screw	7	6C570410	SP-4x10(WS,WF)
80-14	Harness plaiting(4P~4P)	1	20506476	DSP-CN2~ SW-CN3	102	Polycarbonate plate	1	20507153	0.25tx90Wx120L
80-15	Short circuit connector	1	20506479	DSP-CN7	103	Power cable	1	20506329	★
	Short circuit connector	1	20506479	DSP-CN8					
80-16	Terminating resistance assembly 5P	1	61006520	DSP-CN5					
80-17	Switch harness plaiting	1	20506470	DSP-CN9 With arc selector switch					
80-18	Arc selector switch	(1)	6N110009						
80-19	L-SW-A(MAIN) substrate	1	20508811	★					
80-20	Nut (54D)	1	6D400001						
80-21	Knob	1	61005744	K-90-S					
80-22	Screw	2	6C570306	SP-3x6(WS,WF)					
81	e-box	1	20506231						
82	Nut(54D)	1	6D400001						
83	L-SW-A(MULTISWITCH) substrate	1	61006244						
84	Harness plaiting E (3P~3P)	1	20506477	SW-CN4~ ENC-CN4					
85	Dustproof nut	1	60032480						
86	Water proof cap	1	60032431						
87	Direction selector switch assembly	1	20506475	~ switch harness plaiting					
	Direction selector switch	1	20506230	S-3A					

## 13 Cutting Data

### Cutting hole diameter (mm)

TIP SIZE TYPE	00	0	1	2	3	4	5	6	7	8
STANDARD	0.8	1.0	1.2	1.4	1.6	1.9	2.3	2.7	3.0	3.4
D5 type		0.8	1.0	1.2	1.4	1.6	1.8	2.1		
D7 type		0.6	0.9	1.1	1.3	1.5	1.8	2.1	2.6	3.2

### 102(STANDARD SPEED) For Acetylene

PLATE THICKNESS (mm)	TIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	ACETYLENE	CUTTING OXYGEN	PREHEATING OXYGEN	ACETYLENE
3~5	00	700~660	1.5 / 0.15	0.2 / 0.02	690	410	370
5~10	0	660~550	2.0 / 0.2	0.2 / 0.02	1,200	410	370
10~15	1	550~490	2.5 / 0.2	0.2 / 0.02	2,100	480	430
15~30	2	490~400	3.0 / 0.25	0.2 / 0.02	3,400	480	430
30~40	3	400~350	3.0 / 0.3	0.2 / 0.02	4,300	480	430
40~50	4	350~320	3.5 / 0.35	0.25 / 0.025	6,500	550	500

### 102-D5 type (Acetylene)

PLATE THICKNESS (mm)	TIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	ACETYLENE	CUTTING OXYGEN	PREHEATING OXYGEN	ACETYLENE
5~10	0	700~625	5.0 / 0.5	0.2 / 0.02	1,600	520	470
10~15	1	625~550			2,400	600	550
15~30	2	550~475			3,600	600	550
30~40	3	475~425			4,800	600	550
40~50	4	425~350			5,600	750	680

### 102-D7(HIGH SPEED) For Acetylene

PLATE THICKNESS (mm)	TIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	ACETYLENE	CUTTING OXYGEN	PREHEATING OXYGEN	ACETYLENE
5~10	0	750~680	7.0 / 0.7	0.2 / 0.02	1,100	520	470
10~15	1	680~600			2,500	600	550
15~30	2	600~500			3,800	600	550
30~40	3	500~450			5,400	600	550
40~50	4	450~400			7,300	750	680



**106(STANDARD SPEED) For Propane**

PLATE THICKNESS (mm)	CHIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	PROPANE	CUTTING OXYGEN	PREHEATING OXYGEN	PROPANE
3~5	00	700~660	1.5 / 0.15	0.2 / 0.02	690	1,180	310
5~10	0	660~550	2.0 / 0.2	0.2 / 0.02	1,200	1,180	310
10~15	1	550~490	2.5 / 0.2	0.2 / 0.02	2,100	1,180	310
15~30	2	490~400	3.0 / 0.25	0.25 / 0.025	3,400	1,370	360
30~40	3	400~350	3.0 / 0.3	0.25 / 0.025	4,300	1,370	360
40~50	4	350~320	3.5 / 0.35	0.3 / 0.03	6,500	1,860	490

**106-D5 type (Propane)**

PLATE THICKNESS (mm)	CHIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	PROPANE	CUTTING OXYGEN	PREHEATING OXYGEN	PROPANE
5~10	0	700~625	5.0 / 0.5	0.2 / 0.02	1,600	1,180	310
10~15	1	625~550		0.2 / 0.02	2,400	1,180	310
15~30	2	550~475		0.25 / 0.025	3,600	1,370	360
30~40	3	475~425		0.25 / 0.025	4,800	1,370	360
40~50	4	425~350		0.3 / 0.03	5,600	1,860	490

**106-D7(HIGH SPEED) For Propane**

PLATE THICKNESS (mm)	CHIP SIZE	CUTTING SPEED (mm/min)	PRESSURE (kg/c m <sup>2</sup> ) / (Mpa)		FLOW RATE L/H		
			OXYGEN	PROPANE	CUTTING OXYGEN	PREHEATING OXYGEN	PROPANE
5~10	0	750~680	7.0 / 0.7	0.2 / 0.02	1,100	1,180	310
10~15	1	680~600		0.2 / 0.02	2,500	1,180	310
15~30	2	600~500		0.25 / 0.025	3,800	1,370	360
30~40	3	500~450		0.25 / 0.025	5,400	1,370	360
40~50	4	450~400		0.3 / 0.03	7,300	1,860	490

## NOTE

- 1) All pressures are torch inlet pressures.
- 2) Oxygen purity is minimum of 99.7%, propane is minimum of JIS Grade 3.
- 3) Depending on the surface condition of the steel plate (scale, paint) either increase the fuel gas pressure or decrease the cutting speed. Also, when precision cutting is required, adjust all data.