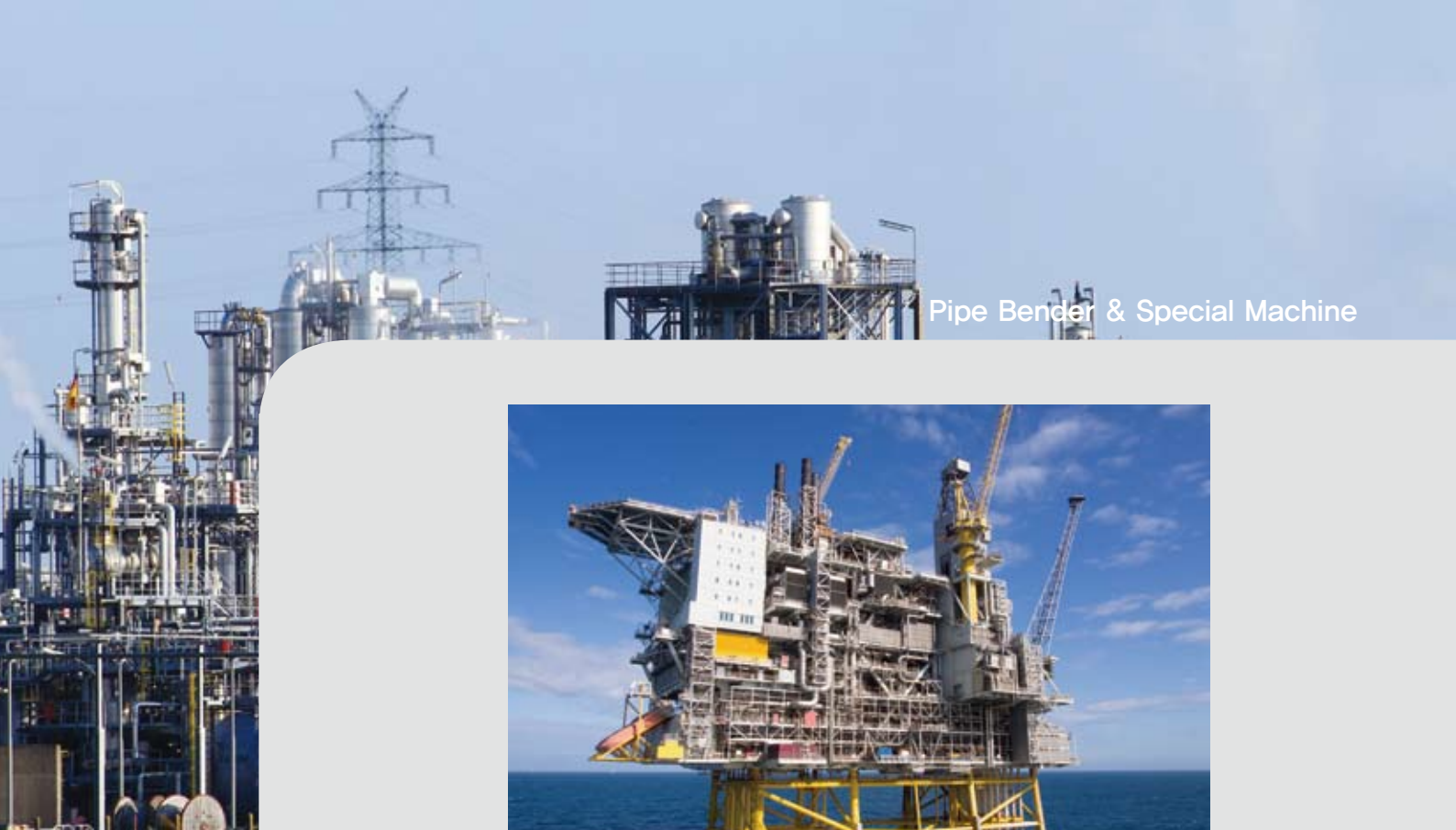


# 육상/해상배관 & 조선스플제작설비

Manufacturing the equipment for onshore /  
off shore plant and shipbuilding  
spool production



**BSD**  
(주)비에스디



### 제품소개

#### Products introduction

##### ▶ CUTTING (절단설비)

- PIPE COASTER
- GAS CUTTING M/C
- ELBOW CUTTING M/C

##### ▶ BENDER (성형설비)

- INDUCTION BENDER
- PIPE BENDER
- FIN-TUBE BENDER
- PANEL BENDER
- SWAGING M/C

##### ▶ MANUFACTURE (가공설비)

- FACING M/C

##### ▶ WELDING JIG (용접보조설비)

- ROTATOR
- TURNING ROLL
- POSITIONER
- MANIPULATOR

##### ▶ FREIGHT / ETC (운반설비/기타)

- JIB CRANE
- TRANSFER



## Global Business Organizer Creating New Value

Pipe Bender, Rotator, Turning-Roll, Coaster, Gas Cutting M/C, Positioner,  
Elbow Cutting M/C, Beveling M/C & etc.

### 인사말

Greetings

안녕하십니까? (주)비에스디입니다.

항상 귀사의 발전과 행운이 깃들기를 기원합니다.

저희 (주)비에스디는 조선SPOOL 및 건설, 화학플랜트에 소요되는 파이프 & 압력용기등의 용접 및 형상가공을 하기 위한 장비를 제작하는 업체로써, 최고의 품질과 최선의 납기로 고객만족 및 현장에서 사용하는데 있어서 견고하고 안정된 장비를 제작하여, 생산성 및 품질향상에 기여하고 있습니다.

감사합니다.



Welcome to BSD Co.,Ltd.

We look forward to working closely with you.

We at BSD are specialists in manufacturing particular equipment used in the process of creating pipes and pressure vessels consumed in the creation of shipbuilding spools, chemical and construction plants.

The company has consistently met customer needs by providing unsurpassed quality and delivery services of all our products and services. We continuously seek ways to further strengthen our heavy-duty equipment while simultaneously improving productivity and quality.

Thank you.

## 절단설비

## CUTTING

### CNC Pipe Coaster (Disk Type)

파이프 모관 & 지관 또는 슬로더 절단을 행하는 장비로써, 전용 CAM Program으로 절단 Data를 저장하여 원하는 모형대로 작업이 가능한 장비

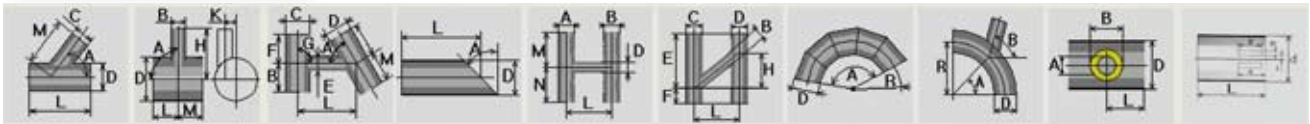
This machine is responsible for the cutting of main and branch pipes or slots. As the machine has an inbuilt CAM program, it is easier to achieve the desired results—just store a specification in the machine's memory.



Disk Type (5Axis)

- 강력한 성능과 탁월한 조작능력
- 별도 후공정 작업 없이 접합 용접을 용이하게 정밀절단
- 다양한 모형 절단 가능
- 터치스크린 방식 및 P/C 겸용
- Strong performance and excellent operating capability.
- Precision cutting of weld joints without post process.
- Cutting to various shapes.
- Both touch screen control and P/C control.

### PATTERN MODEL



### SPECIFICATION

MODEL		SK-COS5-600N	SK-COS5-800N	SK-COS5-1000N
MIN. PIPE DIAMETER		65A	65A	65A
MAX. PIPE DIAMETER		600A	800A	1000A
MAX. PIPE WEIGHT		Max. 2000Kg		
EFFECTIVE PIPE LENGTH		Max. 6000mm		
CUTTING PROCESS		OXYGEN & PLASMA		
AIR PRESSURE		5Kg/cm <sup>2</sup>		
TABLE HEIGHT		F.L +770mm		
CUTTING THICKNESS (STEEL)	GAS	Max. 100mm		
	PLASMA	100A : Max. 25mm / 200A : Max. 40mm		
TORCH BEVEL ANGLE	ANGLE	100A : ±60° / 200A : ±50°		
	ANGLE CONTROL	AUTO & MANUAL		
TORCH UP-DOWN	DRIVING	AC SERVO MOTOR		
	STROKE	Max. 750mm	Max. 950mm	Max. 1150mm
	SPEED	Max. 50mm		
CARRIAGE	DRIVING	AC SERVO MOTOR		
	TRAVEL STROKE	Max. 6300mm		
	TRAVEL SPEED	Max. 6m/min		
TURNING ROLLER	DRIVING	AC SERVO MOTOR		
	ROLLER DIA	Ø300	Ø375	Ø375
	DRIVING	AC SERVO MOTOR		
POWER SOURCE		220V×Ø3×60Hz		
TOTAL ELECTRIC POWER		7Kw (EXCEPT PLASMA)		
SIZE (W×H×L) (mm)		2000×2500×8025	2100×2700×8025	2200×2900×8025
MACHINE WEIGHT		4500Kg	5000Kg	5500Kg
OPTION		EFFECTIVE PIPE LENGTH : 12,000mm		
OPTION		PLASMA 100A or 200A		

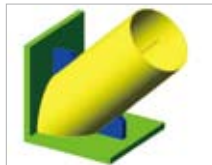
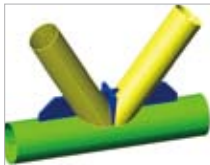
## 절단설비

## CUTTING

### CNC Pipe Coaster (Chuck Type)



Chuck Type (5Axis)



## SPECIFICATION

MODEL		SK-COSC-800	SK-COSC-1000	SK-COSC-1500
MIN. PIPE DIAMETER		40A	65A	300A
MAX. PIPE DIAMETER		800A	1000A	1500A
MAX. PIPE WEIGHT		Max, 4000Kg	Max, 4000Kg	Max, 5000Kg
EFFECTIVE PIPE LENGTH		Max, 12000mm		
CUTTING PROCESS		OXYGEN (PLASMA : OPTION)		
AIR PRESSURE		5Kg/cm <sup>2</sup>		
TABLE HEIGHT		F.L +1150mm		
CUTTING THICKNESS (STEEL)	GAS	Max, 100mm		
	PLASMA	100A : Max, 25mm / 200A : Max, 40mm		
TORCH BEVEL ANGLE	ANGLE	GAS : $\pm 70^\circ$ / PLASMA(100A) : $\pm 60^\circ$ / PLASMA(200A) : $\pm 50^\circ$		
	ANGLE CONTROL	AUTO & MANUAL		
TORCH UP-DOWN	DRIVING	AC SERVO MOTOR		
	STROKE	Max, 650mm	Max, 750mm	Max, 850mm
	SPEED	Max, 1000mm/min		
CARRIAGE	DRIVING	AC SERVO MOTOR		
	TRAVEL STROKE(LEFT&RIGHT)	Max, 12300mm		
	TRAVEL SPEED(LEFT&RIGHT)	Max, 12000mm/min		
HEADSTOCK (CHUCK)	DRIVING	AC SERVO MOTOR		
	MOVING	AUTO & MANUAL		
	SPEED	0.5~6RPM		
	CENTERING	MANUAL		
	CHUCKING DIA	$\varnothing 800$	$\varnothing 1000$	$\varnothing 1500$
	CHUCK UP/DOWN	AIR CYLINDER ( $\varnothing 50 \times 100$ ST)		
SUPPORT UNIT		AC MOTOR		
POWER SOURCE		3SET : MANUAL TYPE		
TOTAL ELECTRIC POWER		220V $\times$ $\varnothing 3 \times 60$ Hz		
SIZE (W $\times$ H $\times$ L) (mm)		10Kw	12Kw	15Kw
MACHINE WEIGHT		2180 $\times$ 2910 $\times$ 15160	2280 $\times$ 3010 $\times$ 15160	2465 $\times$ 3350 $\times$ 15340
PROGRAM		10,000Kg	10,500Kg	13,000Kg
		AUTO CAD CAM PROGRAM		



## 절단설비

### CUTTING

#### Gas Cutting M/C

파이프를 원하는 길이대로 절단하는 설비!

- 자동점화 & 소화기능
- 편리한 이동성, 간편조절
- 토치 상하 조절 가능
- 토치부 LM guide 사용으로 떨림방지 (노치발생 없음)



This equipment cuts the pipes to the desired length!

- Automatic ignition and extinguishing function.
- Easy to transport and control.
- Torch is freely adjustable, up and down.
- Vibration free with LM guide at torch. (No notch is allowed.)



#### SPECIFICATION

MODEL		SK-SPGC 600/800/1000(GENERAL TYPE)	NOTE
CUTTING SIZE		80A~1,000A×6,000m/min	
IGNITION TYPE		BUTTON TYPE (AUTO IGNITION)	
CUTTING SPEED (MIN~MAX)		0~2,005m/min (INVERTER CONTROL)	
TORCH HEIGHT ADJUSTMENT		MANUAL	
MOTOR	DRIVE	0.75Kw	
	TORCH LIGHTER	0.4Kw	
MEASUREMENT	LENGTH	7070mm	
	HEIGHT	2500mm	
	WIDTH	1140mm	
	WEIGHT	3000Kg	

## 절단설비

### CUTTING

#### Elbow Cutting M/C

45° 및 90° Elbow를 필요한 각도로 절단하는 장비

- Touch 방식으로 제어장치 및 각도 조절이 용이하며 빠른 절단 작업이 가능
- 기존 제품 회전 방식에 비해 작업 공간이 작아 공간 활용도가 높음
- 자동최적화, 소화기능 내제



This equipment cuts the 45° and 90° elbows to the desired angles.

- Easy angle control and fast cutting with touch method.
- Higher space utilization compared with the conventional rotation methods.
- Built-in auto optimization and extinguishing functions.



#### SPECIFICATION

MODEL		SK-ECM 600N	NOTE
CUTTING CAPACITY		200~600A	
LOADING CAPACITY		600Kg	
CHUCK CLAMPING METHOD		MANUAL BY HANDLE	
CHUCK TILTING	METHOD	WORM REDUCER BY GEARED MOTOR	
	ANGLE	0~90°	
	SPEED	1.5~5°/SEC	
	CONTROL	MANUAL	
TABLE ROTATION (CUTTING)	METHOD	WORM REDUCER BY GEARED MOTOR	
	ANGLE	±360°	
	SPEED	Max.32mm/sec	
	CONTROL	MANUAL	
MACHINE	LENGTH	2,500mm	
	HEIGHT	3,600mm	
	WIDTH	1,400mm	
	WEIGHT	2,400Kg	

## 성형(벤딩)설비

### BENDER

#### Induction Bender (3Axis)

- 튼튼한 일체형 Frame으로 제작
- 간편한 조작 가능
- 2개의 메인실린더 장착
- 압축 벤딩 시스템 장착
- 파이프 중심 유지를 위한 가이드롤러 시스템 장착
- 디지털 데이터로 출력 가능
- Rigid and integral frames.
- Excellent operating capability
- Double type of main cylinder
- Compression Bending System
- Guide roller system for pipe center
- Output of digital data



#### SPECIFICATION

MODEL	SK-HFB 300N	SK-HFB 600N	SK-HFB 900N	NOTE
PIPE DIAMETER	4" ~ 12"	8" ~ 24"	12" ~ 36"	
WALL THICKNESS	3.2~40mm	6~60mm	6~80mm	
PIPE LENGTH	6,000mm / 12,000mm			
BENDING RADIUS (Min. 1.5DR / Max. 5DR)	150~1650mm	320~3100mm	470~4600mm	
BENDING ANGLE	90° (Option 180°)			
BENDING SPEED	12~200mm/min	10~120mm/min	8~80mm/min	
FEEDING SPEED (NO-LOAD)	Max. 2,000mm/min			
OUTPUT POWER	200Kw	350Kw	500Kw	
GUIDE ROLLER CONTROL	Electric Control			
BENDING ARM CONTROL	Electric Control			
C/T BOX CONTROL	Electric Control			
WALL THINNING RATE (up to 90°)	3 DR : Max. 12.5% 5 DR : Max. 10.0%			
COOLING SYSTEM	Cooling Pump & Cooling Water Tank			
COOLING WATER (ℓ / min)	400 ℓ	500 ℓ	800 ℓ	

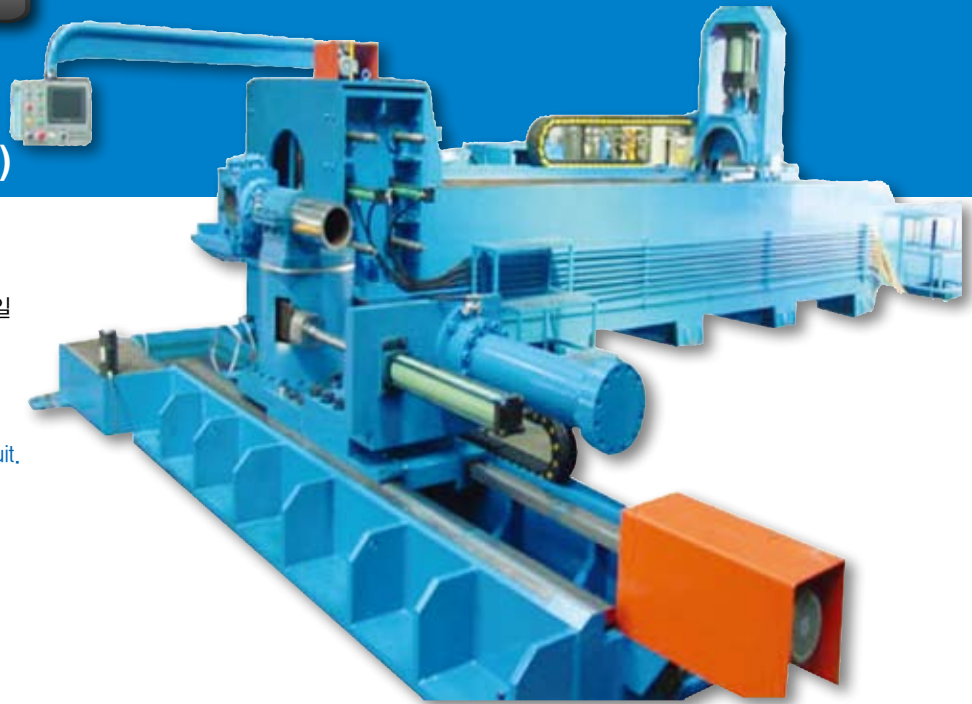


## 성형(벤딩)설비

### BENDER

#### Induction Bender (2Axis)

- 튼튼한 일체형 Frame으로 제작
- 각도 디지털제어
- 작업자의 조작이 용이
- 시퀀스 회로방식으로 작업 상태가 균일
- 터치스크린지원
- Rigid and integral frames.
- Digital control of angles.
- Easy operation.
- Uniform work with a sequence circuit.
- Touch screen support.



#### SPECIFICATION

MODEL		SK-HFB 600	SK-HFB 1000	NOTE
MAX.TUBE DIAMETER		100A~600A	600A~1000A	
BENDING	ROTATE	90°		
	SPEED	15~50mm/min		
	CENTER	F,L+1138mm	F,L+1238mm	
	RADIUS	Min:2D, Max:5D	Min:2D, Max:5D	
GUIDE ROLLER CONTROL		MANUAL		
BENDING ARM CONTROL		MANUAL		
COOLING SYSTEM		COOLING PUMP, TANK		
HIGH-FREQUENCY	POWER SOURCE	3Ø×440V×60Hz		
GENERATING	POWER SOURCE	PHASE(3Ø) CONTROL TYPE		
EQUIPMENT	HIGH-FREQ	250Kw	350Kw	
TOTAL ELECTRIC POWER		350Kw	450Kw	
COOLING WATER		700 ℓ	1000 ℓ	
HYDRAULIC	HYD MOTOR	15HP×6P×440V	22HP×6P×440V	
		10HP×6P×440V	15HP×6P×440V	
OIL TANK		1200 ℓ	1500 ℓ	
MACHINE	LENGTH	15,000mm	17,000mm	
	HEIGHT	3,000mm	3,300mm	
	WIDTH	7,000mm	7,200mm	
	WEIGHT	45,000Kg	56,000Kg	

## 성형(벤딩)설비

### BENDER

#### Pipe Bender

Pipe Bender 파이프를 임의의 각도로 구부리기 위하여 사용하는 설비

- 튼튼한 일체형 Frame으로 제작
- 금형의 장착이 용이하도록 크립식으로 제작
- 각도 디지털제어
- 작업자의 조작이 용이
- 시퀀스 회로방식으로 작업 상태가 균일

This equipment is used to bend the pipe bender pipes to the desired angle.

- Rigid and integral frames.
- Clip type for easy die mounting.
- Digital control of angles.
- Easy operation.
- Uniform work with a sequence circuit.



#### SPECIFICATION

MODEL		SK-BD 65	SK-BD 100	SK-BD 150	NOTE
MAX.TUBE DIAMETER		15A~65A	65A~100A	100A~150A	
EFFECTIVE TUBE LENGTH		6,000mm	6,000mm	6,000mm	
BENDING	ROTATE	190°			
	SPEED	20°/Sec	15°/Sec	7.0°/Sec	
	CENTER	F.L+1141mm	F.L+1091mm	F.L+1368mm	
	RADIUS	Min:2.5D, Max:3D			
FORMER		1-STEP			
PRESSURE DIE BOOSTER		HYDRAULIC			
HYDRAULIC PUMP MOTOR		7.5Kw (11Kw)	15Kw (18.5Kw)	22Kw	
AMOUNT HYDRAULIC OIL		400Liter	500Liter	700Liter	
CONTROL		1 CYCLE AUTO (SEMI AUTO)			
TOTAL ELECTRIC POWER		7.5Kw	18Kw	25Kw	
MACHINE	LENGTH	6,700mm	6,895mm	8,200mm	
	HEIGHT	1,200mm	1,316mm	1,570mm	
	WIDTH	1,250mm	1,325mm	2,785mm	
	WEIGHT	5,500Kg	7,500Kg	13,000Kg	

※ Available SK-BD80 (15A~80A), SK-BD125 (80A~125A)

## 성형(벤딩)설비

### BENDER



#### Fin-Tube Bender

보일러에 사용되는 핀튜브 파이프를 원하는 각도로 벤딩을 하는 설비  
This equipment bends boiler pin tube pipes to the desired angles.



#### Panel Bender

보일러에 사용되는 Pipe를 다단으로 동시 벤딩할 수 있는 설비  
This equipment can simultaneously bend boiler pipes in multistage.



#### Swaging Machine

Pipe 끝단부를 확관 또는 축관하는 설비  
This equipment increases or decreases the diameter of the pipe end.



## Facing Machine 600A/800A (CNC)

파이프 끝단을 원하는 모양으로 개선  
가공하기 위한 가공설비

- 다양한 패턴 형상 가능
- 쉬운 조작과 편리성
- 외경그루브(홈) 가공
- 우수한 내구성과 단순성
- CNC제어/정확한 작업

This equipment is used for bevel cutting, to make the pipe ends to the desired shapes.

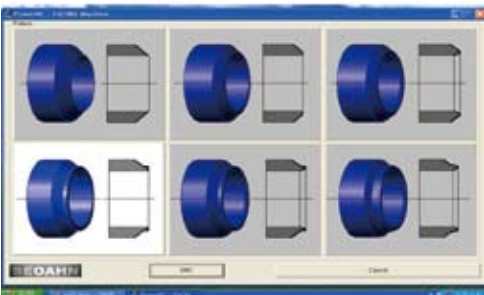
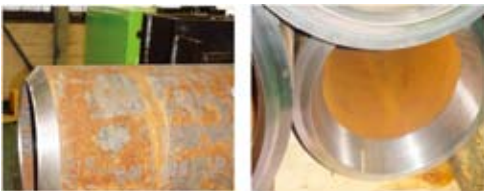
- Various patterned shapes.
- Easy and convenient operation.
- Excellent durability and simplicity.
- CNC control/accurate work.



### SPECIFICATION

MODEL	SK-CBV 600	SK-CBV 800	NOTE
WORKABLE PIPE DIA	Ø150~600mm (6"~24")	Ø350~800mm (8"~32")	
PLATE FACE DIAMETER	Ø600mm	Ø800mm	
BITE HOLDER FOR BEVELING/FACING	1EA/1EA	1EA/1EA	
SPINDLE RPM	40~200RPM	40~200RPM	
SPINDLE MOTOR CAPACITY	7.5Kw	11Kw	
MANUAL FEED	4mm/rev	4mm/rev	
WISE CLAMPING RANGE	Ø150~600mm (6"~24")	Ø200~800mm (8"~32")	
CENTERING ADJUST BY MANUAL	±5mm, 2mm/rev	±5mm, 2mm/rev	
SIZE	LENGTH	2500mm	
	WIDTH	2400mm	
	HEIGHT	2050mm	
	CENTERING HEIGHT	1250mm	
NET WEIGHT	8000Kg	10000Kg	

### RESULT



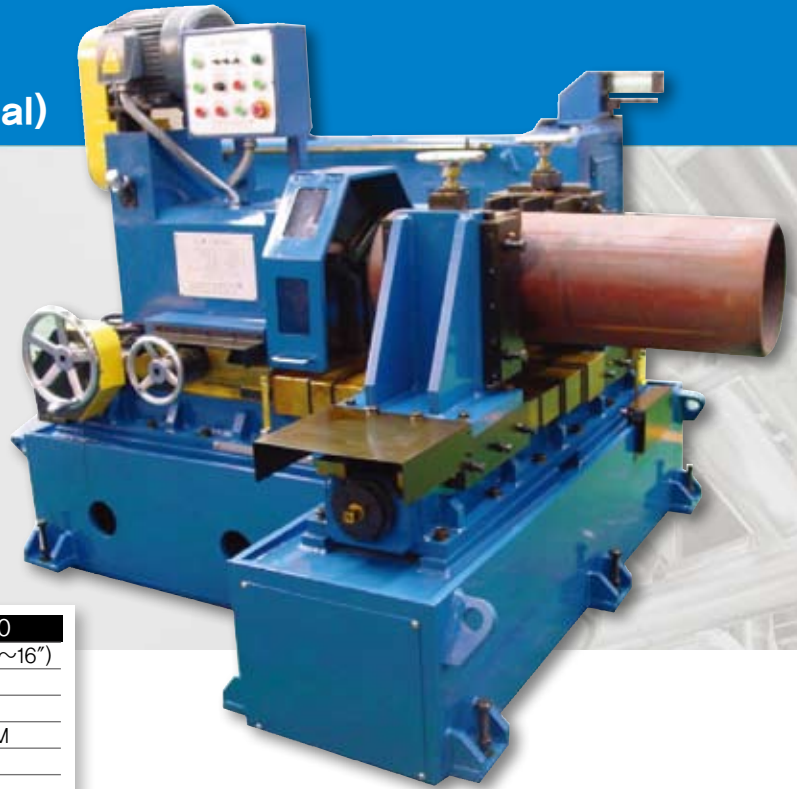
### FACING LIFTER



### OPTION:PIPE UP-DOWN&TURNING ATT

MODEL	SK-CBV 600	SK-CBV 800	NOTE
WORK DIA	150A~600A	350A~800A	180°(회전가능) Stroke : 300mm
WORK LENGTH	6000mm		
SIZE	L6000×W800×H1250		

## Facing Machine 400A (Manual)



### SPECIFICATION

MODEL		SK-BV 400
WORKABLE PIPE DIA		Ø75~400mm(3"~16")
PLATE FACE DIAMETER		Ø420mm
BITE HOLDER FOR BEVELING/FACING		3EA
SPINDLE RPM		40~200RPM
SPINDLE MOTOR CAPACITY		3.7Kw
MANUAL FEED		4mm/rev
VISE CLAMPING RANGE		Ø75~410mm(3"~16")
CENTERING ADJUST BY MANUAL		±5mm, 2mm/rev
SIZE	LENGTH	1600mm
	WIDTH	1250mm
	HEIGHT	1500mm
	CENTERING HEIGHT	950mm
NET WEIGHT		5000Kg

※ Available SK-BV600 (4"~24") Manual



## Small Facing Machine (Manual)

- 강력한 파워와 탁월한 조작성
- 우수한 내구성과 안전성
- 조작이 간편함
- 제품 크램프 유압 SYSTEM

- Strong power and excellent operability.
- Excellent durability and safety.
- Easy operation.
- Hydraulic pressure clamping system.



### SPECIFICATION

MODEL	SK-BV 125	NOTE
CAPACITY	20A~125A	
SIZE	L1080×W1321×H680	
TYPE	LM GUIDE TYPE	

※ Available SK-BV150 (20A~150A)

## 용접보조설비

### WELDING JIG

#### Pipe Rotator

각종 파이프 플렌지 연결시 간단한 조작으로 작업의 안전성과 편리성을 위해 생산된 용접보조설비

- 강력한 파워와 탁월한 조작성
- 우수한 내구성과 안전성
- 편하중 작업을 흘러내림 방지
- 웜기어 방식(업계최초)
- 회전물 접촉성 유지

Safe and convenient welding equipment when connecting pipe flanges with simple operation.

- Strong power and excellent operability.
- Excellent durability and safety.
- Anti slip function for the eccentric work piece.
- Worm gear method. (for the first time in the industry)
- Maintaining the contact with rotating parts.



#### SPECIFICATION

MODEL	SK-ROT 300 SK-ROT 300N	SK-ROT 600 SK-ROT 600N	SK-ROT 1000 SK-ROT 1000N	NOTE
LOAD PIPE	25A~300A	50A~600A	150A~1,000A	WHEN IT IS KEPT HORIZONTAL
C/P	1,000Kg	2,000Kg	3,000Kg	
ROLL SIZE	Ø138×180L	Ø148×210L	Ø148×210L	INVERTER CONTROL
TURNING SPEED	0~1,635mm/Min	0~1,300mm/Min	0~1,000mm/Min	
TILTING ANGLE	±45°	±50°	±50°	
CONTROL SYSTEM	MAIN P/L AND EMERGENCY S/W FOOT S/W			TURNING ON/OFF
SAFETY DEVICES	TILTING SAFETY PIN ATTACHMENT			
TILTING REDUCER PROTECTION	FIX REDUCER SHAFT (BUSS TYPE) TO FRAME			
TURNING ROLL B.R.G	ASSEMBLY OF B.R.G COVER.(PROTECTION FROM FOREIGN MATERIALIS)			

※ SK-ROT300/600/1000 : Chain Driving Type    ※ SK-ROT300N/600N/1000N : Worm Driving Type  
 ※ Other model : SK-ROT 1000N(H)-1000A (HEAVY) / SK-ROT 1200N-1200A / SK-ROT 1500N-1500A



## 용접보조설비

### WELDING JIG

#### Turning Roll

- 강력한 파워와 탁월한 조작성
- 우수한 내구성과 안전성
- Strong power and excellent operability.
- Excellent durability and safety.



#### SPECIFICATION

MODEL	SK-TR 05	SK-TR 10	SK-TR 20	SK-TR 30	SK-TR 50
LOADING C/P	Max.5,000Kg	Max.10,000Kg	Max.20,000Kg	Max.30,000Kg	Max.50,000Kg
TURNING C/P	5,000Kg	10,000Kg	20,000Kg	30,000Kg	50,000Kg
WELDING SPEED	0.27~1.35RPM	0.27~1.35RPM	0.27~1.35RPM	0.27~1.52RPM	0.27~1.65RPM
TANK DIAMETER RANGE	Ø220~Ø1,500mm	Ø400~Ø2,000mm	Ø400~Ø3,000mm	Ø400~Ø4,000mm	Ø380~Ø5,000mm
ROLL SIZE	Ø280~Ø120W	Ø320~Ø120W	Ø320~Ø120W	Ø340~Ø170W	Ø400~Ø200W
ELECTRIC SOURCE	220V, 60Hz 3Ø				

MODEL	SK-TR 80	SK-TR 100	SK-TR 200	NOTE
LOADING C/P	Max.80,000Kg	Max.10,000Kg	Max.200,000Kg	
TURNING C/P	80,000Kg	100,000Kg	200,000Kg	
WELDING SPEED	0.27~1.75RPM	0.27~0.8RPM	0.27~0.6RPM	AC MOTOR OR DC MOTOR
TANK DIAMETER RANGE	Ø500~Ø7,000mm	Ø500~Ø8,000mm	Ø1,000~Ø10,000mm	
ROLL SIZE	Ø420~Ø220W	Ø480~Ø220W	Ø550~Ø280W	
ELECTRIC SOURCE	220V, 60Hz 3Ø			

## WELDING JIG

### Positioner (Perpendicular Type)

대형관 및 편하중관의 작업을 용이하고 안전하게 할 수 있도록 제작된 용접설비

High quality welding equipment designed for large and unconventional pipe.



### SPECIFICATION

	MODEL	SK-POS(ST) 1100	SK-POS(ST) 600	NOTE
PIPE SIZE	OUT DIAMETER	65A~1100A(3"~44")	65A~600A(3"~24")	
	WALL THICKNESS	40mm		
	LENGTH	1000~10000mm		
	MAX WEIGHT	10000Kg	5000Kg	
ROTATING ASS'Y	METHOD	AC MOTOR + CYCLO REDUCER+RING GEAR+PINION		
	CENTER HEIGHT	FL 2100mm	FL 1650mm	
	SPEED	1750×1/187×24/120=1.87RPM	1750×1/231×22/90=1.85RPM	
	AC MOTOR	7.5KW×1750×380V(B-TYPE BRAKE)	3.7KW×1750×380V(B-TYPE BRAKE)	
	CYCLO REDUCER	7.5Kw×1/187	3.7Kw×1/231	
CHUCKING ASS'Y	METHOD	AIR IMPACT + SCREW HANDLE		
	STROKE	550	290	
	SUPPORT ROLL	URETHAN COAT ROLL + SHARP ROLL		
SUPPORT ASS'Y	UP-DOWN METHOD	AIR IMPACT + JACK SCREW + GUIDE BAR		
	JACK SCREW	SJ73-600	SJ66S-300	
	STROKE	600	300	
	MAIN POWER	380V	380V	
ELECTRIC POWER	CONTROL POWER	220V	220V	
	UTILITY	AIR PRESSURE	5Kg/cm <sup>2</sup>	

## 용접보조설비

### WELDING JIG

#### Manipulator

붐 끝단부에 용접토치를 탑재하여 압력 용기, 각종 TANK류, 대구경 파이프를 자동으로 직선 용접을 하거나 로테이터, 포지셔너, 터닝롤과 조합하여 접합부 원주용접을 자동으로 할 수 있는 장치

This equipment is used to automatically weld pressure vessels, tanks, and large diameter pipes in linear way by mounting a welding torch at the end of the boom or automatically weld in circumferential way in combination with rotators, positioners and turning rolls.



#### SPECIFICATION

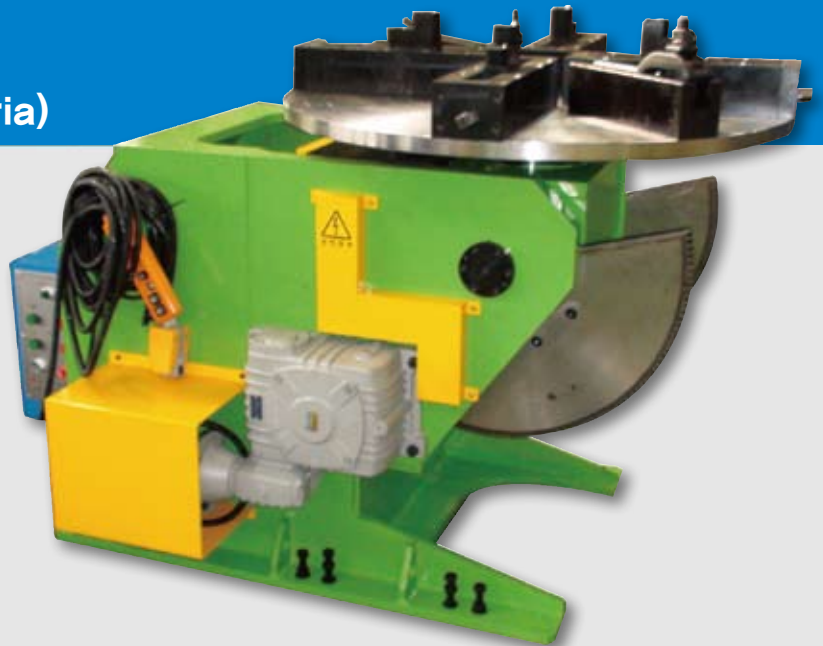
MODEL		SK-MAN 2000		SK-MAN 6000		NOTE
HOISTING STROKE		2000mm		5000mm		
HOISTING SPEED		1830mm/Min		1993mm/Min		
BOOM STROKE		2000mm		6000mm		
BOOM SPEED		Max.2260mm/Min		Max.2015mm/Min		
COLUMN ROTATION ANGLE		±180°		±180°		
COLUMN ROTATION METHOD		MANUAL		MANUAL		
POWER SUPPLY		380V×60Hz×3PH		380V×60Hz×3PH		
HOIST PART	MOTOR	AC 0.4Kw×4P B/K		AC 1.5Kw×4P B/K		
	REDUCER	SI-U80L-1/60		DWBM135-A-1/200		
	FEEDING	TIMING PULLEY	14L 075-6F	SPUR GEAR	28Z/94Z	
		TIMING PULLEY	60L 075-6W	SPROCKET	RS120×20T	
		TIMING BELT	337L 075	SPROCKET	RS120×10T	
CROSS HEAD PART	FEEDING	SPROCKET	#RS60×14NT	CHAIN	RS #120-2	
		AC 0.4Kw		AC 0.75Kw		
	REDUCER	SI-S60R-1/60		DWBM120-A-1/300		
	FEEDING	PINION GEAR	2.5M×21NT	PINION GEAR	M5×22Z	
		TIMING PULLEY	34L 075-6	RACK GEAR	ESFR5-7500	
		TIMING PULLEY	16L 075-6F	X-AXIS	DKM9WD 30BL×90W	
		TIMING BEST	270L 075	Z-AXIS	DKM9WD 30BL×90W	



## WELDING JIG

### Positioner (Several Equilibria)

- 우수한 내구성과 안전성
- 확실한 테이블 경사/정지
- 원활하고 안전한 회전속도
- 손쉬운 조작 (발로 밟는 스위치)
- Excellent durability and safety.
- Accurate table slope/stop.
- Smooth and safe rotating speed.
- Easy operation. (foot switch)



#### SPECIFICATION

MODEL			SK-POS 1200
WELDING CAPACITY			300-1200A
CAPACITY	HORIZONTAL		2000Kg
	VERTICAL		1200Kg
CLAMPING METHOD			MANUAL BY HANDLE
CHUCK	TILTING	METHOD	GEARED MOTOR & WORM REDUCER
		ANGLE	Min, 0°~Max, 135°
		SPEED	Max, 5° / sec
		CONTROL	MANUAL
	ROTATION (WELDING)	METHOD	GEARED MOTOR & WORM REDUCER
		ANGLE	±360°
		SPEED	Max, 1.8RPM
		SPEED CONTROL	MANUAL BY VOLUME
		CONTROL	FOOT & TOGGLE SWITCH
MOTOR	TILTING	2.2Kw	
	ROTATION	0.75Kw	
MEASUREMENT	LENGTH	1780mm	
	HEIGHT	1446.5mm	
	WIDTH	1195mm	
	WEIGHT	2500Kg	

※ Available SK-POS600 (100A~600A), SK-POS1000 (200A~1000A)



## 용접보조설비

### WELDING JIG

#### Positioner (Several Equilibria)



#### SPECIFICATION

MODEL			SK-POS 2000
WELDING CAPACITY			600-2000A
CAPACITY	HORIZONTAL		20000Kg
	VERTICAL		14000Kg
CLAMPING METHOD			MANUAL BY HANDLE
CHUCK	TILTING	METHOD	GEARED MOTOR & WORM REDUCER
		ANGLE	Min. 0°~Max. 135°
		SPEED	Max. 5° / sec
		CONTROL	MANUAL
	ROTATION (WELDING)	METHOD	GEARED MOTOR & WORM REDUCER
		ANGLE	±360°
		SPEED	Max. 0.58RPM
		SPEED CONTROL	MANUAL BY VOLUME
MOTOR	CONTROL		FOOT & TOGGLE SWITCH
	TILTING	7.5Kw	
ROTATION		5.5Kw	
SIZE(L×H×W)			2400×1800×2200mm
WEIGHT			10000Kg



## 운반설비/기타

### FREIGHT/ETC

#### Jib Crane

#### SPECIFICATION

MODEL	
LOADING CAPACITY	950kg
TURNING ANGLE	0~270°
SIZE(L×H×W)	5750X5700X665



# BSD

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