

DCS  **ENG**

S-Cutter

Pipe Cutting & Beveling Machine



www.dcseng.co.kr www.s-cutter.co.kr



The whole view of DCS ENG Co., Ltd.

Company History

- 2008** DCSENG Co., Ltd. Established
Selected for the Ministry of Knowledge Economy's Technology Incubation Project(TBI)
Acquired Korean/International Patent for Pipe Cutting Machine
- 2009** Registered Factory
- 2010** Released Pipe Cutting & Beveling Machine S-500
Registered as a Venture Business
- 2011** Acquired CE(S-500)/ISO9001/ISO14001 Certificates
Acquired Clean Business Certificate
- 2012** Completed Affiliated Corporate Research Center
Registered Korean/International Patents for Pipe Cutting & Beveling Machine(6 cases)
- 2013** Released Pipe Cutting & Beveling Machine S-150
Registered Korean/International Patent for Portable Beveling Machine and 2 other
Released Portable Beveling Machine S-CM4
Started Exporting to China, Japan, And Vietnam(indirect export: Africa/Arab Emirates)
- 2014** Started Developing Pipe Cutting & Beveling Machine for Heavy Pipes
(Selected for national R&D project, Small/Medium Business Administration)
Registered Patents for Pipe Cutting & Beveling Machine for Heavy Pipes and 3 others
Acquired CE(S-150) Certificate
Capital Increase by 592 million KRWAquired Best Family Friendly Management Certificate
- 2015** Acquired Management Innovation Business Certificate
Patent Technology Award
Constructed and moved to new head office building and factory
- 2016** Released Pipe Cutting & Beveling Machine S-100LT / S-150LT / S-200LT



Business Area



Key Technology		Application	Expansion
Pipe Cutting & Beveling Engineering	Government office and residential buildings such as apartment building IT, GMP facilities	Plant industry Oil & Gas Chemical Shipbuilding	Offshore plant Aerospace industry Defense industry

-Cutter

01 S-Cutter is

Efficient equipment that can be used for cutting and beveling of sanitary pipes, stainless pipes, chromium-molybdenum tubes, titanium pipes, super duplex pipes, INCONEL, alloy and copper tubes, aluminum pipes, PP pipes, PE pipes, and PVDF pipes as well as uhp tubes used for super clean pipes and carbon steel.

02 Aren't there such problems as sparks, noise, and dust?

S-Cutter produces no harmful substances.

Now with this, you can work in a safe and efficient manner at a clean and comfortable environment.

03 Isn't the blade consumed too much?

Blade consumption of S-Cutter has been fundamentally reduced.

04 Isn't the blade far too expensive?

Compatible with GF and AXXAIR CUTTERDHK, S-blades have been developed by us and are supplied with top quality and at reasonable prices.

05 S-Cutter is

Widely used for clean piping works, bio, food, and GMP plants, shipbuilding and marine plants, and petro-chemical plants as well as diverse sites including that require a clean working environment.





-CM4

Portable hand beveler

Pipe and board film removal(outer diameter)
or beveling process

25A ~

Maximum 14C



-100LT / 150LT / 200LT

The most cost-effective!
orbital cutting machine,
having the best cost-to-
benefit ratio!

Maximization of the users' convenience

Cutting and beveling up to 1/4 " ~ 8"

Maximum 8,2t

-150

Things are cut, whether thin
or thick, at a single stroke!

Developed into orbital type

Cutting and beveling up to 3/8" ~ 6" (O.D 16mm ~ 170mm)

Maximum 12t



-500

Necessary for stainless piping work!!

Able to cut up to 3/8" ~ 20"

(O.D 16mm ~ 510mm) and conduct beveling with one machine!

Maximum 10t



-300HV/600HV

Necessary for pipe processing factory!

Possible to cut and bevel them on both sides at the same time (CNC M/C)

Cutting and beveling up to 2" ~ 24" (O.D 60mm ~ 620mm)

Maximum 80t





DCS-CM4-M



Portable hand beveler

Bevel Capacity : 0° ~ 90° , 0 ~ 14C

Pipe/Board : Flat processing(removal of outside diameter film) and bevel processing



– Machine Specifications

Work Capacity	Processing Type	Pipe	Min. Gauge	1 inch(25A)	
			Max. Gauge	No Limit	
		Board	No Limit		
	Materials	General steel, Stainless, Plastic, etc.			
	Depth Adjustment	One-touch method(loosening prevention ballplunger)			
	Processing Depth	0.05mm as a minimum unit			
Machine Capacity	Processing Angle	0° ~ 90°			
	Penetrating Angle	75°			
	Processing Depth	Minimum 0.05mm, Maximum 15mm			
	Processing Capacity	Bevel Angle	Thickness	Width(mm)	
		0° (cross section)	15	15	
		15°	16	17	
		30°	19	22	
45°		14	20		
60°		10	22		
75°	8	31			
90° (surface)	5	26			
Machine Specification	Total Weight	6.0Kg			
	Output	85×85×185H			
	Effectiv. Factor	4EA(S-501306-CM4-780) – user 8 surfaces			

– Motor Specifications

Item	Unit	Cutting Motor
Rated Output	W	1050
Rated Voltage	V	AC 200~220V / 50~60Hz
Operating Environment	–	-20°C~40°C/20~80%RH

– Standard Accessory

- Equipped with a guide roll for piping as standard
- Handle
- 1 hexagonal wrench, 1 torx wrench

– Option Accessory

- Insert tip : S-501306-CM4-780
- Insert tip fixing bolt

· Design and specification of this product are the version as of October 2016.
 · The data may be subject to change for product improvement without a prior notice.
 · Be sure to read through safety precautions described in the user manual and the equipment before using our products.

CM4-OD



Portable plane processing machine

Processing Capacity : 48mm of maximum width,
15mm of maximum depth

Pipe/Board : Film removal (outside diameter)
and flat processing



– Machine Specifications

Work Capacity	Processing Type	Pipe	Min. Gauge	1 inch(25A)	
			Max. Gauge	No Limit	
		Board	No Limit		
	Materials	General steel, Stainless, Plastic, etc.			
	Depth Adjustment	One-touch method(loosening prevention ballplunger)			
	Processing Depth	0.05mm as a minimum unit			
Machine Capacity	Processing Angle	90°			
	Penetrating Angle	75°			
	Processing Depth	Minimum of 0.05mm, Maximum of 15mm			
	Processing Capacity	Using Materials			Width(mm)
		Board	Minimum		18
			Maximum		48
		Pipe (When Processing 0.3mm)	50A		27
100A			29		
200A			31		
300A			33		
	500A		43		
Machine Specificati	Total Weight	6.0Kg			
	Output	85×85×185H			
	Effectiv. Factor	4EA(S-501306-CM4-780) – user 8 surfaces			

– Motor Specifications

Item	Unit	Cutting Motor
Rated Output	W	1050
Rated Voltage	V	AC 200~220V / 50~60Hz
Operating Environment	–	-20°C~40°C/20~80%RH

– Standard Accessory

- Equipped with a guide roll for piping as standard
- Handle
- 1 hexagonal wrench, 1 torx wrench

– Option Accessory

- Insert tip : S-501306-CM4-780
- Insert tip fixing bolt

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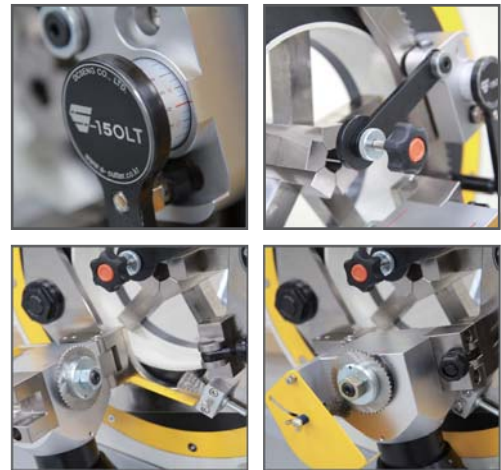


-100LT / 150LT / 200LT



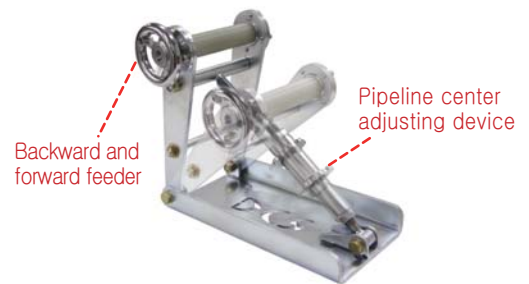
The most cost-effective orbital cutting machine, having the best cost-to-benefit ratio!

Capacity : 1/4" ~ 8"
(Pipe O.D 6mm ~ 200mm)
Pipe thickness Maximum 8.2t



- Maximized user convenience
 - Easy to replace cutting blades
 - Effective and convenient in processing short pipes
 - Possible to cut elbows
 - Mounted basically with a stopper for cutting & beveling
 - Maximized convenience of repeated work
- Clamping of O.D 1/4" ~ 8" at a time
 - No need for an ancillary vise(vice jaw)
 - Shortened working time
- Oilless bearing applied to the main shaft
 - The durability of the equipment is improved
 - The looseness of the equipment is minimized
- Optimally designed for the processing of thin pipes
 - Changes in pipes are minimized
 - Minimum distances are secured between cutting & beveling blade and vise (fix jaw)
- Possible to fine tune processing depths
 - Improved quality in cutting & beveling
 - A one-touch adjustment device
- Equipped with a BLDC motor
 - Providing stable torques across the range and ensuring high reliability
 - Adjusting speeds according to work types with a 6-stage control
 - Having a built-in overload protection circuit

– Using with basic table(S-□□□LT_MT)



– Machine Specifications

	Item	Unit	Specification
100LT	Cutting & Beveling Capacity	Min. / Max. Caliber	mm(inch) 13(1/4) / 120(4)
		Min. / Max. Thickness	mm 0.2 / 8.2(5)
		Beveling Angle	° 30/32/35/37.5/45
	Mechanical Data	Size(D×L×H)	mm 143×366×383
Weight		kg 47	
150LT	Cutting & Beveling Capacity	Min. / Max. Caliber	mm(inch) 20(1/2) / 170(6)
		Min. / Max. Thickness	mm 0.2 / 8.2(5)
		Beveling Angle	° 30/32/35/37.5/45
	Mechanical Data	Size(D×L×H)	mm 145×466×483
Weight		kg 66	
200LT	Cutting & Beveling Capacity	Min. / Max. Caliber	mm(inch) 60(2) / 220(8)
		Min. / Max. Thickness	mm 0.2 / 8.2(5)
		Beveling Angle	° 30/32/35/37.5/45
	Mechanical Data	Size(D×L×H)	mm 145×525×542
		Weight	kg 77

· Minimum caliber is using the collet, tube collet(1/4", 1/2").

· Minimum cutting thickness is on the basis of 10A.

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– Motor Specifications

Item	Unit	Cutting Motor
Rated output	W	1000
Rated Voltage	V	AC 200~220 / 50~60Hz
Rated Current	A	5.0
Operating Environment	–	-20°C~40°C/20~80%RH

– Standard Accessory

- Standard Accessory

– Option Accessory

- S-□□□LT_RS : Pipe Feeder
- S-□□□LT_VS : Stand
- S-□□□LT_MT : Machine Table



-150



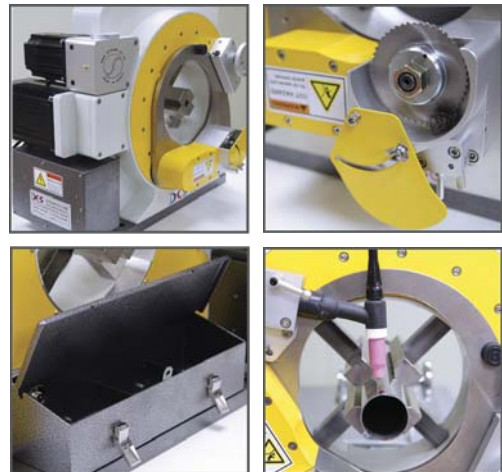
Things are cut, whether thin or thick, at a single stroke !


World best easy and speed !

Machine Capacity : 3/8" ~ 6"

(Pipe O.D 16mm ~ 170mm)

(When using collet O.D 6.35mm ~)



- Maximizing user convenience with auto rotation
 - Thick pipes are cut in right direction and beveled
 - Thin pipes are cut in reverse direction(spiral duct cutting available)
- Clamping at a time up to O.D16mm~170mm
- Evolved into a new orbital type
 - Main axial motor mounted onto the body (to prevent ejection while working)
 - In semi-permanent design for zero backlash
- Able to freely adjust of blade while cutting and beveling
- Welding holder mounted(butt welding) 
 - Semi-automatic welding realized for thin tasks



– Using with basic table(S-150_MT)



– Machine Specifications

Item		Unit	Specification
Cutting Capacity	Minimum Caliber	mm(inch)	6.35(1/4inch) ^{note1)}
		mm(A)	16(10A)
	Maximum Caliber	mm(A)	170(150A)
	Minimum Thickness	mm	0,5 ^{note2)}
	Max. Thickness ^(encourage)	mm	12(10)
Beveling Capacity	Minimum Caliber	mm(A)	16(10A)
	Maximum Caliber	mm(A)	170(150A)
	Minimum Thickness	mm	–
	Max. Thickness ^(encourage)	mm	12(10)
	Beveling Angle	°	30° / 32° / 35° / 37.5° / 45°
Welding Capacity (secondary)	Minimum Caliber	mm(A)	16(10A)
	Maximum Caliber	mm(A)	170(150A)
Mechanical Data	Size(D×L×H)	mm	660×360×505
	Weight	kg	100

· Note1) When using collet, pipe collet(6A/8A), tube collet(1/4", 3/8", 1/2")

· Note2) Min. Cutting thickness is on the basis of 10A

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– Motor Specifications

Item	Unit	Cutting Motor	Rotation Motor
Rated Output	W	1500	400
Rated Voltage	V	AC 220	AC 220
Rated Current	A	5.7	1.85
Operating Environment	–	0°C~40°C/20~80%RH	

– Standard Accessory

- All-in-one toolbox – Standard Accessories

– Option Accessory

- S-150_RS : Pipe Feeder
- S-150_VS : Stand
- S-150_MT : Basic-type Machine Table

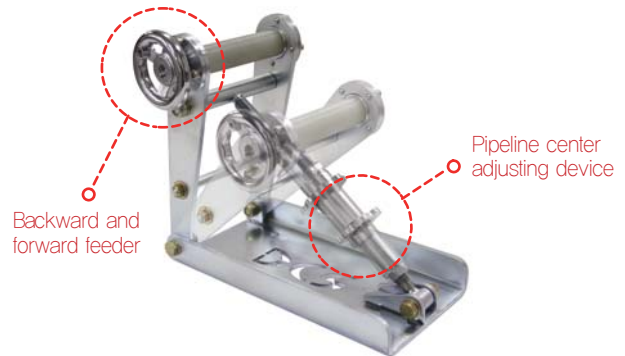


Accessory With S-150 Together Supply

▶ S-150_RS

This equipment is essential for heavy pipe work.
Easily find where to cut on the pipe.

- Pipeline feeder for tables
- Fine tune cutting spots with backward and forward feeder
- Compatible with S-150_VS
- Usable for existing equipment



▶ S-150_VS

This equipment is essential for heavy pipe work.
Upper V-shape head only supplied.

- Standing pipeline feeder
- Suitable for front and back movement and rotation movement
- Compatible with S-150_RS
- Fit to your existing stand
- Usable for existing equipment

▶ S-150_MT



Equipment table.

All products are supplied as prefabricated and can be used as soon as delivered

- Comes with S-150_RS and built with 2 sets of S-150_VS
- Designed so that 6M straight tubes are used
- Compatible with S-150_VS
- Having a foldable cutting tip holder mounted

| Built with a large toolbox (500×1600×510H)

| Size 900×2300×750H(900×3600×750H)

| Material SS400 powder painting(upper plate STS304)

| Weight about 200kg





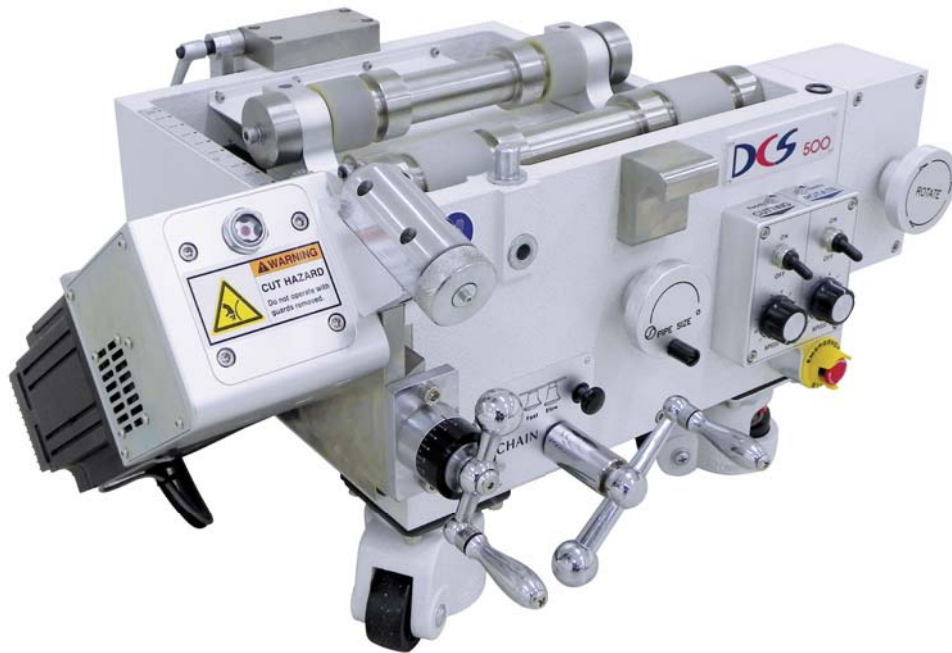
-500

Necessary for stainless piping work !!

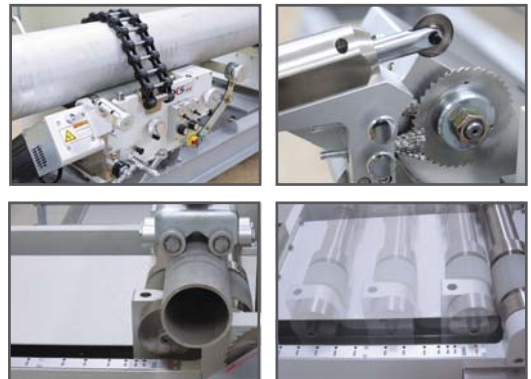
Using rotation cutting method of pipes for the first time in the world!

Machine Capacity : 3/8" ~ 20"

(Pipe O.D 16mm ~ 510mm)



- Maximizing user convenience with auto rotation
- Able to cut up to 16mm ~ 510mm and conduct beveling with one machine !
 - 3/8" ~ 2" : Vice clamping method
 - 2" ~ 20" : Chain clamping method
 - May use up to 24"(please contact head office)
- Blade catch preventer installed(exceptionally usefull in large diameter)
- Minimize eccentricity while cutting and beveling
- Able to freely adjust of blade while cutting and beveling



– Equipped welding holder

- Implementation of the semi-automatic welding thin pipe



– Useable with S-500_PR



– Machine Specifications

Item	Unit	Specification
Cutting Capacity	Minimum Caliber	mm(A) 16(10A)
	Maximum Caliber	mm(A) 510(500A)
	Minimum Thickness	mm 0.8 <small>note1)</small>
	Max. Thickness(encourage)	mm 10(8)
Beveling Capacity	Minimum Caliber	mm(A) 16(10A)
	Maximum Caliber	mm(A) 510(500A)
	Minimum Thickness	mm -
	Max. Thickness(encourage)	mm 10(8)
	Beveling Angle	° 30 / 32 / 35 / 37.5 / 45
Welding Capacity (secondary)	Minimum Caliber	mm(A) 16(10A)
	Maximum Caliber	mm(A) 510(500A)
Mechanical Data	Size(D×L×H)	mm 413×460×325
	Weight	kg 92

– Motor Specifications

Item	Unit	Cutting Motor	Rotation Motor
Rated Output	W	1500	400
Rated Voltage	V	AC 200~220V / 50~60Hz	
Rated Current	A	5.7	1.58
Operating Environment	-	0°C~40°C/20~80%RH	

– Standard Accessory

- S-500_VC : Small caliber pipe support(10A~50A)
- S-500_CC : Large caliber pipe support(50A~500A)
- Toolbox : Standard Accessory

– Option Accessory

- S-500_PS : Pipe Support System
- S-500_PR : Total Rail
- S-500_PL : Pipe Lift

- Note1) Minimum cutting thickness is on the basis of 10A.
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Accessory With S-500 Together Supply

▶ S-500_PS

Used to support long pipes at the front and back.

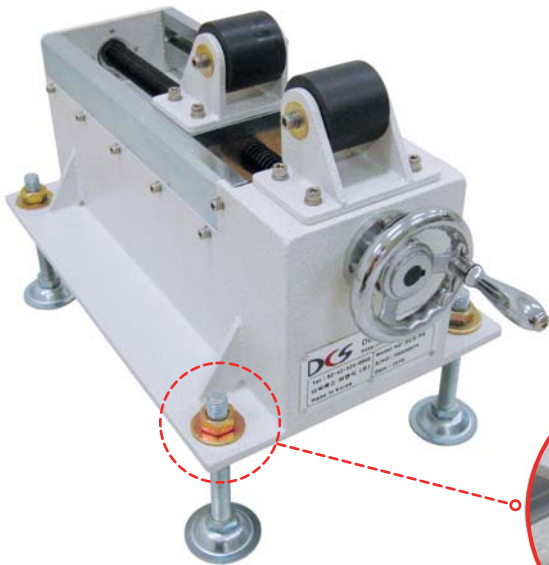
- Suitable for rotation movement
- Usable as a turntable while welding
- Used in Three sets
- Easy to move back and forth while assembling angle wheels for rails

| Equipment Size 280×450×320H

| Weight 33kg

| Supporting Ability 10A~500A

| Rated Load 600kg



Using angle wheels for rails

▶ S-500_PR

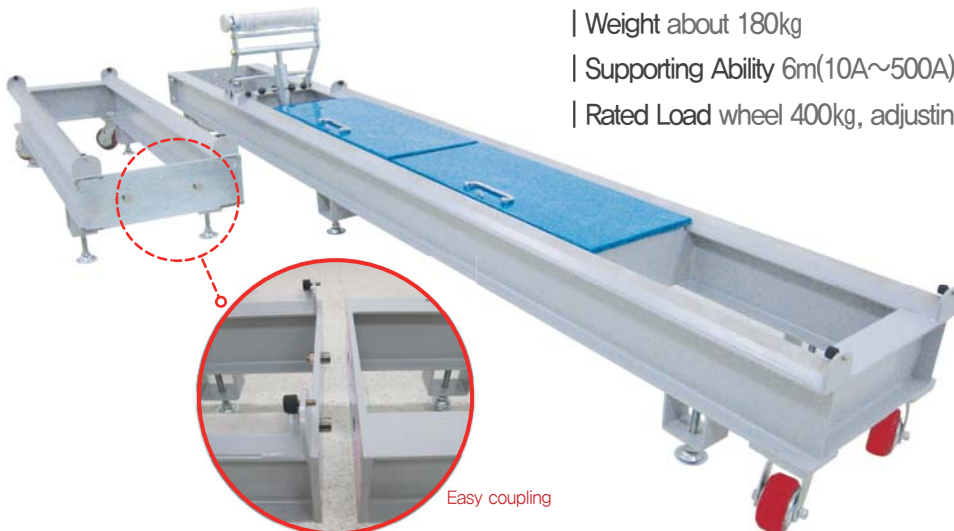
Necessary tow work on large caliber and heavy materials.

| Equipment Size 5000×465×350H, Two-piece division 1600, 3400

| Weight about 180kg

| Supporting Ability 6m(10A~500A)

| Rated Load wheel 400kg, adjusting chair 1000kg



Easy coupling

S-500_PR and S-500_PS 3 sets can be used together with rails

Equipment table.

All products are supplied as prefabricated and can be used as soon as delivered.

- Assembled with S-500_PS 3 sets for use
- Necessary for work of large caliber and heavy materials
- Pipe Lift included
- Fine-tune the cutting spot with the front and back movement device
- Having a built-in toolbox(800x390x160Hx2EA)
- Easy to assemble as an adjusting pin type

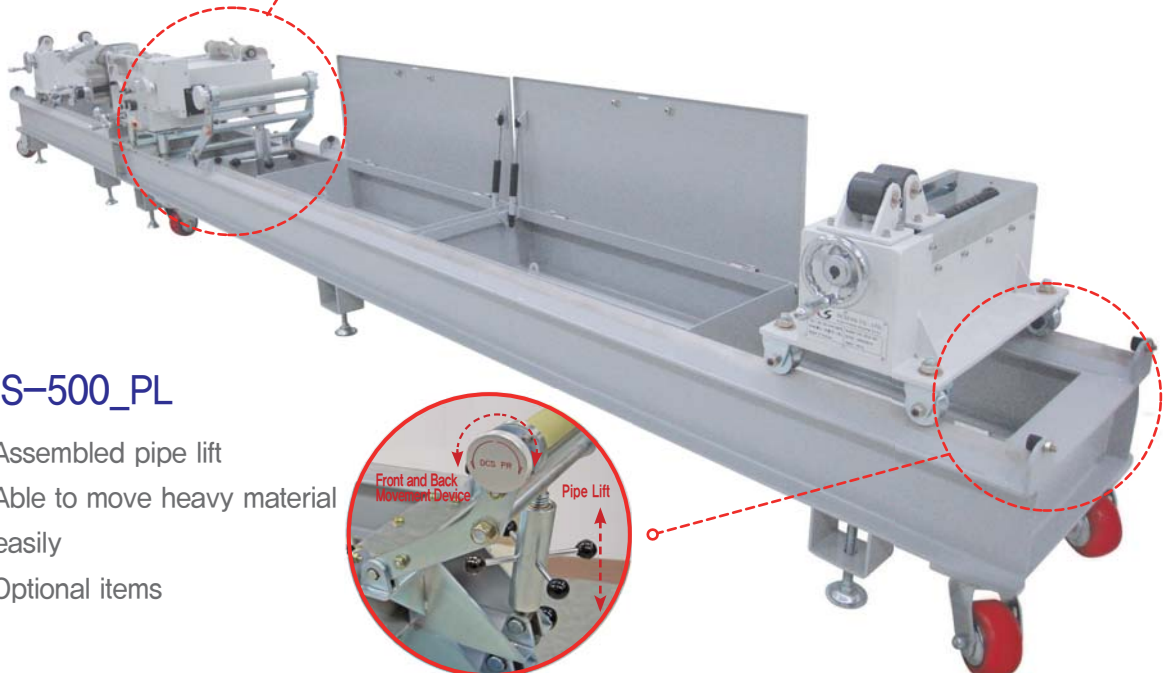


- Pipe Lift

- Easy to move heavy pipes and fine-tune the cutting spot

- Front and Back Movement Device

- Available for mass production on best cutting conditions



► S-500_PL

- Assembled pipe lift
- Able to move heavy material easily
- Optional items



S-300HV / 600HV

Necessariness of a pipe processing factory!

Possible to cut and bevel them on both sides
at the same time (CNC M/C)

Machine Capacity : 2" ~ 24"

(O.D 60mm ~ 620mm)

Maximum 80t



Model		S-300HV	S-600HV	Remark
Description	Unit			
Cutting Diameter	mm	60~320(2"~12")	250~620(10"~24")	
Cutting Thickness	mm	80	100	
Tool Holder	set	6(8)	6(8)	Full Auto
X-axis Distance	mm	80	100	
Z-axis Distance	mm	160	220	
Spindle Motor CapaCity	kW	11	22	
X-axis Motor CapaCity	kW	1.5	3	
Z-axis Motor CapaCity	kW	1	3	
Pipe Feeder Assy'	set	2	3	Full Auto
Centering Adjust	mm	200	350	Full Auto
Hydraulic unit	kW	3.75	6	Full Auto
Size(L×W×H)	mm	2350×1400×2000(2200)	2800×2000×2500(2850)	
Power Source		3P/220V/60Hz	3P/380V/60Hz	
Net Weight	kg	4500	7500	

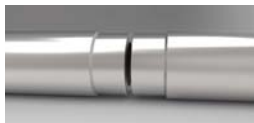
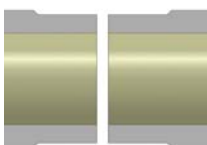
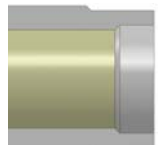

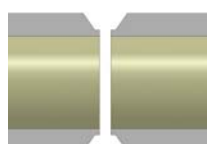
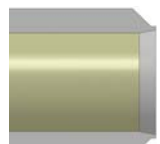


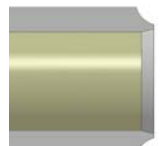


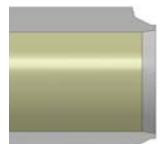
· Note) These data can be customized to fulfill your order and are subject to change without notice .
For detail, please contact our Technical Sales Division.

First time in the world!

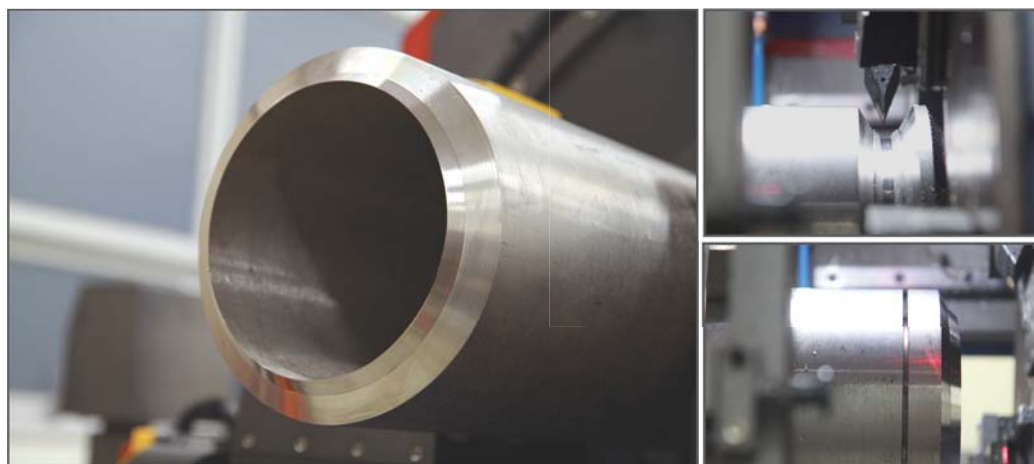
Dual Cutting & Beveling Full Automatic Machine

- Dual cutting sides and chamfering off; not required a machine tool of cutting or chamfering
- The minimum working space through straight production
- The maximum convenience; equipped with auto tool change 6 tool holder
- The embodiment of various shaping processing; 8-axis servo motor
- The auto feeder of pipe/centering function
- The auto oil pressure revision system; the minimum deformation through chuck pressure depending on the type of pipes
- Tool Pre-setter/Chip Conveyer/Coolant System

▶ S-300HV, S-600HV

Improved forms	Example	
	Double-sided	Single-sided
I-shaped 		
V-shaped 		
U-shaped 		
DV-shaped 		

※ Full Automatic Machine can process various forms.





Cutting Blade

This is a cutting blade.

Compatible with GF, Axxair Cutter.

| Meet HSS

| Thickness 1.5t ~ 2.0t

| Materials Materials including Carbon steel, Stainless, Copper, Sanitary tubes, Chromium–Molybdenum tubes, Titanium pipes, Duplex pipes, INCONEL, and Alloy



– List of products and Cutting Reference Dimentions

Model No	Outside Diameter	Inside Diameter	No. of Blades	Materials
S-6860	68	16	60	0.5t~1.5t
S-6844	68	16	44	1.5t~3.0t
S-8056	80	16	56	0.5t~3.0t
S-8048	80	16	48	2.0t~5.0t
S-8040	80	16	40	4.0t~10.0t
S-8036	80	16	36	7.0t~13.0t
S-10044	100	16	44	7.0t~15.0t

- The above data is based on STS304 materials.
- Use different cutting speed and rotation speed depending on your work conditions.

Beveling Blade

This is a beveling blade.

Compatible with GF Cutter.

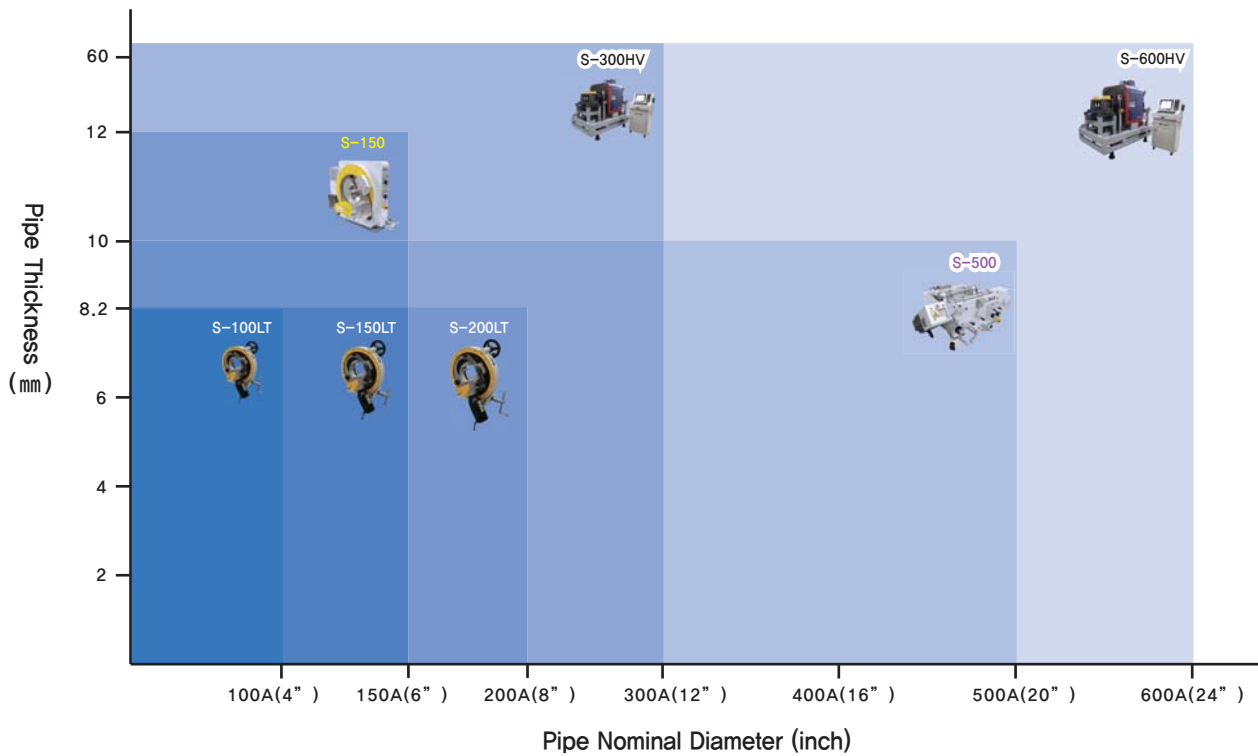
| Meet HHS

| Materials Materials including Carbon steel, Stainless, Copper, Sanitary tubes, Chromium–Molybdenum tubes Titanium pipes, Duplex pipes, INCONEL, and Alloy

| Beveling Angle 30° / 32° / 35° / 37.5° / 45°



Machine Selection Criteria Table



Cutting, Beveling Quantity

Nomonal Diameter	Outside Diameter(mm)	Thickness(t)	Cutting		Beveling	
			Quantity / 1EA	Blade Model	Quantity / 1EA	Blade Model
15A	21.7	2.1	464	S-8056	8,962	S-BB90
20A	27.2	2.1	368		7,150	
25A	34.0	2.8	300		5,720	
32A	42.7	2.8	240		4,554	
40A	48.6	2.8	210		4,002	
50A	60.5	2.8	173		3,214	
65A	76.3	3	129	S-8048	2,392	
80A	89.1	3	113		2,032	
100A	114.3	3	90		1,350	
125A	139.8	3.4	75	1,008		
150A	165.2	3.4	60	852		
200A	216.3	4	45	S-8040	590	
250A	267.4	4	38		476	
300A	318.5	4.5	30		400	
350A	355.6	5	29		340	
400A	406.4	5	24		296	
450A	457.2	5	20		264	
500A	508.0	5	15		238	

- Writing of this data based on STS 304 ERW SCH10S.
- Use different cutting speed and Beveling rpm(%) depending on your work conditions.
- Excessive cutting and fast initial entry speed damage can be shorten the life.



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