STANDARD SHEET METAL MACHINERY



PRODUCT CATALOG



Standard Sheet Metal Machinery, Inc., is incorporated in Lisbon, Iowa USA. The company speciaizes in sales and service of machinery for production of Spiral Round and Rectangular duct. We have over 40 years' experience selling duct machinery.

The Enterprise 500 Plasma cutting machines and cleaner beader machines are designed and built by Standard Sheet Metal Machinery in Lisbon, Iowa USA.

Standard sells Duct Making Machinery from *JinWoong Technology (JWT) Seoul Korea* worldwide and is the exclusive distributor for JWT machinery in North and South America.

JWT stated company mission is to be the provider of the latest in duct making technology.

Table of Contents

Enterprise 500 Plasma Cutting System	.2
TDCF Full Duct Line U Type	.4
TDCF Full Duct Line I Type	
PDF 1 Super Full Duct Line	
PDF 3 Full Duct Line	.7
Square 1	.8
Square 2	.9
Square 3	.10
Roll Forming Machines	11
Spiral Elbow	.12
Wrap Brake	.14
TDC Notcher	.14
Spiral Duct Flanger	15
Beading Machines	16
Corner TDC/FMachines	17
Pittsburgh Seam Closer	17
Stitch Welding Machine/Seam Welder	18
Automatic Rounding Machine	18
Spiral Duct Lines	19
Elbow Gore Seaming Machine	.20
Pipe Flanging Machines	21
Spiral Flex Line	.22
Tie Rod Nut Insert Machine	.23
Lock Forming Tester	.23
Brakes & Shears	24



ENTERPRISE

AIRZONE Installation - Spiral Mfg Minnesota



ENTERPRISE KEY FEATURES

- Digital servo dual side driven cutting bridge
- •Lightweight aluminum bridge construction
- •Energy saving air zone table
- •5 damper controlled cutting table exhaust zones
- ·Lift out slag pans for easy table cleaning
- ·Cleaner cut parts
- Compact machine footprint
- ·Remove parts while cutting

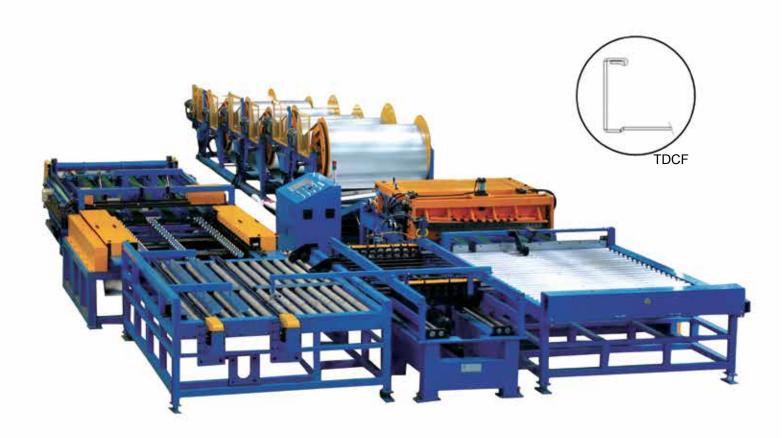
- Table configured for side or end loading of sheets
- •Drive and guide rails are protected beneath the table
- Precision near zero backlash sealed gearbox drive speed reduction
- Machine control trouble shooting via the internet
- All wiring is internal for protection
- Cutting torch can be removed without tools
- •Air float cutting torch balance system with tip-up protection
- •Cut partial sheets without covering entire table



5' x 10' / 1.5M x 3.0M Table

TDCF Full Duct Line U Type

TDCF full duct line (U Type) is designed to manufacture rectangular duct withTDCF, Slip and Drive, and machine closed Pittsburgh Seam. The PLC will accept production downloads from many Cad/Cam programs.



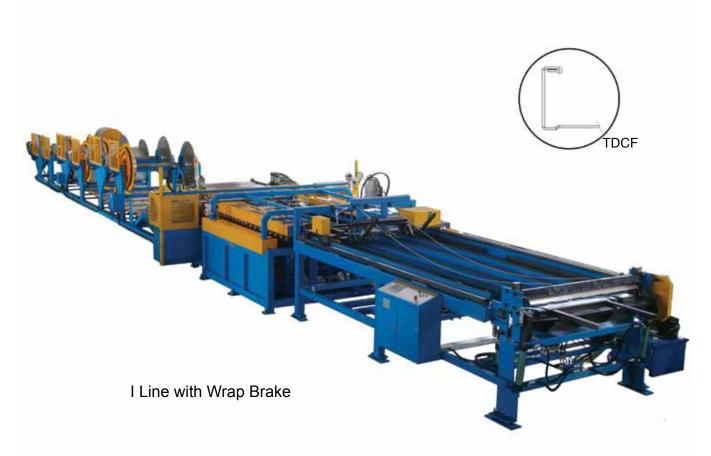
U Line with Wrap Brake

Specification

Uncoiler	4 Station (or other option) /Max. 5 Tons	Bead	"V" Bead or "Z" Bead, "Cross Bead"
•Coil Width	48"/60"/80" (or other option)	•Seam Type	Pittsburgh (Snap Lock) Seam
Thickness	Maximum 18 ga. / 1.2mm (Galv. mild Steel)	 Notch Type 	TDCF, S&D, End Cap, PDF
•Minimum Duct Size	6" x 6" / 150mm x 150mm	 Flange Type 	TDCF, S&D, PDF
•Speed	Maximum 40 F.P.M. / 11M/min	Option	Seam Closing Unit
			Sealant Injection System

TDCF Full Duct Line I Type

TDCF full duct line (U Type) is designed to manufacture rectangular duct withTDCF, Slip and Drive, and machine closed Pittsburgh Seam. The PLC will accept production downloads from many Cad/Cam programs.



Specification

•Uncoiler
 •Coil Width
 4 Station (or other option) /Max. 5 Tons
 •Bead
 "V" Bead or "Z" Bead, "Cross Bead"
 •Seam Type
 Pittsburgh (Snap Lock) Seam

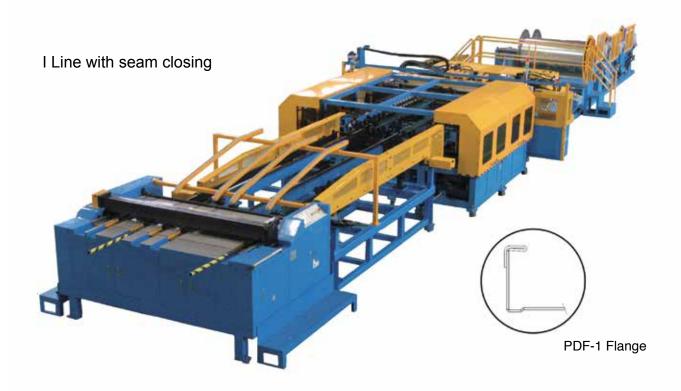
•Thickness Maximum 1.2mm (Galv. mild Steel) •Notch Type TDCF, S&D, End Cap, PDF

•Minimum Duct Size 6" x 6" / 150mm x 150mm
 •Flange Type
 •Speed
 • Flange Type
 • Option
 • Seam Closing Unit

Sealant Injection System

PDF 1 Super Full Duct Line

TDCF full duct line (U Type) is designed to manufacture rectangular duct withTDCF, Slip and Drive, and machine closed Pittsburgh Seam. The PLC will accept production downloads from many Cad/Cam programs. The stronger PDF1 superflange profile is available on this line.



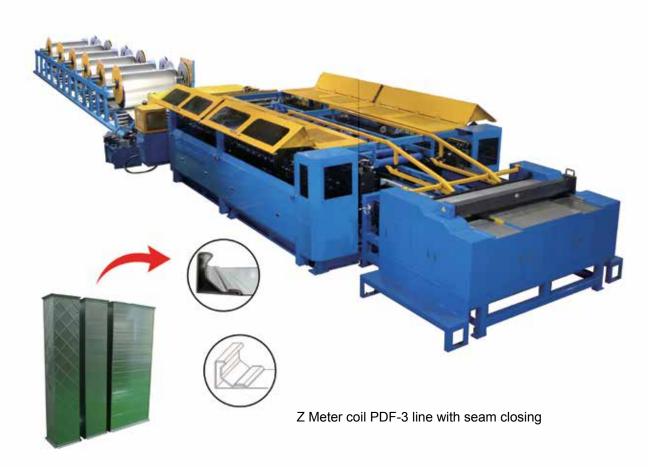
Specification

Uncoiler	4 Station (or other option) /Max. 5 Tons	•Bead	"V" Bead or "Z" Bead, "Cross Bead"
•Coil Width	48"/60"/80" (or other option)	•Seam Type	Pittsburgh (Snap Lock) Seam
Thickness	Maximum 1.2mm (Galv. mild steel)	 Notch Type 	PDF 1 Super
•Minimum Duct Size	6" x 6" / 150mm x 150mm	 Flange Type 	PDF 1 Super 20mm / 30mm
•Speed	Maximum 40 F.P.M. / 11M/min	Option	Seam Closing Unit

Sealant Injection System

PDF 3 Full Duct Line [Patented]

PDF 3 Full Duct Line produces rectangular duct with PDF 3 flange. This is the strongest integral duct flange connection available in the industry. This line produces finished ducts with closed seam in under 2 minutes per piece. TDCF flange is also available.



Specification

Uncoiler	4 Station (or other option) /Max. 5 Tons	Bead	"V" Bead or "Z" Bead, "Cross Bead"
 Coil Width 	48"/60"/80"	 Seam Type 	Pittsburgh (Snap Lock) Seam
Thickness	Maximum 18 ga. / 1.2mm (Galv. mild steel)	 Notch Type 	TDCF, S & D, End Cap, PDF
•Minimum Duct Size	6" x 6" / 150mm x 150mm	 Flange Type 	TDCF, S & D, PDF
•Speed	Maximum 40 F.P.M. / 11M/min	Option	Seam Closing Unit
			Sealant Injection System

STANDARD SHEET METAL MACHINERY

Square 1

Square-1 economy duct line produces blanks, L (2 piece) or wrap ducts for uses with companion angle flange or slip on profiles like Ductmate flange.



Uncoiler

Coil Width

Thickness

Minimum Duct Size

Speed

Bead

4 Station (or other option) /Max. 5 Tons

48"/60" (or other options)

Maximum 18 ga. / 1.2mm (Galv. mild steel)

150mm x 150mm

Maximum 11M/min /40 F.P.M.

"V" Bead, "Z" Bead

Square 2

The starter portion of full line U Type. Square-2 line uncoils, beads, notches and cuts the duct blank to length. An optional shear and bending head are available to form the male Pittsburgh or optional Snap Lock seam. This line is designed for an easy upgrade to a full duct line U type.



•Uncoiler 4 Station (or other option) /Max. 5 Tons •Bead "V" Bead or "Z" Bead

•Coil Width 48"/60"/80" (or other options) •Notch Type TDCF, S&D, End Cap, PDF

• Thickness Maximum 18 ga. / 1.2mm (Galv. mild steel)

Minimum Duct Size 6" x 6" / 150mm x 150mmSpeed Maximum 18M/min./60 F.P.M.

Square 3

The starter portion of Full Line I Type. Square 3 uncoils, beads, notches, forms male and female seam & cuts the blank to length. A crop shear is also included.



Square 3 with Pittsburgh male & female seams

Specification

• Uncoiler 4 Station (or other options)

•Coil Weight 5 Tons

•Thickness Maximum 18 ga. / 1.2mm (Galv. mild steel)

Minimum Duct Size 6" x 6" / 150mm x 150mmSpeed Maximum 60 F.P.M. / 18M/min

Roll Forming Machines

Roll formers for TDC clip, slip & drive, damper vanes, hanger channel & your special profile.





7:11 Roll former Inside tee, outside tee, standing seam



Snap lock flanger

Spiral Elbow Line [Patented]

The JWT Spiral Elbow Line produces Spiral Elbow from material in coil. These elbow are produced automatically with production cycle times as low as 18 seconds per piece. The entire width of the coil is used so there is no material waste.

The JWT Spiral Elbow Line is available in three models. The SEL-300, SEL-450 and SEL-600. Elbow centerline radius can be changed from 1 to 1.5 times elbow diameter. Change of Spiral Elbow Angle (30", 45", 60", 90") is made by keyboard entry at the machine's PLC.



Model

Min. Elbow Diameter
Max. Elbow Diameter
Elbow Center Radius
Material Thickness (Galv. mild steel)
Power Requirement
Floor Area Requirement
Option (Material)

SEL-300

4" / 100mm 12" / 315mm 1-1.5 x Diameter .020" - .026" / 0.4 - 0.5mm 30KVA 33' x 8' x 8' / 10M x 2.3M x 2.3M

Stainless Steel

SEL-450

4" / 100mm 18" / 450mm 1-1.5 x Diameter .020" - .026" / .4 - 0.5mm 30KVA 33' x 8' x 8' / 10M x 2.3M x 2.3M Stainless Steel

SEL-600

8" / 200mm 26" / 600mm 1-1.5 x Diameter 0.5 - 0.6mm / .009" - .023" 30KVA 33' x 8' x 8' / 10M x 2.3M x 2.3M Stainless Steel

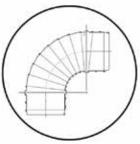






Spiral Elbow Beading Machine Forms bead stop and edge bend to reduce slitting wave





STANDARD SHEET METAL MACHINERY

Wrap Brakes

Machines equipped with notch locators for one man operation.



6 Ft. Wrap Brake

Specification

 Sheet Width 6 Ft. / 1,825mm

Thickness Maximum 18 ga. / 1.2mm (Galv. mild steel)

Operation Hydraulic of Pneumatic System

TDCF, PDF, Sheet Flange Type





TDC Notcher

Specification

 Tooling component 5 Heads

Manual adjustment / positioning

Thickness Maximum 18 g. / 1.2mm (Galv. Mild Steel)

Spiral Duct Flanger Machine

The JWT Spiral Flange Machine processes pipe in a horizontal position. One end is formed in each machine cycle. One or both ends of spiral duct can be flanged. Spiral duct seam weld system, optional motorized table with jog control for travel, lift and rotate.



Specification

•Tube Length

Diameter Range

Material Thickness

Spiral DuctThickness

Flange Height

Option

12" - 10 Ft. / 300mm - 6M

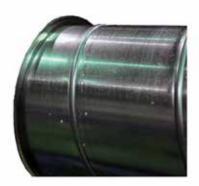
8" - 48" / 200 - 1.,250mm

.020" - 59" / 0.5 - 1.6mm (Welded Pipe)

Maximum 18 ga. / 1.2mm

10 - 15mm

Duct seam spot weld system



Flanged Spiral Duct



Beading Machines

6 Ft. / 1,820mm, 80" / 2M and 10 Ft. / 3,050mm Models. Cross Beaders, V Bead, Mesa Bead and Z Bead



6 Ft. / 1,825mm capacity Beader with Japan Style Z Bead



Diamond Bead



Z Bead



V Bead



Cleans plasma cutting smoke from parts while beading. Also available as cleaner machine only.

Maximum

18 ga. / 1.2mm

60" / 1,525mm

Corner Machines



Dual Corner Machine



Maximum 5 Feet Duct Height Operation

Single Corner Machine

Hydraulic / Pneumatic System

Dual Type, Single Type

TDCF, PDF 1 Super Flange Type

Pittsburgh Seam Closer



Verrtical Pittsburgh Seam Closer



Specification

Specification

Type Vertical, Horizontal

5 Feet /1525mm 6 Feet /1820mm Duct Height Hydraulic / Pneumatic System Operation

Maximum 18 ga. / 1.2mm (Galv. mild steel) Thickness

Stitch Welding Machine (SW-1000)



Specification

 Welding Type Stitch & Continuous Type Welding Speed Maximum 10M/min /33 F.P.M.

100 - 1,000mm /4" - 40" Diameter Range

 Length Range 80 - 1,000mm (Option: 1,200mm) Galvanized Steel, Stainless Steel, Mild Steel Material

 Material Thickness 0.2 - 1.0mm (Galvanized Steel) /.020" - .040"

6mm Seam Overlap

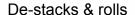
1.8mm /.074" Wire Diameter

Water Cooling System Cooling Type

Transformer 60KVA

Option Cooling Unit







Specification

Material Width

5" - 25" / 120mm - 600mm Diameter Range

 Material Thickness .012" - .030" / 0.4mm - 1.2mm ((Galv. mild steel)

Maximum 760mm /10"





Spiral Former 2000-S Model

The SF-2000 (S) model has a gear motor drive and uncoiler with drag brake mounted on a common machinery base. Coil entry angle adjustment is motorized. The SF-2000 (S) model includes PLC control. Part length and batch quantity are set at the PLC control. The SF-2000 (S) includes hydraulic forming head clamping for fast diameter change.



The SF-1250 is our most popular model spiral tube former. This machine uses the same heavy duty cast forming heads as our larger capacity machine. The slitter cutoff system produces clean end cuts.



Model

Diameter Range

Galvanized Steel

Stainless Steel

Material Width

Uncoiler

Speed

Material

SF-1250

4" x 48" / 100 - 1,250mm

.020" - .040" / 0.5 - 1.0mm

.020" - .023" / 0.5 - 0.6mm

5.39" / 137mm

Integrated vertical single type

Maximum 135 F.P.M. / 40M

Galvanized Steel, Stainless Steel, Mild Steel

SF-2000 (S)

3" - 80" / 75 - 2,000mm

.020" - .047" / 0.5 - 1.2mm

.020" - .037" / 0.5 - 0.8mm

137mm(Material Thickness 020" - .040" / 0.5 - 1.0mm) 140mm (Material Thickness .047" / 1.2mm)

Integrated vertical single type

Maximum 80M /min/270 F.P.M.

Galvanized Steel, Stainless Steel, Mild Steel

Elbow Gore Seaming Machine



The Combi dual head version of our Hydraulic machine is designed to form and close the gore seams on elbows and other round fittings. It keeps setup times to the absolute minimum.

	EM-1000	EM-1250	Combi
Diameter Range	8" - 40" / 200 - 1,000mm	8" - 48" / 200 - 1,250mm	8" - 48" / 200 - 1,250mm
Gore Range	Maximum 30"	Maximum 30"	Maximum 30"
Thickness (Galvanized Steel)	.013" - 40" / 0.4 - 1.0mm	.012"047" / 0.4 - 1.25mm	.012"047" / 0.4 - 1.25mm
Roll Speed	Maximum 135 F.P.M. / 40M/min	Maximum 135 F.P.M. / 40M/min	Flange Max. 65M/min Seam Closing Max. 45M/min /220.F.P.M.
Head	Single	Single	Double

Pipe Flange Machine



Diameter Range	500 - 2,000mm /20" - 80" (We also do specials)	
Maximum Flange Height	80mm /13"	
Maximum Material Thickness	0.4mm - 1.2mm (Galvanized Steel) /.012"047" 0.4mm - 0.8mm (Stainless Steel) /.012"030"	
•Punch Size	Maximum 28mm /1 1/8"	
•Option	Bell Mouth Program	





Flexible Tube Machine (MIC) [Patented]



Specification

• Diameter Range 100 - 300mm /4" - 20"

•Coil Width 5mm •Coil Thickness 0.5mm /.2"

•Coil Diameter Maximum 800mm /31"

Fabric Width 50mm /2"Fabric Thickness 0.3mm /.012"

• Fabric Diameter Maximum 700mm /28"

•Uncoiler Type Vertical

•Feeding Speed Maximum 70M/min /230

F.P.M.

Cutt-off Type Manual



Tie Rod Nut Insert Machine







Specification

•Operation System Hydraulic

Material

Galvanized Steel Pipe, Stainless Steel Pipe

Lock Forming Tester

The Lock forming machine used by Steel Coil manufacturers for testing material to local forming quality.



Specification

Material

Galvanized Steel

Material Thickness

•-Double Hem

0.2 - 1.5mm

•-Single Hem

1.6 - 2mm

Speed

7M/min / 25 F.P.M.

Forming Shape

Double Hem

Single Hem



Double Hem



Single Hem

STANDARD SHEET METAL MACHINERY

Brakes & Shears







JinWoong Technology Seoul, Korea

