

BETTER PARTS >>>> BETTER PROFITS



#### **VS SERIES**

Solid design and durable body for precise cutting results blade clearance and cutting angle automatically adjusted by CNC controller. The VS Series performs fast cycle times for thick or thin sheets.

#### **Standard Equipment**

- User-friendly CNC touchscreen control
- Flexibility for thick/thin, narrow/wide sheets
- Automatic swing-up back gauge
- T-slotted sheet support arVS
- Tabletop ball transfers

#### Options

#### Capacities

- 1 Return to senderAutomatic feeding
- 1/4" 1"
  10' 30' Lengths
- Sheet support systeVS
- Conveyor systeVS

#### SBT SERIES

The Swingbeam Series Shears, by design and construction, provide for reliable, fast, and accurate shearing. The rugged box frame construction of the upper beam allows for a very low fixed rake angle of the upper cutting blade. This is key in reducing distortion of the sheared piece.

#### Capacities

- 1/4" 3/4"
- 10' & 13' Lengths

#### **Standard Equipment**

- Touch Screen Control
- Programmable Back Gauge Positions
- Program Storage
- Programmable Stroke Length
- 39" High Speed Back Gauge

#### MS SERIES

Mechanial Shears are high-speed, accurate, efficient and high- performance, using Direct Drive technology. The VS Series cut quickly without sacrificing cutting quality, making them a productive solution for serial production.

#### Capacities

- 10 14 Gauge
- 4' 10' Lengths





- Swing Away or Up Back Gauge Bar
- 60" Squaring Arm
- T-Slotted Support ArVS with Disappearing Stops
- Tabletop Ball Transfers
- Quickset Blade Clearance Setting







# STANDARD EQUIPMENT

- User-Friendly CNC Touchscreen Control Flexibility for Thick/Thin, Narrow/Wide Sheets =
- Automatic Swing-up Back Gauge .
- T-slotted Sheet Support Arms
- Tabletop Ball Transfers .
- CNC Front Feeding =
- Support, Conveying & Stacking Systems Anti-Twist Device to Reduce Strip Distortion •

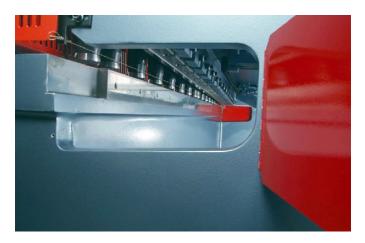
# **OPTIONAL EQUIPMENT**

- Return to sender
- Automatic feeding
- Sheet support systems .
- = Conveyor systems

# CAPACITIES

- 1/4" 1" .
- 10' 30' Lengths





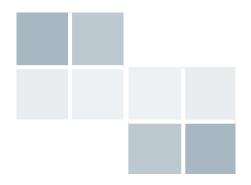
LARGE GAP

Large gaps (minimum 13.7") in the side frames allow shearing of sheets longer than the blade length. This feature also assists in blade rotations and changes.



# FLIP UP FINGER GUARD & TABLETOP BALL TRANSFERS

The first 40" of the finger guard can be flipped up out of the way for easy viewing of the work piece at the point of cut. The table sections are fitted with roller balls that reduce friction and marking when feeding the sheet.







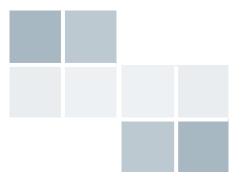
# REAR PNEUMATIC SHEET SUPPORTS

An optional feature, when shearing long drop pieces of thin material the sheet can droop before it reaches the gauge bar, making it hard to gauge accurately. Support arms are pneumatically activated to support the sheet while gauging, then automatically move away for shearing after the sheet is securely clamped and gauged. This eliminates the need to front gauge and the need to manually support the sheet from the rear side of the machine, which is not only costly, but unsafe.



## PROTRACTOR

This device allows easy and fast angle cutting of the sheet. Calibrated in degrees the operator can position the sheet at the angle of cut desired.





# PROGRAMMABLE FAST & ACCURATE BACK GAUGE

If processing only thin sheets, sometimes quicker strokes per minute on full length sheets can be of value.



When shearing long drop pieces of thinner stock the sheet can "droop" before it reaches the gauge bar, making it difficult to produce an accurate blank. Pneumatically operated arms are automatically activated to support the sheet to the back gauge bar. This eliminates the need to front gauge and safely removes the need to have an operator in the rear of the machine to hold the sheet; it is a cost saving and safety oriented feature.



# SUPPORT & RUNOUT CONVEYOR

A runout conveyor can also be integrated to discharge the sheet after shearing.

#### SUPPORT SYSTEM - TYPE 1

Type 1 is a simple pneumatic sheet support system that supports the sheet until gauged and clamped. After the sheet is clamped by holddowns the arms arc down out of the way and the shear cycles.



SUPPORT SYSTEM - TYPE 2

In this system the sheet is supported during the cutting process reducing distortion than can occur when shearing large drops.



## SUPPORT SYSTEM - TYPE 3

This system operates the same as Type 2 but is equipped with an "anti-twist" device to reduce distortion than occurs when shearing thin strips or narrow drops. Type 3 is also equipped with a "return to sender" feature which can return the sheet back to the operator after it has been sheared.



Durma offers front and back feed and discharge systems to eliminate labor and increase productivity for high production shearing.





### FRONT FEED SYSTEM - TYPES 1 & 2

Types 1 and 2 are a programmable system built to not just gauge, but actually feed the material to the back gauge bar. Systems includes built-in pneumatic "pushers" that secure the material against the gauge bar which as built contact sensors. Once the sensors acknowledge the material is present the shear automatically cycles. This allows the operator to load a full sheet and let it be sheared to finish regardless of how many different size blanks.



# CONVEYOR STACKER SYSTEM



# STACKING & ALIGNMENT

Once sheared the blank can be conveyed out from between the side frames of the shear on to stacking area. The system is also available with an integrated front to back and side to side "tamping system." With this feature blanks are stacked in to neat piles and can be discharged with roller conveyor. Scrap removal is also integrated into the system.



## CONTROL UNIT

# D-TOUCH 7

- 7" Touchscreen Display
- Auto Setting of Blade Clearance
- Auto Setting of Rake Angle
- Program Storage
   Material Library
- Material Library



TOUCH SCREEN



MAIN MENU





# PROGRAMS LIST

Material List 1/1		
AL35T1	60 kg/mm <sup>2</sup>	
ST42	60 kg/mm <sup>2</sup>	
ST43	60 kg/mm <sup>2</sup>	CHANGE CHANGE NAME HARDNESS
	₽ <del>3</del>	
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# MATERIAL LIST



# LARGE FORMAT SHEARS



20' X .625



26' X .250 WITH PATENTED BLADE CLEARANCE



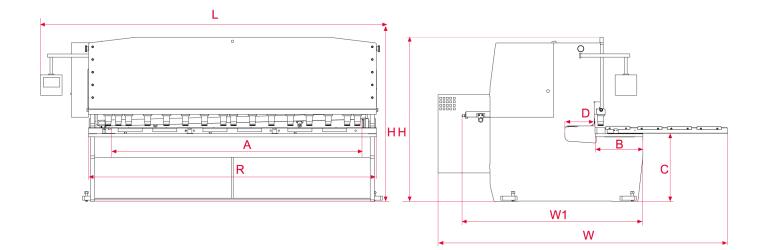
26' X .375



30' X .500



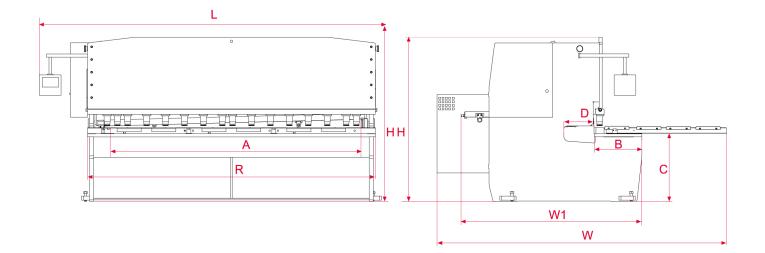
# SPECIFICATIONS



VS Series				3006	3010	3013	3016	3020	4006	4013	4016	4020
Cutting Length		(A)	in	121	121	121	121	121	121	121	121	121
MS Cutting Capacity		in	0.24	0.39	0.51	0.63	0.79	0.24	0.51	0.63	0.79	
SS			in	0.16	0.31	0.39	0.51	0.63	0.16	0.39	0.39	0.63
Stroke per minute	min			12	10	9	7	6	10	7	5	4
max			20	20	17	12	12	20	13	9	8	
High speed stroke / min	min			21	15	15	11	9	19	13	10	8
<b>U</b>	max			33	27	27	18	17	31	25	17	16
Cutting Angle			0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	
Cutting / Ingio	max			2°	2°	2°30'	2°30'	2°30'	2°	2°30'	2°30'	2°30'
Number of holddowns				16	16	17	14	14	20	20	17	21
Holddown force	min max min max min		ton	4.4	4.4	8.0	11	17.0	4.0	10.0	50.0	50.0
	max		ton	22	22	40	55	83	20	48	100	100
Back gauge course			min	1000	1000	1000	1000	1000	1000	1000	1000	1000
Back gauge speed			ips	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
Motor power			hp	15	30	40	60	60	15	40	60	60
Oil capacity			gal	33	48	79	119	132	33	87	106	132
Throat depth		(D)	in	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
Front arms				3	3	3	3	3	4	4	4	4
Table height		(C)	in	32	32	33	33	33	32	33	39	39
Table width		(B)	in	19	22	22	22	23	19	23	25	25
Table length		(R)	in	129	132	133	135	136	173	173	173	173
Length		(L)	in	161	150	165	163	161	203	205	232	232
Width		(W1)	in	81	81	83	87	91	83	85	83	87
Total Width		(W)	in	144	140	140	150	146	140	140	143	150
Height		(H)	in	77	85	96	101	104	81	100	116	116
Weight			lbs	16535	20503	28440	39683	47399	26455	52029	52029	63934

Specifications are approximate and subject to change without notice.





VS Series				6006	6013	6016	6020	6025	8010	10013
Cutting Length		(A)	in	239	239	239	239	240	319	398
Cutting Capacity	MS		in	0.24	0.51	0.63	0.79	1.00	0.39	0.51
Cutting Capacity	SS		in	0.16	0.31	0.39	0.51	0.79	0.24	0.31
Stroke per minute	min			6	5	4	3	3	3	3
	max			10	10	10	6	6	6	6
High speed stroke / min	min			-	-	-	-	-	-	-
	max			-	-	-	-	-	-	-
Cutting Angle	min			0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'
	max			2°	2°30'	2°30'	3°15'	3°25'	2°	2°12'
Number of holddowns				29	29	29	29	30	40	52
Holddown force	min		ton	10	29	29	48	150	40	60
	max		ton	20	58	58	100	250	60	81
Back gauge course			min	1000	1000	1000	1000	1000	1000	1500
Back gauge speed			ips	7.9	7.9	7.9	7.9	7.9	7.9	7.9
Motor power			hp	30	50	60	60	74	40	60
Oil capacity			gal	53	106	145	185	198	145	172
Throat depth		(D)	in	13.8	13.8	13.8	13.8	13.8	19.7	29.5
Front arms				6	6	6	6	6	7	9
Table height		(C)	in	35	37	37	39	39	48	48
Table width		(B)	in	25	26	26	31	35	33	34
Table length		(R)	in	251	251	251	260	266	336	419
Length		(L)	in	287	291	291	319	309	358	453
Width		(W1)	in	83	87	87	110	114	132	134
Total Width		(W)	in	134	146	149	161	167	165	167
Height		(H)	in	108	114	116	139	134	129	150
Weight			lbs	55777	74516	85319	134482	158733	191802	324080

Specifications are approximate and subject to change without notice.





# DURMA AIMS FOR CONTINUOUS DEVELOPMENT

DURMA's large investment in machining centers and production equipment, as well as its ISO-certified factories totaling 1,350,000 square feet and 1,000 employees, make one of the world's largest, efficient and most contemporary facilities in the world.

In order to offer customer solutions and further develop patents, the Durma Research and Development center opened in 2010. Fifty engineers were added over the last two years.

Designed and engineered with modern technology, Durma products are equipped with high quality and proven readily available components.

Established in 1956, Durma has vast experience in building and supplying quality products. With over 60,000 machines delivered worldwide, Durma has earned a reputation as a supplier of innovative "value oriented" solutions.

Your partner today, tomorrow, and forever.



