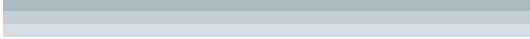
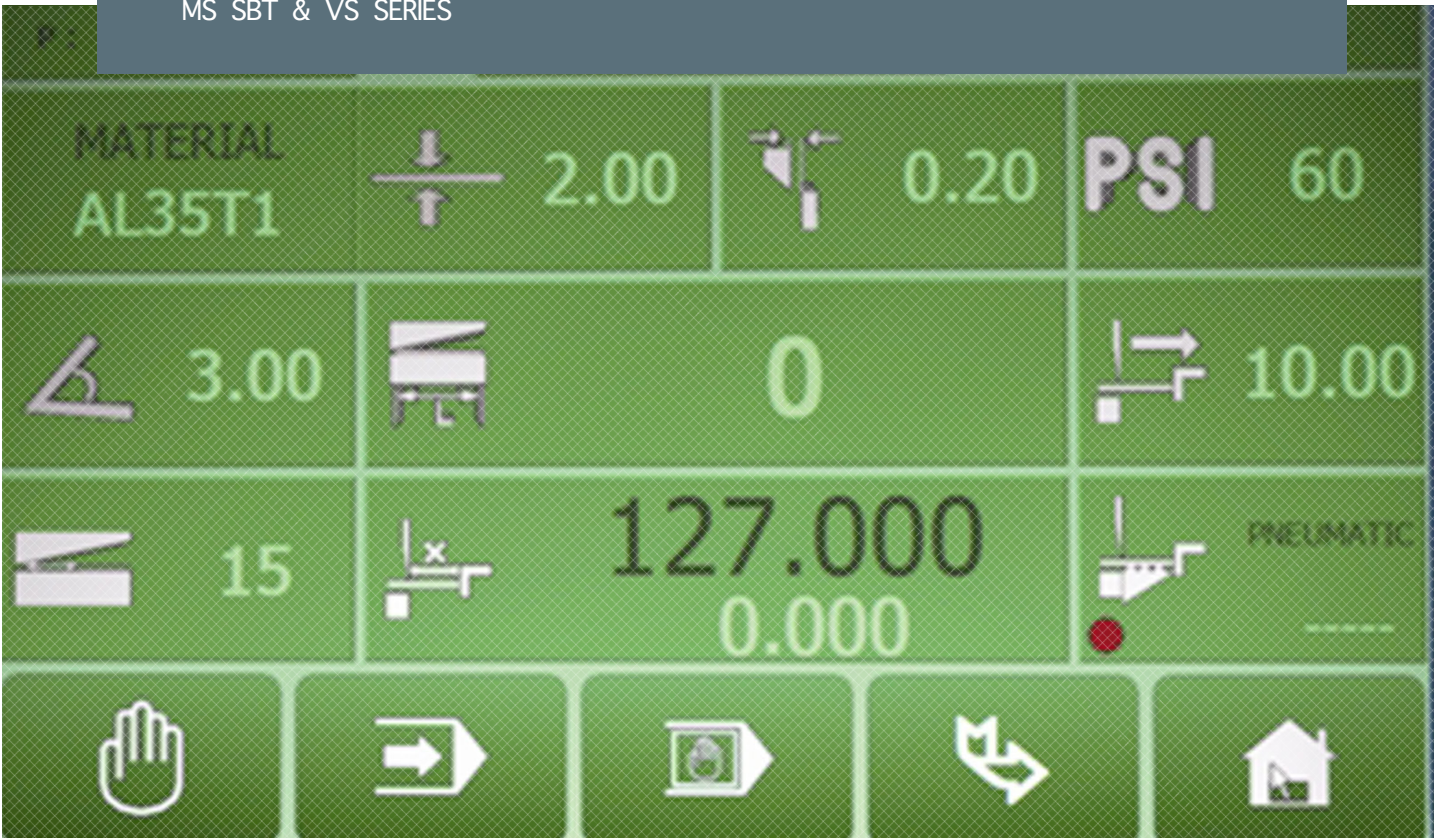


**DURMA**

# SHEARS

MS SBT & VS SERIES



BETTER PARTS >>> BETTER PROFITS

# THE COMPANY

As a total supplier for sheet metal manufacturing with almost 60 years of experience, Durma understands and recognizes the challenges, requirements and expectations of the industry.

We strive to satisfy the ever higher demands of our customers by continuously improving our products and processes while researching and implementing the latest of technologies.

## HEADQUARTERS | BURSA TURKEY



In our three production plants with a total of 1.5 million square feet, we dedicate 1,000 employees to delivering high quality manufacturing solutions at the best performance-to-price ratio in the market.

From the innovations developed at the Research & Development Center to the technical support given by our worldwide distributors, we all have one common mission: to be your preferred partner.



R&D CENTER



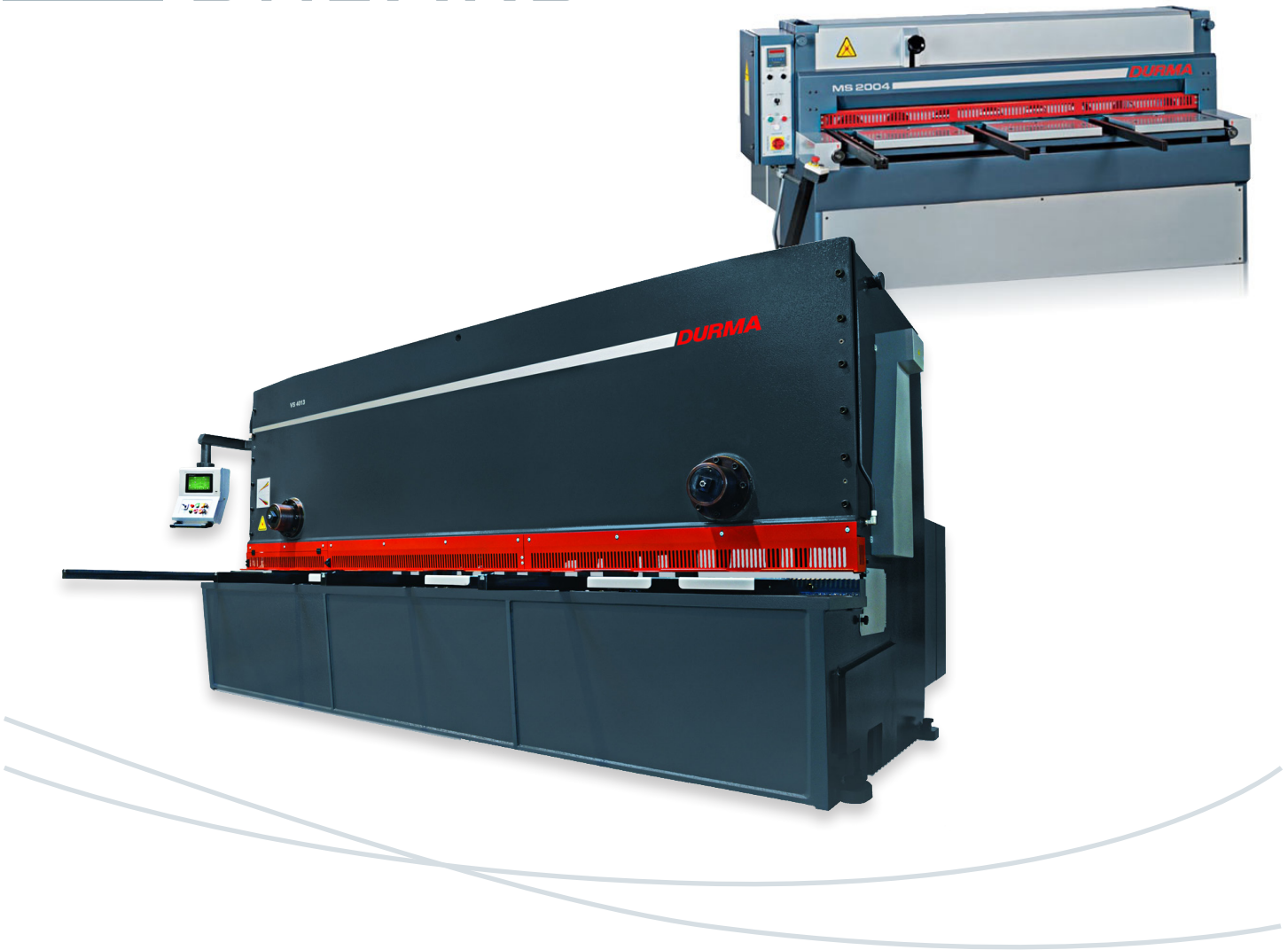
BASKÖY FACTORY



CHARLOTTE HEADQUARTERS

MS, SBT & VS SERIES

# SHEARS



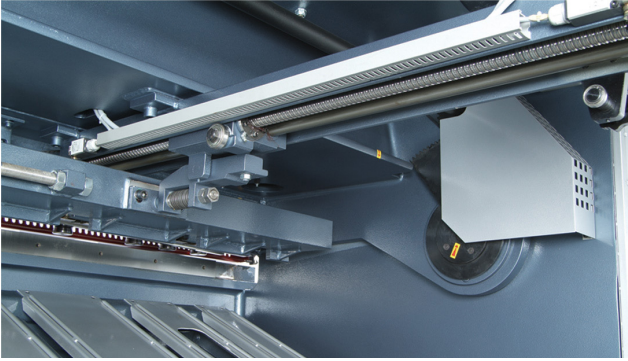
MS	SBT	VS
10 - 11 - 12 - 14 Gauges 4 - 10' Lengths	1/4" to 3/4" 10' and 13' Lengths	1/4" - 1" 10' - 30' Lengths

	MS	SBT	VS
D-Touch Programmable Control	o / s	s	s
Power Drive System	Mechanical	Hydraulic	Hydraulic
Blade Clearance	Manual	Manual	Autoset
Rake Angle	Fixed	Fixed	Autoset
Rear Sheet Support	o	o	o
CNC Front Feed	-	o	o
Rear Automation	-	o	o

(S) STANDARD (O) OPTIONAL (-) NOT AVAILABLE

STANDARD

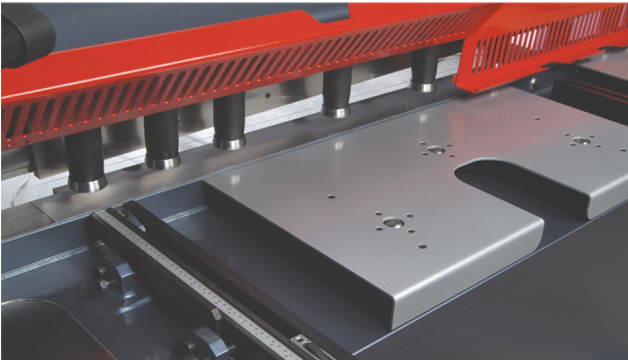
# FEATURES



## Fast Programmable Back Gauge

*MS 10 gauge | SBT | VS*

The fast programmable back gauge positions via ballscrews. It can be used either in a “touch & go” mode or multiple step program held in storage under program number. Depending on the model the gauge bar either flips up out of the way at the end of its travel, or is of the swing away type. Optional for MS Series 11, 12 or 14 Gauge.



## Tabletop Ball Transfers

*MS 10 gauge | SBT | VS*

The table sections are fitted with roller balls that reduce friction and marking when feeding the sheet.



## Blade Clearance

*MS + SBT - Manual | VS - Automatic*

The operator can easily and quickly change this setting, as the material type and thickness demands, for a high quality blank. The different material thicknesses are clearly marked for quick and easy adjustment. On the VS Series, the rake angle and blade clearance is set automatically according to programmed material type and thickness. SBT type is shown on the left.



## Large Gap

*VS*

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. Optional on SBT Series.

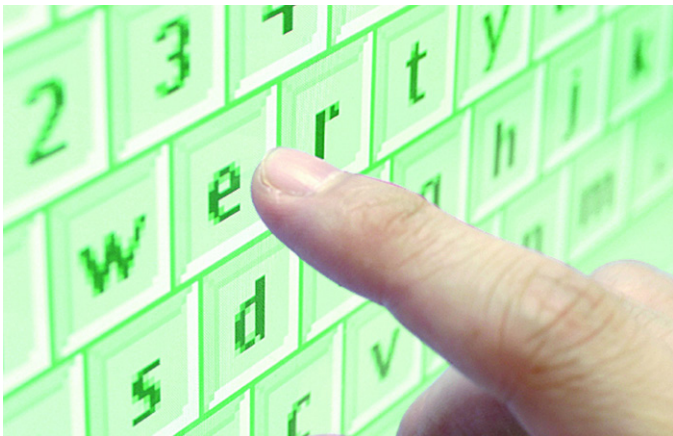
SHEARS

# CONTROL

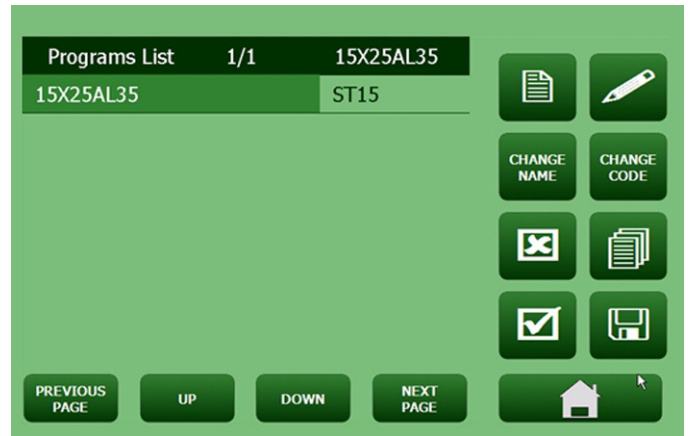


## D-Touch 7

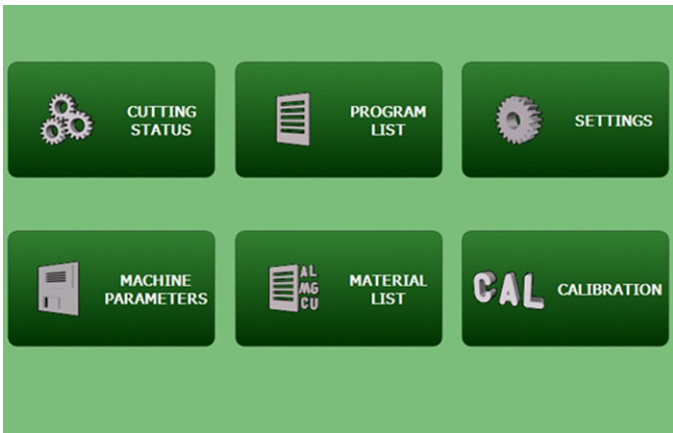
- Large Color 7" LCD Touch Screen
- 800 X 480 Tft LCD Display
- Rapid Data Input
- USB Port for user USB Memory
- Ethernet: RJ-45 10/100M
- Operating System: Windows CE
- User Program and Steps: Unlimited
- Material Type: Unlimited



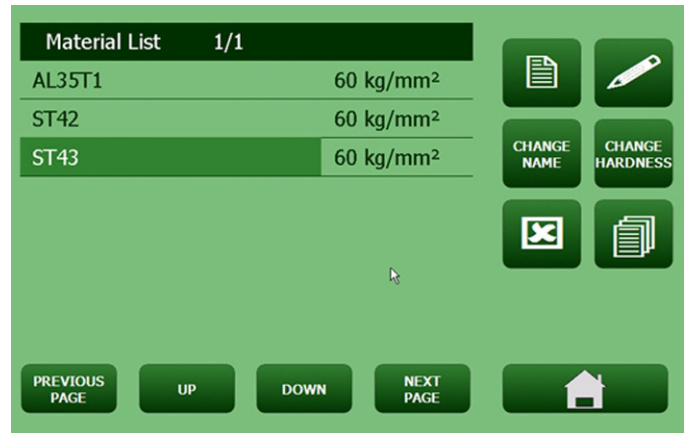
TOUCH SCREEN



PROGRAMS LIST



MAIN MENU



MATERIAL LIST

OPTIONAL

# FEATURES



## 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.



## Rear Pneumatic Sheet Supports

*SBT | VS*

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.

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

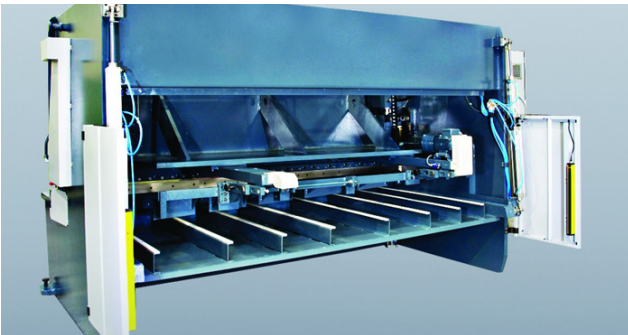
The VS Series has three available rear sheet support systems:

**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.

In **Type 2**, the sheet is supported during the cutting process reducing distortion than can occur when shearing large drops.

**Type 3** 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.

TYPE 1



TYPE 2



TYPE 3

# VS SERIES LARGE FORMAT +

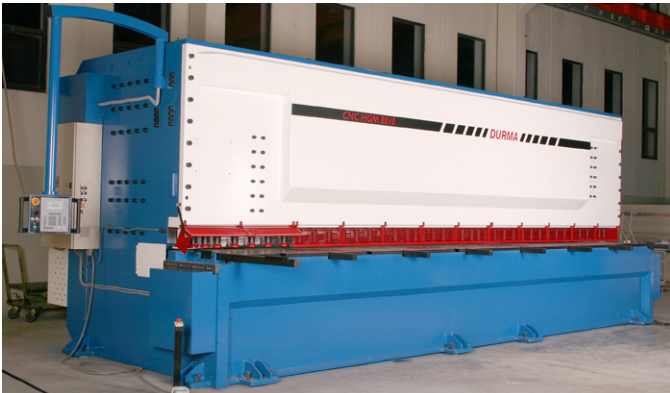
# AUTOMATION



20' X .625



26' X .250 WITH PATENTED BLADE CLEARANCE



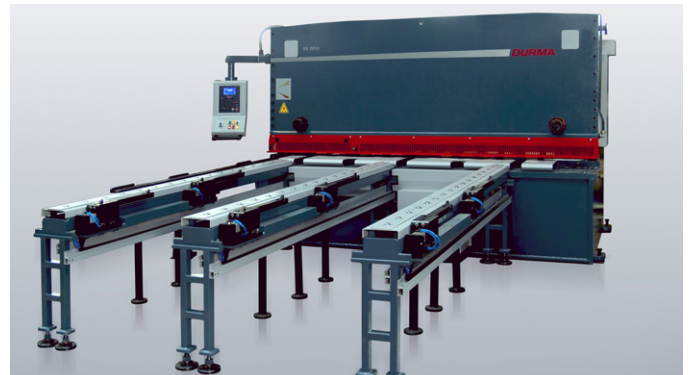
26' X .375



30' X .500



FRONT FEED SYSTEMS - TYPE 1



FRONT FEED SYSTEMS - TYPE 2



CONVEYOR STACKER SYSTEM + ALIGNMENT



CONVEYOR STACKER SYSTEM + ALIGNMENT

## MS SERIES

# SHEARS

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



		1303	2003	2525	2005	2504	3004
Cutting Capacity	inch	0.12	0.12	0.10	0.16	0.16	0.16
Cutting length	inch	53	81	100	81	100	122
Cutting angle		2°30'	2°12'	1°30'	1°30'	1°30'	1°30'
Stroke per minute		35	35	35	42	42	42
Motor power	kw	3	3	3	7.5	7.5	7.5
Back gauge range	ipm	22	22	22	30	30	30
Table width	inch	16	16	16	18	18	18
Table height	inch	33	33	33	32	32	32
Height	inch	47	47	47	52	52	52
Width	inch	53	53	53	91	91	91
Length	inch	67	94	113	100	120	144
Approx. Weight	pounds	2425	2866	3086	6173	7121	8223



## SBT SERIES

# SHEARS

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.



	Model	3006	3010	3013	3016	3020	4006	4013
Cutting Length	inch	122	122	122	122	122	161	161
Cutting Capacity	MS	inch	.250	.375	.500	.625	.750	.500
	SS	inch	.157	.250	.314	.375	.500	.314
Throat Depth	inch	2	2	2	2	2	2	2
Strokes - full length	spm	17	15	15	11	7	13	9
Strokes -full length (high-speed option)	spm	26	21	20	15	8	25	19
Cutting Angle	degree	1°30'	1°30'	1°45'	2°	2°	1°30'	1°45'
Holddowns		16	16	16	14	14	20	18
Holddown Force	ton	15	24	41	67	85	19	68
Back Gauge Range	inch	39.4	39.4	39.4	39.4	39.4	39.4	39.4
Back Gauge Power	hp	1	1	1	1	1	1	1
Back Gauge Speed	ipm	472	472	472	472	472	472	472
Motor Power	hp	20	30	40	50	60	20	40
Oil Capacity	U.S. gallon	52.8	52.8	87.2	108.3	118.9	52.8	87.2
Sheet Supports		2	2	2	2	2	3	3
Table Height	inch	34	34	34	33	35	34	33
Table Width	inch	19.7	22.8	23.6	21.7	22.4	22.8	21.7
Table Length	inch	138.4	138.4	139.8	140.9	144.5	177.6	178.0
Length	inch	161.8	165.4	168.5	179.1	175.2	205.9	210.6
Width	inch	86.6	88.6	90.6	88.6	89.0	90.6	88.6
Total Width	inch	145.7	141.7	141.7	150.6	133.9	141.7	151.6
Height	inch	82.7	82.7	92.5	88.6	96.5	84.6	88.6
Weight		16,830	20,460	27,500	33,000	47,740	25,850	35,860

## VS CNC SERIES

# SHEARS

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



			4020	6006	6013	6016	6020	6025	8010	10013
Cutting Length		in	121	239	239	239	239	240	319	398
Cutting Capacity	MS	in	0.79	0.24	0.51	0.63	0.79	1.00	0.39	0.51
	SS	in	0.63	0.16	0.31	0.39	0.51	0.79	0.24	0.31
Stroke per minute	min		4	6	5	4	3	3	3	3
	max		8	10	10	10	6	6	6	6
High speed stroke / min	min		8	-	-	-	-	-	-	-
	max		16	-	-	-	-	-	-	-
Cutting Angle	min		0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'
	max		2°30'	2°	2°30'	2°30'	3°15'	3°25'	2°	2°12'
Number of holddowns			21	29	29	29	29	30	40	52
Holddown force	min	ton	50.0	10	29	29	48	150	40	60
	max	ton	100	20	58	58	100	250	60	81
Back gauge course		min	1000	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	7.9
Motor power		hp	60	30	50	60	60	74	40	60
Oil capacity		gal	132	53	106	145	185	198	145	172
Throat depth		in	13.8	13.8	13.8	13.8	13.8	13.8	19.7	29.5