



SUTHERLAND PRESSES & FEEDS
MAIN SPECIFICATIONS AND DIMENSIONS

MARK 1
 Single Point Gap Frame

MODEL (Single Point Gap Frame)		MARK-40		MARK-50		MARK-66		MARK-88		MARK-121		MARK-176		MARK-220		MARK-285	
TYPE (stroke and speed)		1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Capacity U.S. Ton	Ton	40		50		66		88		121		176		220		285	
Rated Tonnage Point	ABDC	0.050	0.102	0.060	0.126	0.080	0.157	0.080	0.157	0.120	0.236	0.120	0.236	0.120	0.236	0.140	0.276
Drive Configuration	Geared	Geared in Oil		Geared in Oil		Geared in Oil		Geared in Oil		Geared in Oil		Geared in Oil		Geared in Oil		Geared in Oil	
Link Slow Down @ BDC	Link	N/A		N/A		Optional		Optional		Optional		Optional		Optional		Optional	
Stroke Length	Inch	2.76	4.72	3.15	4.72	3.54	5.51	3.94	6.3	4.33	7.09	5.12	7.87	6.3	9.84	9.84	11.81
Strokes Per Minute	SPM	90-150	55-115	65-130	50-105	60-120	45-95	55-110	40-85	50-100	35-70	40-85	30-60	35-70	25-50	30-50	20-40
Die Height (SDAU)	Inch	10.83	9.84	11.42	10.63	12.8	11.81	13.78	12.6	15.16	13.78	17.13	15.75	19.49	17.72	22.24	21.26
Slide Adjustment	Inch	1.97		2.36		2.76		3.15		3.15		3.94		4.3		4.72	
Slide Area (LRxFB)	Inch	15.75 x 11.82		17.32 x 13.38		19.69 x 15.74		20.67 x 18.11		24.61 x 20.48		27.56 x 22.84		33.07 x 25.60		37.01 x 28.74	
Shank Knock Out Hole (DIA)	Inch	2.00		2.00		2.00		2.00		2.00		2.00		2.00		2.00	
Bolster Area (LRxFB)	Inch	31.50 x 15.76		33.46 x 17.32		35.43 x 20.48		37.40 x 23.62		45.29 x 26.76		49.21 x 31.51		55.13 x 33.08		61.02 x 35.44	
Bolster Thickness	Inch	2.76		3.35		3.54		3.94		4.72		5.51		6.69		7.09	
Floor to Bolster	Inch	31.10		31.30		31.30		33.07		34.45		35.80		40.55		40.55	
Side Window Opening	Inch	NA		NA		NA		NA		NA		NA		NA		NA	
Height (overall)	Inch	91.25		95.28		107.28		115.94		125		129.59		148.22		176.38	
Width (lr)	Inch	35.43		37.4		41.34		42.13		47.64		55.12		62.99		68.11	
Depth (fb)	Inch	47.24		55.12		55.91		63.78		68.5		82.28		88.39		97.24	
Press Weight (net)	LBS	6600		7920		10560		13200		21340		33000		44440		68200	
Slide Adjusting Motor HP	HP	.25 HP		.25 HP		.5 HP		.5 HP		.5 HP		1 HP		1 HP		2 HP	
Main Motor (eddy current -VS)	HP	5 HP		5 HP		7.5 HP		7.5 HP		10 HP		15 HP		20 HP		30 HP	
Power Requirements	220/480	Dual		Dual		Dual		Dual		Dual		Dual		Dual		Dual	
Air Counter Balance Max Capacity	LBS	746		906		990		1111		1406		1824		2658		3740	
Air Pressure Required	PSI	80 psi		80 psi		80 psi		80 psi		80 psi		80 psi		80 psi		80 psi	

Optional Pneumatic Die Cushion

Capacity U.S. Ton	Ton	2.5	2.5	4	4	7	11	15.4	15.4
Stroke Length	Inch	1.97	1.97	2.76	2.76	3.15	3.15	3.94	3.94
Cushion Area (LRxFB)	Inch	11.81 x 9.06	11.81 x 9.06	13.79 x 11.81	17.73 x 12.21	19.7 x 13.79	25.61 x 16.54	27.97 x 18.91	31.91 x 18.91

PRESS CONTROLS

T1- Honeywell MECH-PAC-1	Control	Standard	Standard	Standard	Standard				
T1 - Mech Pac Digital Cam	4 Cam	4 Cam	4 Cam	4 Cam	4 Cam				
T2 - Honeywell SMART PAC-2	Control					Standard	Standard	Standard	Standard
T2 - Smart Pac-2 Cam	8 Cam					Programmable	Programmable	Programmable	Programmable
T3 - Honeywell Rolling Console	Option								

STANDARD ON ALL PRESSES

- Start Up Assistance (1day)
- JIS 1st Class Tolerances
- Vogel Automatic Grease Lube
- JIC 6" T-Slot Pattern
- Sandsun Hydraulic Overload
- Ross Dual EP Clutch Valve
- Flywheel Brake
- Ortlinghaus Clutch and Brake (406- Ring Fetter)





SUTHERLAND PRESSES & FEEDS
ACCURATE, DURABLE, RELIABLE & EASY to SERVICE

MARK 1
 Single Point Gap Frame



Tier 1 MEC PAC CONTROL
 WINTRISS WPC-2000 Clutch-Brake Control, LED Stroke Position Indicator, 4 Adjustable Cams, Resolver Based Motion Control, Variable Speed, Hydraulic Overload Release Switch



Tier 2 SMART PAC II CONTROL
 WINTRISS WPC-2000 + SMART PAC II Automation Controller, Clutch-Brake Control, Stroke Position Indicator, 8 Programable Cams, Resolver Based Motion Control, Variable Speed, Hydraulic Overload Release Switch

OPTIONS
 Tonnage Monitor
 Die Protection
 Servo Feed Interface
 Spanish Speaking
 Info Center
 Waveform
 PMP Monitor

T-STAND
 All MODES of Operation can be selected at the Operator T-Stand



ORTLINGHAUS CLUTH & BRAKE
 406 Type with Ring Fetter Locking Device requires No Keyways on Drive Shaft or Clutch Hub. **ROSS** Dual EP Monitored Air Valve.



VOGLE AUTOMATIC LUBRICATION
 Electrically Monitored Lubrication System, Unit on right lubricates the Air Counter Balance System. The unit on left lubricates Crankshaft & Connecting Rod Bushing and Six (6) Point Full Length Slide Guidance



MAIN ELECTRICAL & AIR CENTER
 Mounted on right side of press frame. All Electrical components are TE-WINTRISS and in stock. All Air components are ROSS and SMC and in stock.
 All Documentation to US Standard and complete Bill of Material is provided with each MARK SERIES GAP FRAME PRESS





SUTHERLAND PRESSES & FEEDS
MAIN SPECIFICATIONS AND DIMENSIONS

MARK 2
 Double Point Gap Frame

MODEL (Double Point Gap Frame)		MARK-2-121		MARK-2-176		MARK-2-220		MARK-2-275	
TYPE (stroke and speed)		1	2	1	2	1	2	1	2
Capacity U.S. Ton	Ton	121		176		220		275	
Rated Tonnage Point	ABDC	0.197		0.236		0.236		0.276	
Drive Configuration	Geared	Counter Rotating		Counter Rotating		Counter Rotating		Counter Rotating	
Link Slow Down @ BDC	Link	Optional		Optional		Optional		Optional	
Stroke Length	Inch	4.33	7.09	5.12	7.87	5.91	9.84	6.69	11.02
Strokes Per Minute	SPM	55-110	35-70	50-95	30-60	40-80	30-50	30-60	20-40
Die Height (SDAU)	Inch	17.1	15.7	19.1	17.7	21.7	19.7	23.8	21.7
Slide Adjustment	Inch	3.94		3.94		4.72		4.72	
Slide Area (LRx FB)	Inch	64.96 x 20.47		74.81 x 22.84		88.58 x 25.6		94.50 x 27.55	
Shank Knock Out Hole (DIA x 3)	Inch	2.00 x 3		2.00 x 3		2.00 x 3		2.00 x 3	
Bolster Area (LRx FB)	Inch	70.87 x 27.55		78.74 x 29.92		94.48 x 33.86		98.42 x 36.22	
Bolster Thickness	Inch	4.72		5.91		6.69		6.69	
Floor to Bolster	Inch	35.43		35.43		39.37		43.31	
Side Window Opening	Inch	NA		NA		NA		NA	
Height (overall)	Inch	120.35		131.57		149.61		168.11	
Width (lr)	Inch	67.17		76.38		89.76		96.46	
Depth (fb)	Inch	73.82		81.89		85.04		96.46	
Press Weight (net)	LBS	28,600		50,600		66,000		88,000	
Slide Adjusting Motor HP	HP	1 HP		1 HP		2 HP		3 HP	
Main Motor (eddy current -VS)	HP	15 HP		20 HP		25 HP		30 HP	
Power Requirements	220/480	Dual		Dual		Dual		Dual	
Air Counter Balance Max Capacity	LBS	3036		3194		6292		6362	
Air Pressure Required	PSI	80 psi		80 psi		80 psi		80 psi	

Optional Pneumatic Die Cushion

Capacity U.S. Ton	Ton	7.2	12.6	20	28
Stroke Length	Inch	2.75	3.15	3.15	3.94
Cushion Area (LRx FB) x 2 Pads	Inch	17.73x12.21	19.7x13.79	25.61x16.55	27.97x19.91

PRESS CONTROLS

T1- Honeywell MECH-PAC-1	Control				
T1 - Mech Pac Digial Cam	4 Cam				
T2 - Honeywell SMART PAC-2	Control	Standard	Standard	Standard	Standard
T2 - S Pac-2 Cam	8 Cam	Programmable	Programmable	Programmable	Programmable
T3 - Honeywell Rolling Console	Option	Standard	Standard	Standard	Standard

STANDARD ON ALL PRESSES

- Start Up Assistance (1day)
- JIS 1st Class Tolerances
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