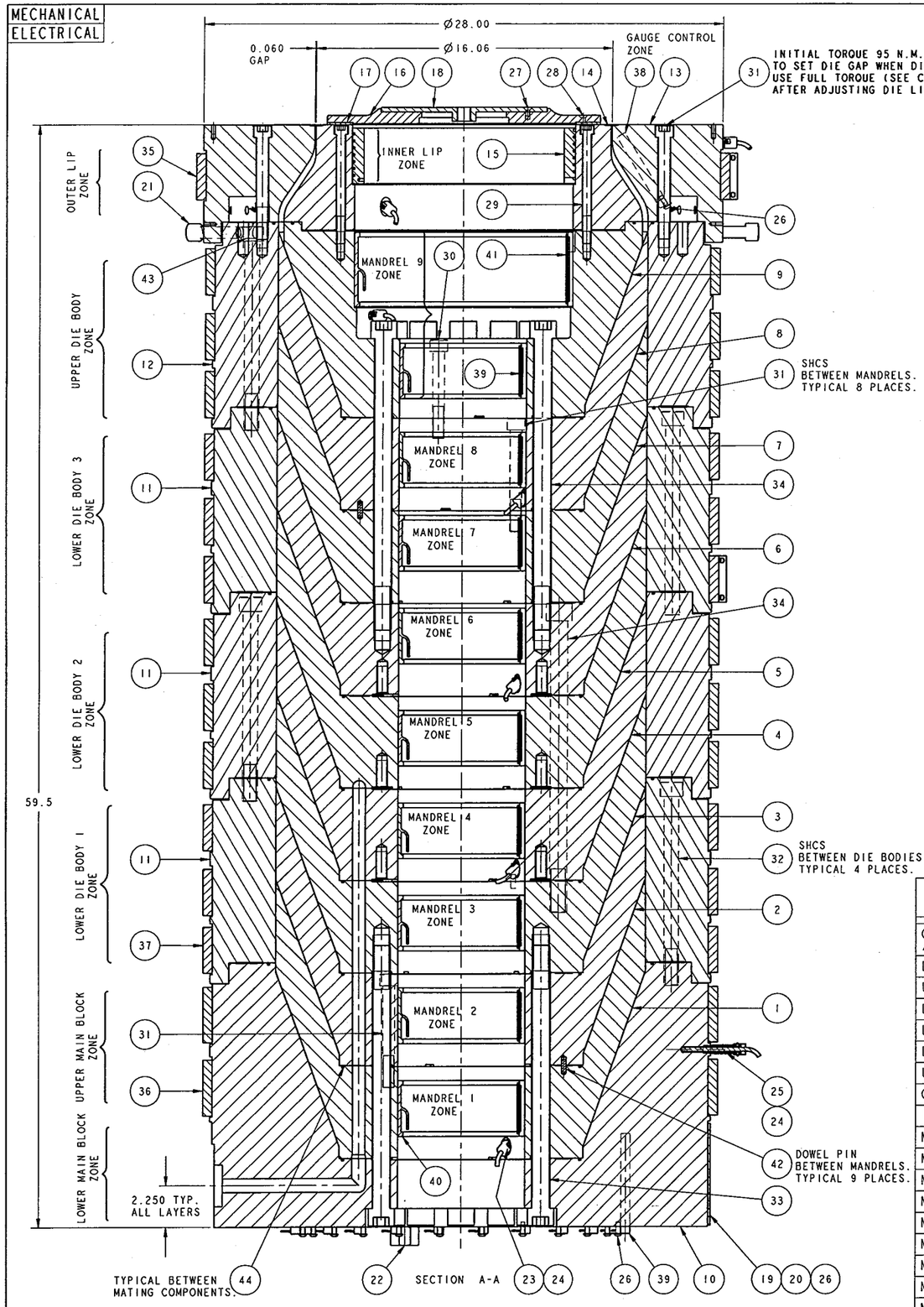
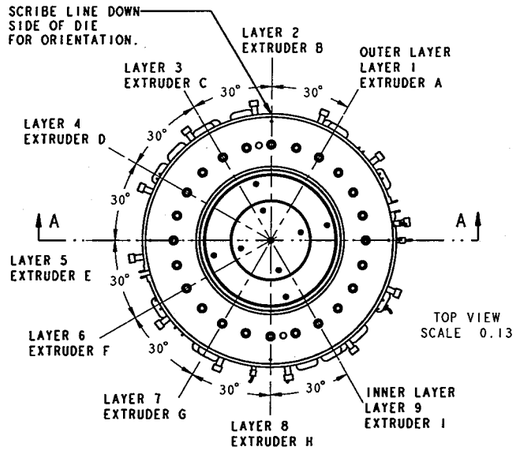
MECHANICAL
ELECTRICAL



FOLLOWING ITEMS ARE NOT SHOWN					
ITEM	MPA	PART #	DESCRIPTION	QTY	TOT
49	A	81880-5-11	NON-IBC AIR SUPPLY KIT	1	1
50	A	84070-5-11	GUARD ASSEMBLY	1	1

RECOMMENDED TORQUE TO BE APPLIED TO SHCS THAT ARE HOLOKROME AND LUBRICATED.	
3/8-16UNC --> 31 FT.LBS.	M10-1.50mm --> 60 N.M.
1/2-13UNC --> 71 FT.LBS.	M12-1.75mm --> 100 N.M.
5/8-11UNC --> 142 FT.LBS.	M16-2.0mm --> 270 N.M.
3/4-10UNC --> 350 FT.LBS.	M20-2.5mm --> 500 N.M.
7/8-9 UNC --> 450 FT.LBS.	M24-3.0mm --> 950 N.M.
1.0-8 UNC --> 700 FT.LBS.	M30-3.5mm --> 1350 N.M.
N.M. = FT.LBS x 1.35	FT.LBS = N.M. / 1.35

NOTE: HOT TORQUE ITEM #34 SHCS. PRIOR TO ITEM #33.



ASSEMBLY: HEAT UP BOTH BLOCK ZONES TO 100° C WHILE ASSEMBLING MANDRELS.

DIS-ASSEMBLY: KEEP BOTH BLOCK ZONES 50 DEG. HIGHER THAN THE REST OF THE DIE DURING DIS-ASSEMBLY.

240 V. 1 PHASE

ZONE NAME	HEATERS (ITEM #)	TOTAL WATTS	
GAUGE CONTROL 48 ZONES	#38 (x 48)	200 WTS EACH ZONE	*---DO NOT USE GAUGE CONTROL ZONE UNLESS FILM IS RUNNING.*
LOWER MAIN BLOCK	#39 (x 24)	6000 WTS	
UPPER MAIN BLOCK	#36 (x 2)	10080 WTS	
LOWER DIE BODY 1	#37 (x 3)	12600 WTS	*---WIRED 3 PHASE.*
LOWER DIE BODY 2	#37 (x 3)	12600 WTS	
LOWER DIE BODY 3	#37 (x 3)	12600 WTS	
UPPER DIE BODY	#37 (x 3)	12600 WTS	
OUTER LIP	#35	4350 WTS	*---FOR PRE-HEATING DIE ONLY.*
INNER LIP	#15	2700 WTS	
MANDREL 9	#40, #41	4200 WTS	
MANDREL 8	#40	1250 WTS	
MANDREL 7	#40	1250 WTS	
MANDREL 6	#40	1250 WTS	
MANDREL 5	#40	1250 WTS	
MANDREL 4	#40	1250 WTS	
MANDREL 3	#40	1250 WTS	
MANDREL 2	#40	1250 WTS	
MANDREL 1	#40	1250 WTS	

ITEM	MPA	PART #	DESCRIPTION	QTY	TOT
1	A	84121-5-11	MANDREL 1	1	1
2	A	84122-5-11	MANDREL 2	1	1
3	A	84123-5-11	MANDREL 3	1	1
4	A	84124-5-11	MANDREL 4	1	1
5	A	84125-5-11	MANDREL 5	1	1
6	A	84126-5-11	MANDREL 6	1	1
7	A	84127-5-11	MANDREL 7	1	1
8	A	84128-5-11	MANDREL 8	1	1
9	A	84129-5-11	MANDREL 9	1	1
10	A	84130-5-11	MAIN BLOCK	1	1
11	A	84131-5-11	LOWER DIE BODY	3	3
12	A	84132-5-11	UPPER DIE BODY	1	1
13	A	84133-5-11	OUTER LIP	1	1
14	A	84134-5-11	INNER LIP 16in (0.060 GAP)	1	1
15	A	84198-5-11	HEATER ASSEMBLY 2700 WTS	1	1
16	A	84194-5-11	LIP DEFLECTION PLATE	1	1
17	A	84215-5-11	INSULATION RING	1	1
18	A	82816-5-11	DIE COVER PLATE	1	1
19	A	84136-5-11	INSULATION WRAP	1	1
20	A	83754-5-11	INSULATION WRAP BAR	2	2
21	A	89107-5-11	ADJ.BOLT, M16-2.0 X 60mm LG.	12	12
22	A	83964-5-11	DIE SPACER	3	3
23	E	EM0100TA	TC ADAPTOR (0.88 LG.)	11	11
24	E	EM0100TC	THERMOCOUPLE, J-TYPE	17	17
25	E	EM0103TA	TC ADAPTOR	6	6
26	P	FS5133BC	BHCS, M6-1 X 16mm LG.	78	78
27	P	FS5132FC	FHCS, M6-1 X 12mm LG.	4	4
28	P	FS5134FC	FHCS, M6-1 X 20mm LG.	4	4
29	P	FS5220SC	SHCS, M12-1.75 X 150mm LG	12	12
30	P	FS5245SC	SHCS, M16-2 X 120mm LG	3	3
31	P	FS5247SC	SHCS, M16-2 X 140mm LG	48	48
32	P	FS5279SC	SHCS, M20-2.5 X 260mm LG	48	48
33	P	FS5623SC	SHCS, M24-3 X 360mm LG	12	12
34	P	FS5649SC	SHCS, M24-3 X 400mm LG	24	24
35	E	HB0101CM	HB, CERAMIC 4350 WTS	1	1
36	E	HB0105CM	HB, CERAMIC 5040 WTS	2	2
37	E	HB0182CM	HB, CERAMIC 4200 WTS	12	12
38	E	HB0124CR	CARTRIDGE HTR, 200 WTS	48	48
39	E	HB0126CR	CARTRIDGE HTR, 250 WTS	24	24
40	E	HB0290MC	HB, INTERNAL 1250 WTS	9	9
41	E	HB0490MC	HB, INTERNAL 2950 WTS	1	1
42	P	PN0132DW	DOWEL, 1/4 DIA X 3/4 LG.	9	9
43	P	PN0187DW	DOWEL, 5/8 DIA X 3/4 LG.	12	12
44	P	SL0100RN	TEFLON, 1/8 DIA X CUT TO LGTH	15	15

NOTES:
1) DIE LIP MUST BE SET TO UNIFORM GAP PRIOR TO SHIPMENT.
2) STAGGER HEATER BANDS AT ASSEMBLY.
3) APPROXIMATE WEIGHT = 9850 LBS.
4) ALL SHCS TO BE HOT TORQUED DURING DIE ASSEMBLY.
5) ALL ACCESSIBLE SHCS MUST BE HOT TORQUED AS PER SPECIFICATIONS PRIOR TO EVERY START-UP IN ORDER TO AVOID POTENTIAL LEAKAGE.
6) USE ITEMS 18,27 & 49 WHEN IBC SYSTEM IS NOT USED

REV.	DESCRIPTION	DATE	BY	INIC.BY

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TOLERANCES EXCEPT AS NOTED

DECIMAL .X ±0.020 .XX ±0.010 .XXX ±0.005

FRACTIONAL ±1/32 ANGULAR ±1/8°

SCALE : 0.3I
DATE : MAY 15/08
DRAWN BY : IAN R. ASS
CHECKED BY: SAGAR
CODE : KPR-11341-5

MACRO
MACRO ENGINEERING & TECHNOLOGY INC.
199 TRADERS BLVD. EAST, MISSISSAUGA
ONTARIO, CANADA, L4Z 2E5
(905)507-9000 Fax: (905)507-3000

TITLE : 20in 9/L DIE ASSY, WITH 16in LIPS

SIZE	SHEET	MULTIPLIER	DWG.NO.	REV.
D	1of1		A 84120 5-10	

JOB NO.	REF. DRAWING	DATE	QTY
KPR-11341-5	84115-5-0	MAY 15/08	1