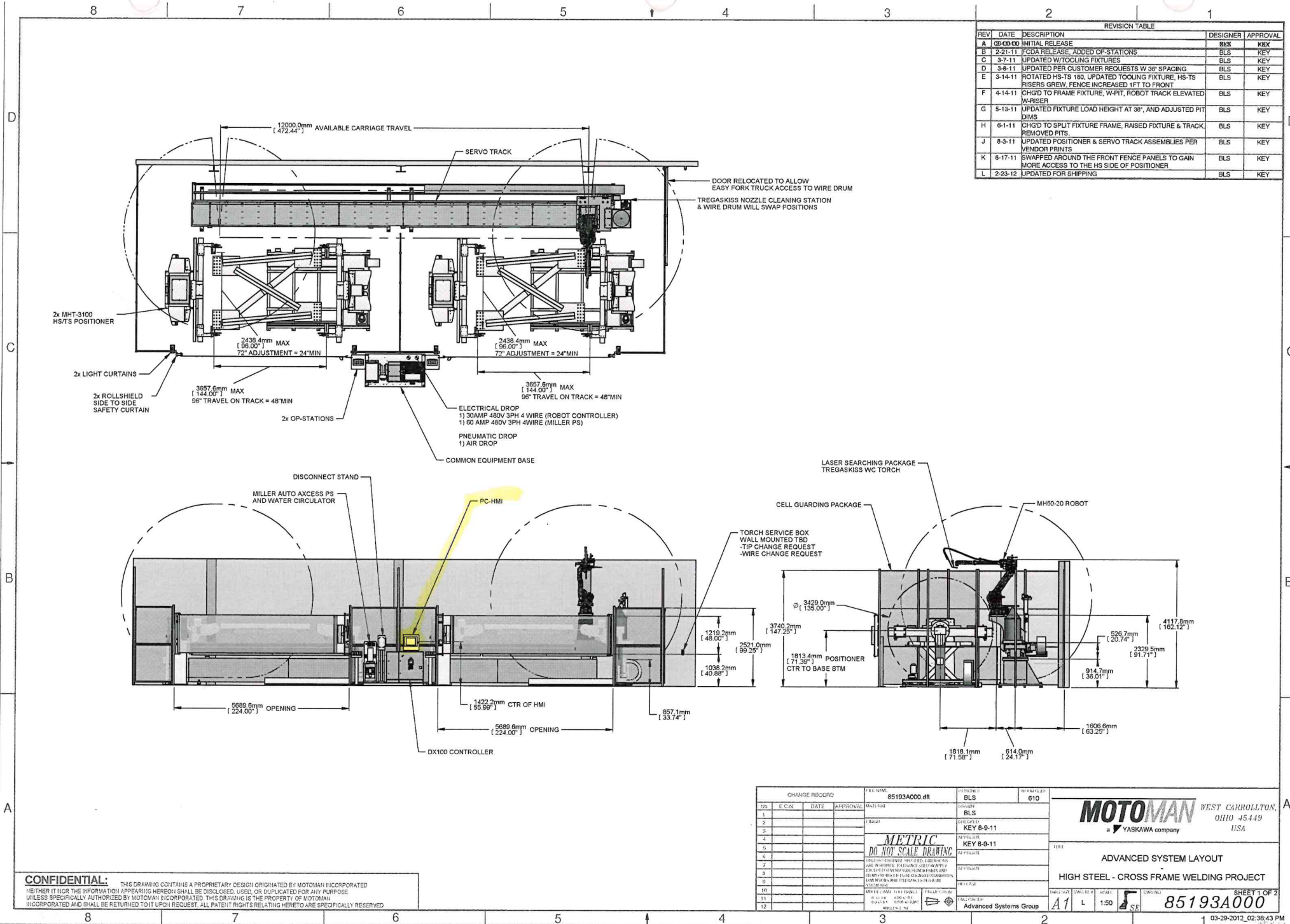




REVISION TABLE				
REV	DATE	DESCRIPTION	DESIGNER	APPROVAL
A	09-09-10	INITIAL RELEASE	BLS	KEY
B	2-21-11	FCDA RELEASE, ADDED OP-STATIONS	BLS	KEY
C	3-7-11	UPDATED W/TOOLING FIXTURES	BLS	KEY
D	3-8-11	UPDATED PER CUSTOMER REQUESTS W 36" SPACING	BLS	KEY
E	3-14-11	ROTATED HS-TS 180, UPDATED TOOLING FIXTURE, HS-TS RISERS GREW, FENCE INCREASED 1FT TO FRONT	BLS	KEY
F	4-14-11	CHGD TO FRAME FIXTURE, W-PIT, ROBOT TRACK ELEVATED W-RISER	BLS	KEY
G	5-13-11	UPDATED FIXTURE LOAD HEIGHT AT 38", AND ADJUSTED PIT DIMS	BLS	KEY
H	6-1-11	CHGD TO SPLIT FIXTURE FRAME, RAISED FIXTURE & TRACK, REMOVED PITS	BLS	KEY
J	8-3-11	UPDATED POSITIONER & SERVO TRACK ASSEMBLIES PER VENDOR PRINTS	BLS	KEY
K	8-17-11	SWAPPED AROUND THE FRONT FENCE PANELS TO GAIN MORE ACCESS TO THE HS SIDE OF POSITIONER	BLS	KEY
L	2-23-12	UPDATED FOR SHIPPING	BLS	KEY

CHANGE RECORD				FILE NAME	FILE NO	REV	DATE	APPROVAL
1	E.C.N.	DATE	APPROVAL	85193A000.dwg	BLS	610		
2					BLS			
3					KEY 8-9-11			
4					KEY 8-9-11			
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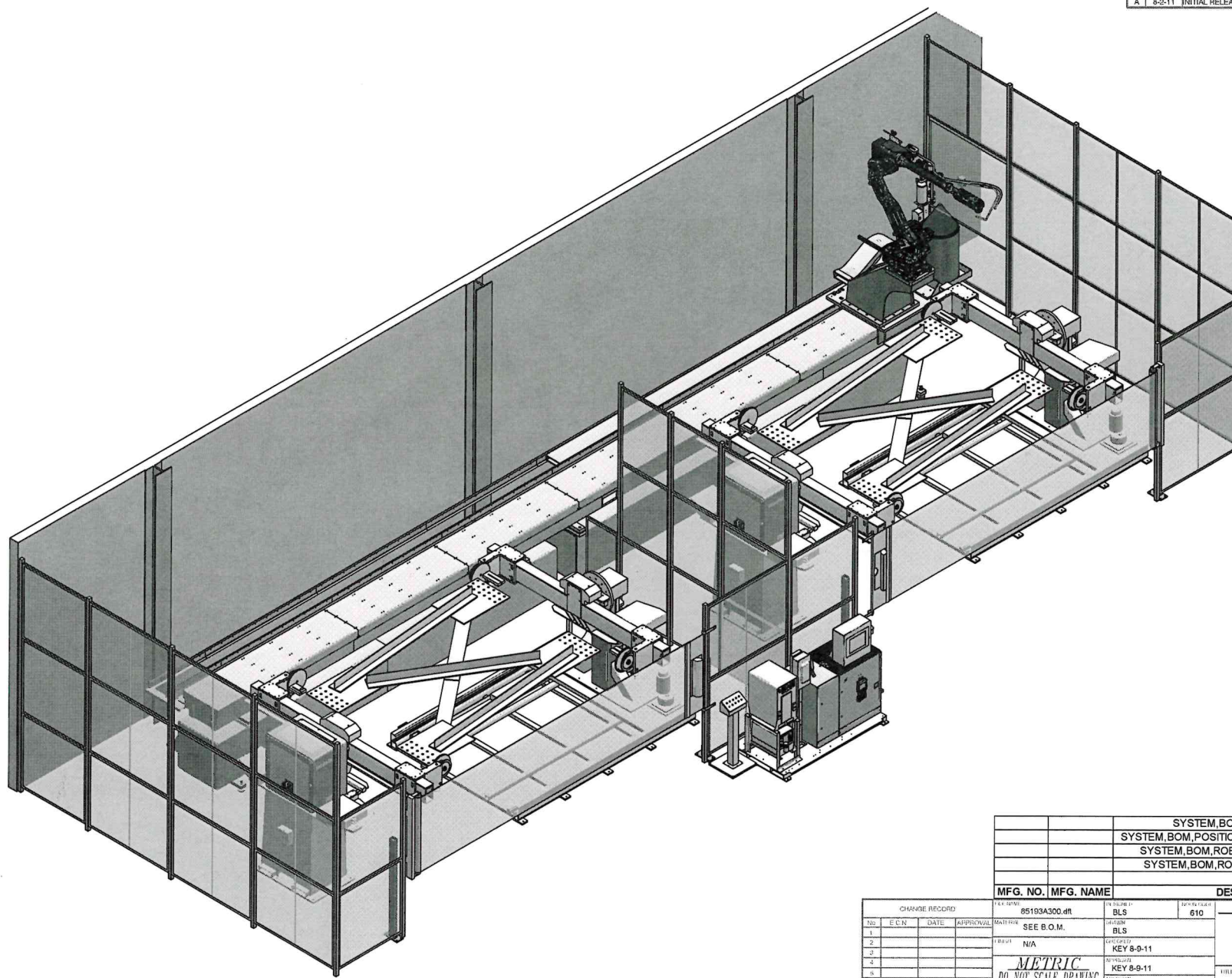
MOTOMAN WEST CARROLLTON, OHIO 45149 USA
a YASKAWA company

ADVANCED SYSTEM LAYOUT
HIGH STEEL - CROSS FRAME WELDING PROJECT

85193A000

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REVISION TABLE				
REV	DATE	DESCRIPTION	DESIGNER	APPROVA
A	8-2-11	INITIAL RELEASE	BLS	KEY



		SYSTEM,BOM,SAFETY	85193A500	EACH	1	40	4
		SYSTEM,BOM,POSITIONER,PART	85193A650	EACH	1	30	3
		SYSTEM,BOM,ROBOT TRACK	85193A600	EACH	1	20	2
		SYSTEM,BOM,ROBOT, WELD	85193A550	EACH	1	10	1

MFG. NO.	MFG. NAME	DESCRIPTION	P/N	UOM	QTY	MXP Seq	ITEM
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CHANGE RECORD			
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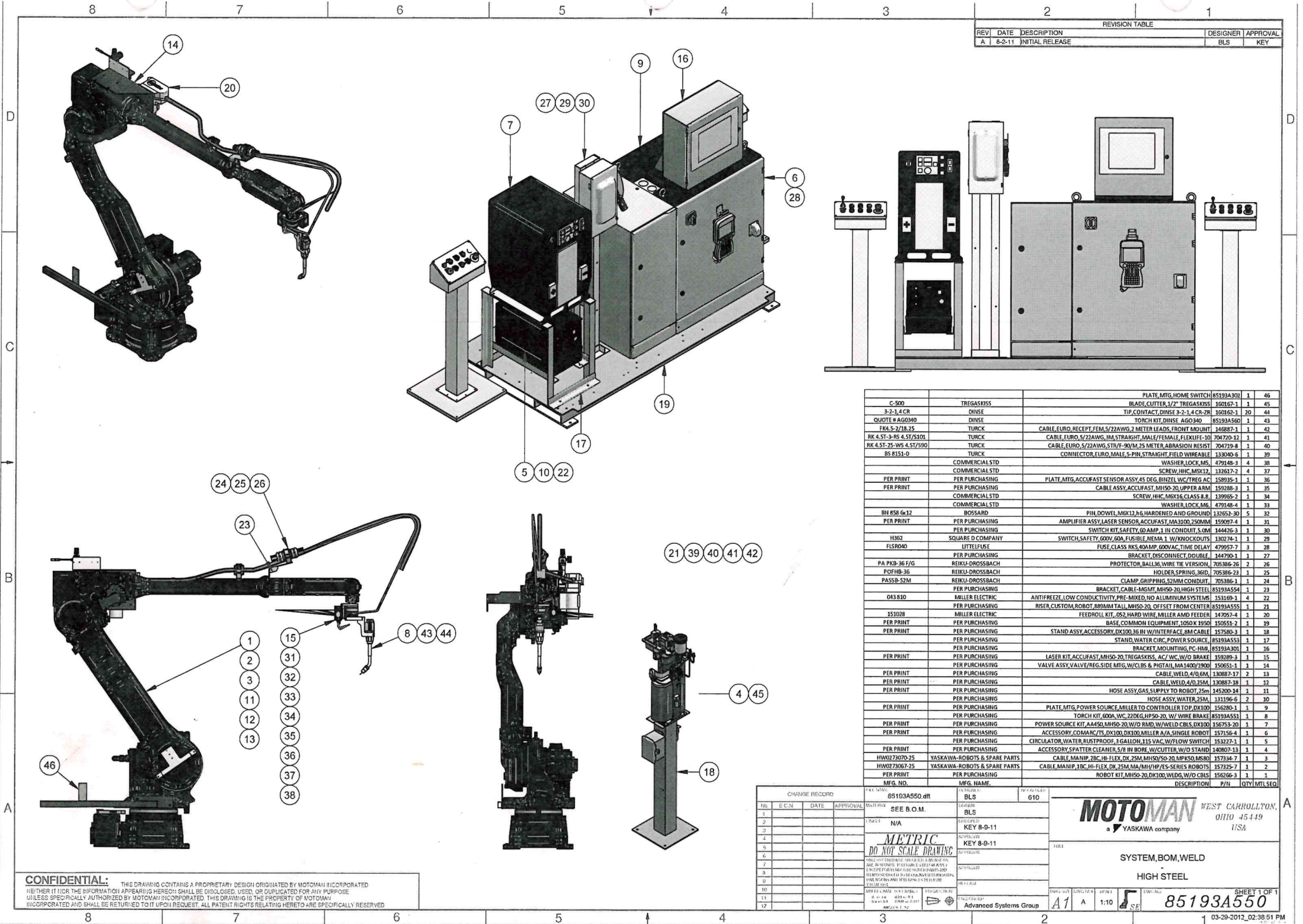
FILE NAME	85193A300.dft	FILE TYPE	BLS	DATE	12/11/91
MAIN TITLE	SEE B.O.M.	DESCRIPTION	BLS		
SHEET	N/A	KEYWORD	KEY 9-9-11		
<i>METRIC</i> <i>DO NOT SCALE DRAWING</i> THIS DRAWING IS A METRIC DRAWING. ALL DIMENSIONS ARE IN METRIC. IF THE DRAWING IS TO BE USED FOR A PROJECT THAT IS NOT METRIC, THE DIMENSIONS MUST BE CONVERTED TO THE APPROPRIATE METRIC DIMENSIONS. THE USER IS RESPONSIBLE FOR THE ACCURACY OF THE DIMENSIONS. THE USER IS RESPONSIBLE FOR THE ACCURACY OF THE DIMENSIONS. DATE: 12/11/91 BY: J. L. B. (JLB) FOR: J. L. B. (JLB) REVISION: 1.00 DATE: 12/11/91 BY: J. L. B. (JLB) FOR: J. L. B. (JLB)					
Advanced Systems Group					

MOTOMAN WEST CARROLLTON
OHIO 45449
YASKAWA company USA

TITLE	SYSTEM,BOM,MECHANICAL
	HIGH STEEL - CROSS FRAME WELDING PROJECT

HIGH STEEL - CROSS FRAME WELDING PROJECT				
ENGINE NO.	LOADING	SCALE	DATE	SHEET 1 OF
A1	L	NA	851934	300

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REVISION TABLE				DESIGNER	APPROVAL
REV	DATE	DESCRIPTION		BLS	KEY
A	8-2-11	INITIAL RELEASE			

C-500	TREGASKISS	PLATE, MTG, HOME SWITCH	85193A302	1	46
3-2-1, 4 CR	DNISE	BLADE, CUTTER, 1/2" TREGASKISS	160102-1	1	45
QUOTE # AG0340	DNISE	TIP, CONTACT, DRIVE 3-2-1, 4 CR, 2H	160103-1	1	44
FK4.5-2/18-25	TURCK	TORCH KIT, DNISE AG0340	85193A540	1	43
RK 4.5T-3-RS 4.5T/3101	TURCK	CABLE, EURO, RECEPT, FEM, 5/22AWG, 2 METER LEADS, FRONT MOUNT	146887-1	1	42
RK 4.5T-25-WS 4.5T/550	TURCK	CABLE, EURO, 5/22AWG, 3M, STRAIGHT, MALE/FEMALE, FLEXIBLE, 10	704770-12	1	41
BS 8151-0	TURCK	CABLE, EURO, 5/22AWG, STR/F-90/M, 25 METER, ABRASION RESIST	704775-8	1	40
	TURCK	CONNECTOR, EURO, MALE, 5-PIN, STRAIGHT, FIELD WIREABLE	133040-6	1	39
COMMERCIAL STD		WASHER, LOCK, M6	479146-3	1	38
PER PURCHASING		SCREW, IHC, M6X12	133212-2	1	37
PER PRINT	PER PURCHASING	PLATE, MTG, ACCURAST, SENSOR ASSY, 45 DEG, BINZEL WC/TREG AC	158935-1	1	36
PER PRINT	PER PURCHASING	CABLE ASSY, ACCURAST, MH50-20, UPPER ARM	159288-3	1	35
COMMERCIAL STD		SCREW, IHC, M6X16, CLASS 8.8	139905-2	1	34
COMMERCIAL STD		WASHER, LOCK, M6	479146-4	1	33
BSH 858 G-12	ROSSARD	PIH, DOWEL, M6X12, 2.5, HARDENED AND GROUND	133252-30	1	32
PER PRINT	PER PURCHASING	AMPLIFIER ASSY, LASER SENSOR, ACCURAST, MA3100, 250MM	159097-4	1	31
H302	PER PURCHASING	SWITCH KIT, SAFETY, 10 AMP, 1 IN CONDUIT, 5 OM	144476-3	1	30
FLS040	SQUARE D COMPANY	SWITCH, SAFETY, 600V, 60A, FUSIBLE, NEMA 1 W/KNOCKOUTS	130274-1	1	29
	LITTELFUSE	FUSE, CLASS RK5, 40AMP, 600VAC, TIME DELAY	479957-7	1	28
PA PKB-36 V/G	REIKU-DROSSBACH	BRACKET, DISCONNECT, DOUBLE	144790-1	1	27
POFIB-36	REIKU-DROSSBACH	PROTECTOR, BALLS, WHITE, TIE, VIKROSA	705386-26	1	26
PASSB-52M	REIKU-DROSSBACH	HOLDER, SPRING, 30ID	705386-23	1	25
PER PURCHASING		CLAMP, GRIPPING, 52MM CONDUIT	705386-1	1	24
PER PURCHASING		BRACKET, CABLE, MGMT, MH50-20, HIGH STEEL	85193A554	1	23
043 B10	MILLER ELECTRIC	ANTIFREEZE, LOW CONDUCTIVITY, PRE-MIXED, NO ALUMINUM SYSTEMS	153109-1	1	22
15102B	MILLER ELECTRIC	RISE, CUSTOM, ROBOT, 88MM TALL, MH50-20, OFFSET FROM CENTER	85193A555	1	21
PER PRINT	PER PURCHASING	FEEDROL KIT, 052, HARD WIRE, MILLER AND FEEDROL	141057-4	1	20
PER PRINT	PER PURCHASING	BASE, COMMON EQUIPMENT, 1050 X 1950	150553-2	1	19
PER PURCHASING		STAND ASSY, ACCESSORY, DX100, 36 IN W/INTERFACE, 8M CABLE	157580-3	1	18
PER PURCHASING		STAND, WATER CIRC, POWER SOURCE	85193A553	1	17
PER PURCHASING		BRACKET, MOUNTING, PC-HM6	85193A301	1	16
PER PRINT	PER PURCHASING	LASER KIT, ACCURAST, MH50-20, TREGASKISS, AC/DC, W/O BRAKE	159289-3	1	15
PER PRINT	PER PURCHASING	VALVE ASSY, VALVE/REG, SIDE, MTG, W/CLB, 8, POSTAIL, 4M, 1400/1900	150553-1	1	14
PER PRINT	PER PURCHASING	CABLE, WELD, 4/0, 6M	130887-17	1	13
PER PRINT	PER PURCHASING	CABLE, WELD, 4/0, 25M	130887-18	1	12
PER PRINT	PER PURCHASING	HOSE ASSY, GAS, SUPPLY TO ROBOT, 25m	145200-14	1	11
PER PRINT	PER PURCHASING	HOSE ASSY, WATER, 25M	131196-6	1	10
PER PURCHASING		PLATE, MTG, POWER SOURCE, MILLER TO CONTROLLER, TOP, DX100	150290-1	1	9
PER PURCHASING		TORCH KIT, 600A, WC, 220KG, MH50-20, W/ WIRE BRAKE	85193A551	1	8
PER PRINT	PER PURCHASING	POWER SOURCE KIT, AA450, MH50-20, W/O RMD, W/WELD CBL, DX100	156753-20	1	7
PER PRINT	PER PURCHASING	ACCESSORY, COMARC/T5, DX100, DX100 MILLER A/A, SINGLE ROBOT	157156-4	1	6
PER PRINT	PER PURCHASING	CIRCULATOR, WATER, RUSTPROOF, 3 GALLON, 115 VAC, W/FLOW SWITCH	153227-1	1	5
PER PRINT	PER PURCHASING	ACCESSORY SPATTER CLEANER, 5/8 IN BORE, W/CUTTER, W/O STAND	140607-13	1	4
HW027300-25	YASKAWA-ROBOTS & SPARE PARTS	CABLE, MANIP, 2HC, 1H, 1LX, DX, 25M, MH50-20, IMPROV, 8800	157334-7	1	3
HW027300-25	YASKAWA-ROBOTS & SPARE PARTS	CABLE, MANIP, 1HC, 1H, 1LX, DX, 25M, MA/MH/HP/ES-SERIES ROBOTS	157325-7	1	2
PER PRINT	PER PURCHASING	ROBOT KIT, MH50-20, DX100, W/CLS	156266-3	1	1

CHANGE RECORD				REV. NO.	REV. DATE	REV. BY	REV. FOR
1	8-2-11	BLS	SEE B.O.M.	610			
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MOTOMAN
a YASKAWA company

WEST CARROLLTON,
OHIO 45449
USA

SYSTEM, BOM, WELD
HIGH STEEL

Advanced Systems Group

1:10

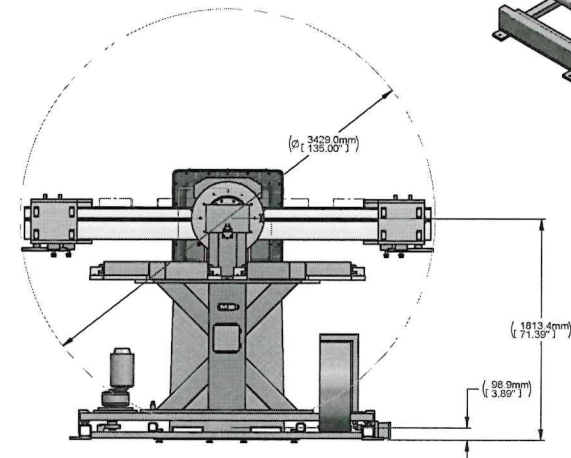
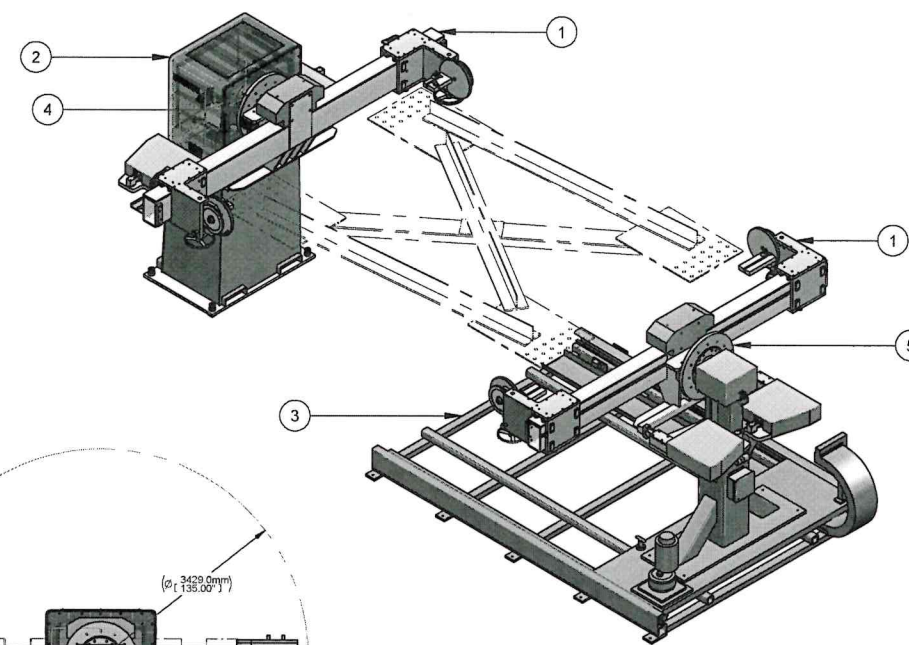
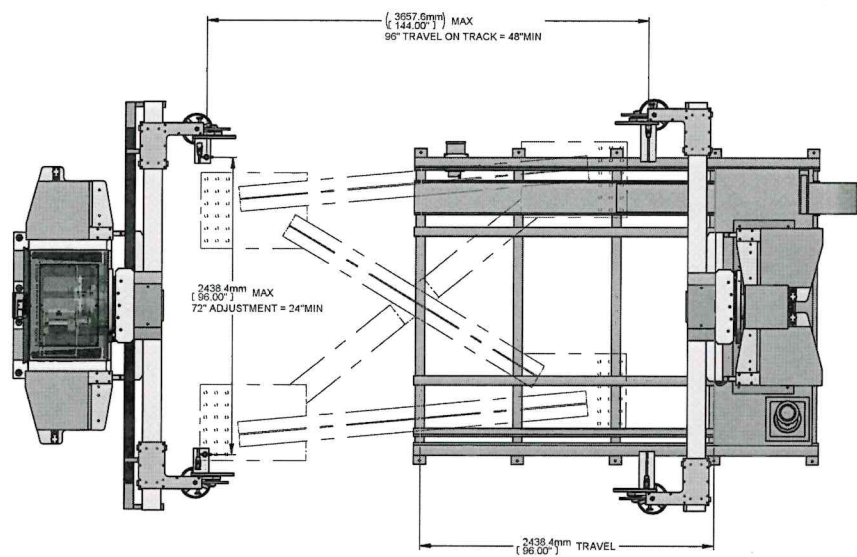
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REVISION TABLE				DESIGNER	APPROVAL
REV	DATE	DESCRIPTION			KEY
A	8-2-11	INITIAL RELEASE		BLS	



6 7 8 9 10 NOT SHOWN

MFG. NO.	MFG. NAME	DESCRIPTION	P/N	UOM	QTY	MXF	Seq	ITEM
		CABLE HOLDER, CAT TRACK, FOOT	718437-1	EACH	1	100	10	
		MOUNT, CAT TRACK, FIXTURE	85193A719	EACH	2	90	9	
		MOUNT, CAT TRACK, FIXTURE	65193A718	EACH	1	80	8	
		SUPPORT, CAT TRACK, FIXTURE	65193A717	EACH	1	70	7	
		PLATE, GROUND, TAIL STOCK	85193A657	EACH	1	60	6	
		PLATE, FACE, 2000KG HEAD STOCK	146199-1	EACH	2	50	5	
		FIXTURE ASSY, TOOL MOUNTING	146200-2	EACH	2	40	4	
QUOTE#110614-01 DATE 06/14/11	PRESTON EASTON	TRACK, TAIL STOCK, 2.5M STROKE	85193A630	EACH	2	30	3	
		POSITIONER ASSY, MH3100	85193A652	EACH	2	20	2	
QUOTE# 105436 DATED 2/14/11	MAC MACHINE & MTLWRK	FIXTURE, WELDING, HOLDING	85193A651	EACH	2	10	1	

CHANGE RECORD				DATE	APPROVAL
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MOTOMAN WEST CARROLLTON, OHIO 45449
a YASKAWA company HISA

SYSTEM BOM, POSITIONER, PART
HIGH-STEEL

SHEET 1 OF 1
85193A650

03-29-2012 02:38:59 PM

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