

Hensel Phelps Construction Co, Inc

DATE: 9/6/2014 Phone: 760-587-2333
 CONTRACTOR: Hensel Phelps Construction Co, Inc. Fax: _____
 ATTENTION: Oscar odessert@henselphelps.com
 PROJECT ADDRESS: 17885 Von Karman
 PROJECT: Mesa Court - Irvine
 We are pleased to quote the following prices to provide concrete pumping services, in support of the above referenced project. Prices quoted will remain in effect through Duration of Project

BOOM PUMPS

Boom Length	Pump/Hr.	CY/Price	Min.Pump Chg	Vertical Reach	Horizontal Reach
28 Meter	\$50.00	\$1.70	4 HR	92'	79'
32 Meter	\$55.00	\$1.70	4 HR	106'	93'
34 Meter	\$60.00	\$1.80	5 HR	112'	99'
36 Meter	\$65.00	\$1.80	5 HR	118'	105'
39 Meter	\$75.00	\$2.00	5 HR	127'	114'
42 Meter	\$80.00	\$2.00	5 HR	138'	124'
47 Meter	\$90.00	\$2.00	5 HR	155'	142'
52 Meter	\$110.00	\$2.25	5 HR	158'	146'
55 Meter	\$135.00	\$2.75	5 HR	167'	152'
58 Meter	\$150.00	\$3.00	5 HR	188'	175'
61 Meter	\$170.00	\$3.00	5 HR	197'	185'

CONVEYOR BELTS

	Pump/Hr.	CY/Price	Min.Pump Chg
105'	\$100.00	\$2.25	5 HR
130'	\$120.00	\$2.50	5 HR

Boom Pump Operator Rates	<u>0-8 hrs.</u>	<u>8-12 hrs</u>
Operator	\$116.00	\$164.00
Oiler	\$109.00	\$152.00

Operators and oilers have a 4 & 8 hour minimum which includes 1-hour set up and 1-hour clean up time and will be charged in accordance with the California State Labor Laws.

Oiler is required on 42 thru 61 meter booms, or when the operator cannot see the point of pour from on, or at the pump.

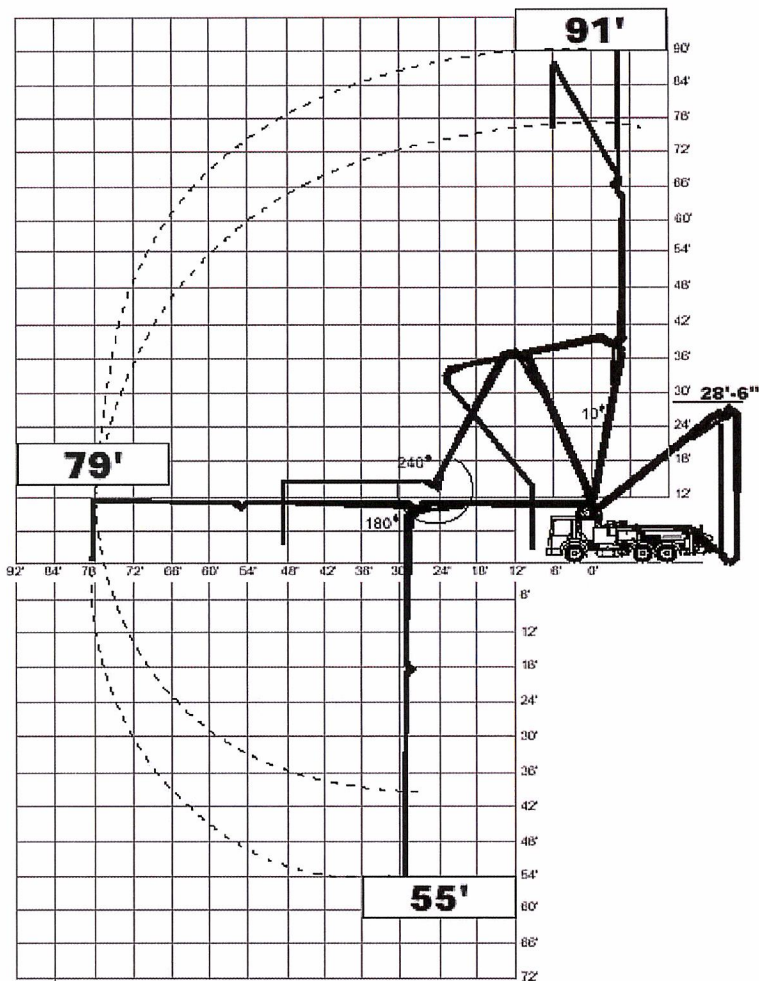
Proposed by: Dane Dixon

Title: Vice-President

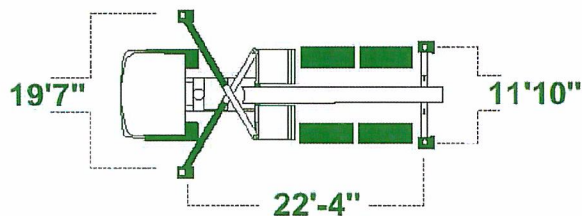
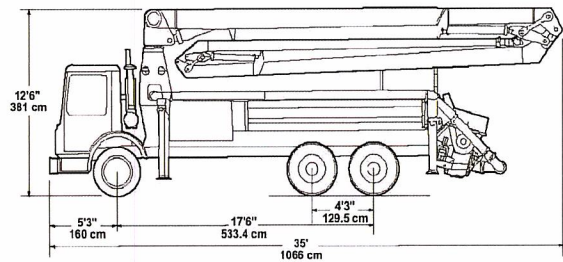
Schwing 28 meter

Technical Information

KVM 28X Boom Chart



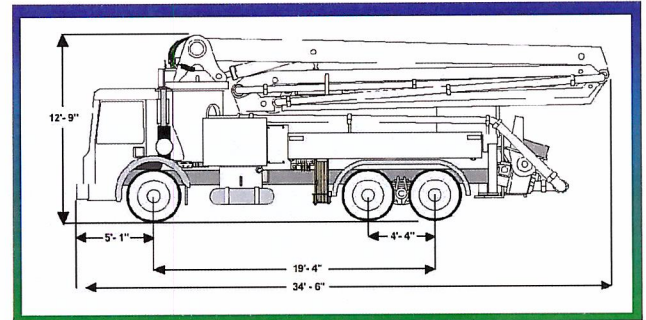
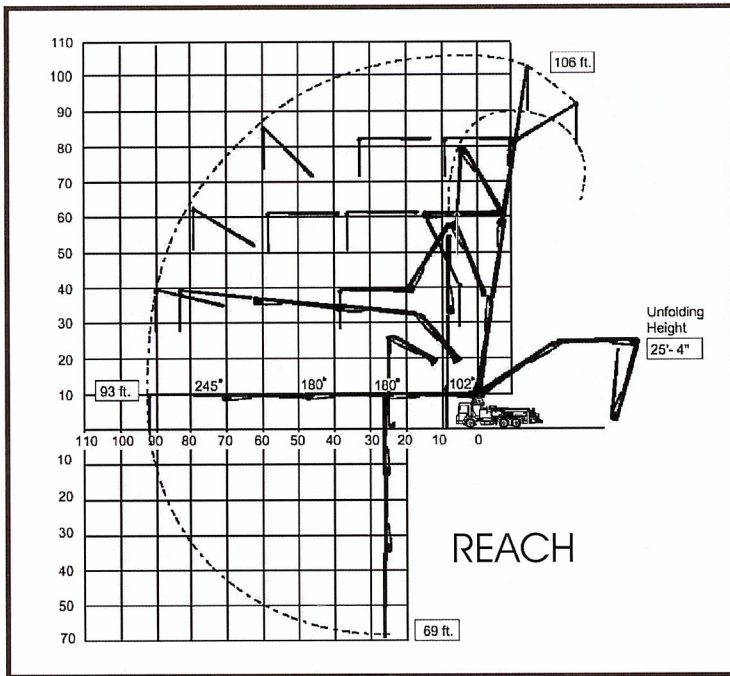
Vehicle Length & Height



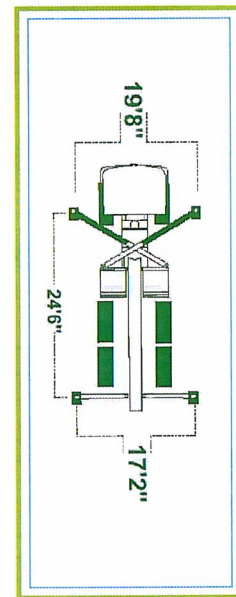
Outrigger Pattern

Boom Specifications		U.S.
Pipeline Diameter		5"
Vertical Reach		92'
Net Horizontal Reach		73'
Reach from Slewing Axis		79'
Unfolding height		28' 1"
Section Length	First Section	28' 3"
	Second Section	26' 7"
	Third Section	23' 9"
Slewing Range		370°
End hose length		12' 6"
Specifications are subject to change without prior notice		

Schwing 32 meter



LENGTH & HEIGHT SPECS



FOOTPRINT

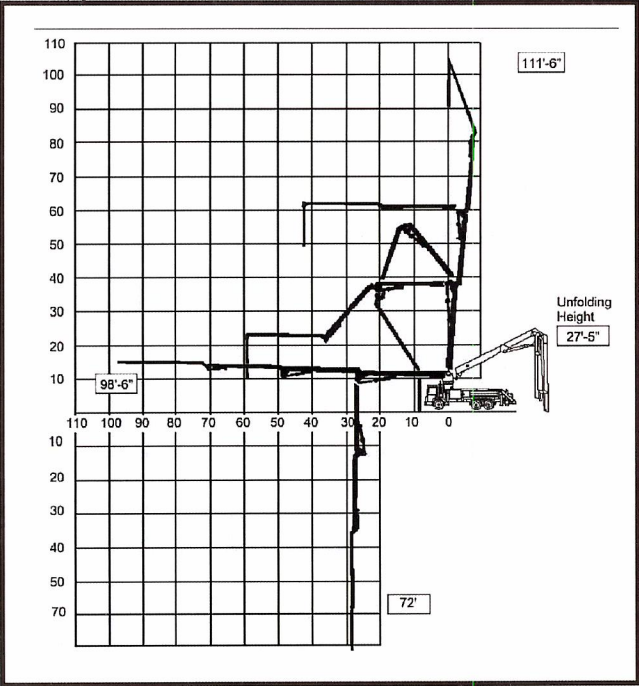


TECHNICAL DATA

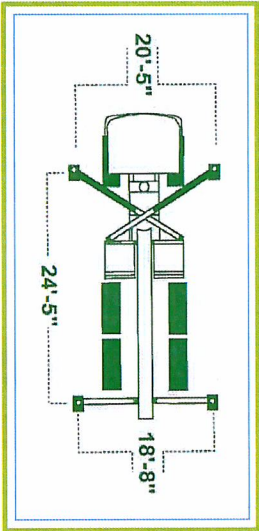
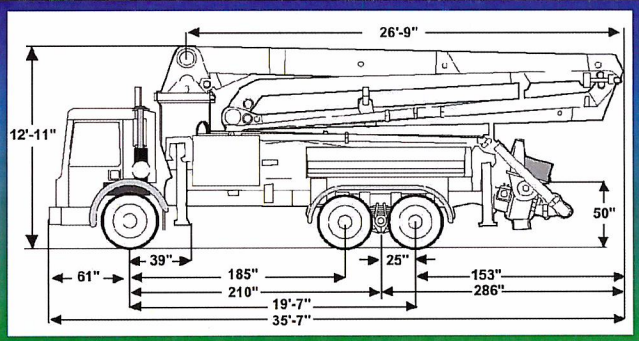
Pump Kits on 32XL					900	1200	2023-4	2023-5	Boom Specifications		U.S.	Metric
Theor. Concrete Output (cu./yds/hr)		117		171		170		209	Pipeline Diameter		5"	125 mm
Max. Pressure on Concrete (psi)		870		759		1007		1007	Vertical Reach		106'	32 m
Max. Strokes/Min.		30		26		26		32	Net Horizontal Reach		84' 4"	25.7 m
Pump Cylinder Diameter (in.)		8		9		9		9	Reach from Slewling Axis		93'	28.3 m
Pump Cylinder Stroke Length (in.)		63		79		79		79	Unfolding height		25' 4"	7.5 m
Differential Cylinder Size (in.)		4.7		4.9		5.1		5.1	Section Length	First Section	25' 11"	7.9 m
Max. Aggregate Size (in.)		2.5		2.5		2.5		2.5		Second Section	23' 1"	7 m
Hydraulic System Pressure (psi)		4350		4350		5075		5075		Third Section	23' 1"	7 m
										Fourth Section	20' 10"	6.3 m
									Slewling Range		400°	400°
									End hose length		12' 6"	4000 mm
Specifications are subject to change without prior notice									Specifications are subject to change without prior notice			

Schwing 34 meter

LENGTH & HEIGHT SPECS



REACH



FOOTPRINT

Pump Kits on 34X 2023-4

Theor. Concrete Output (cu./yds/hr)	170
Max. Pressure on Concrete (psi)	1007
Max. Strokes/Min.	26
Pump Cylinder Diameter (in.)	9
Pump Cylinder Stroke Length (in.)	79
Differential Cylinder Size (in.)	5.1
Max. Aggregate Size (in.)	2.5
Hydraulic System Pressure (psi)	5075

Specifications are subject to change without prior notice

TECHNICAL DATA

Boom Specifications		U.S.	Metric
Pipeline Diameter		5"	125 mm
Vertical Reach		111'-6"	34 m
Net Horizontal Reach		90'	27.5 m
Reach from Slewing Axis		98'-6"	30 m
Minimum Unfolding height		27'-5"	7.8 m
Section Length	First Section	26'-5"	8.6 m
	Second Section	23'-8"	7.8 m
	Third Section	23'-9"	7.8 m
	Fourth Section	24'-7"	8 m
Slewing Range		550°	550°
End hose length		12'-6"	4000 mm
Specifications are subject to change without prior notice			

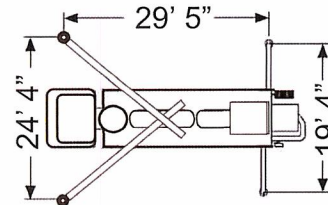
UTILIZING CONCRETE PUMPS THAT ARE
THE CUTTING EDGE IN TECHNOLOGY

Schwing 36 meter

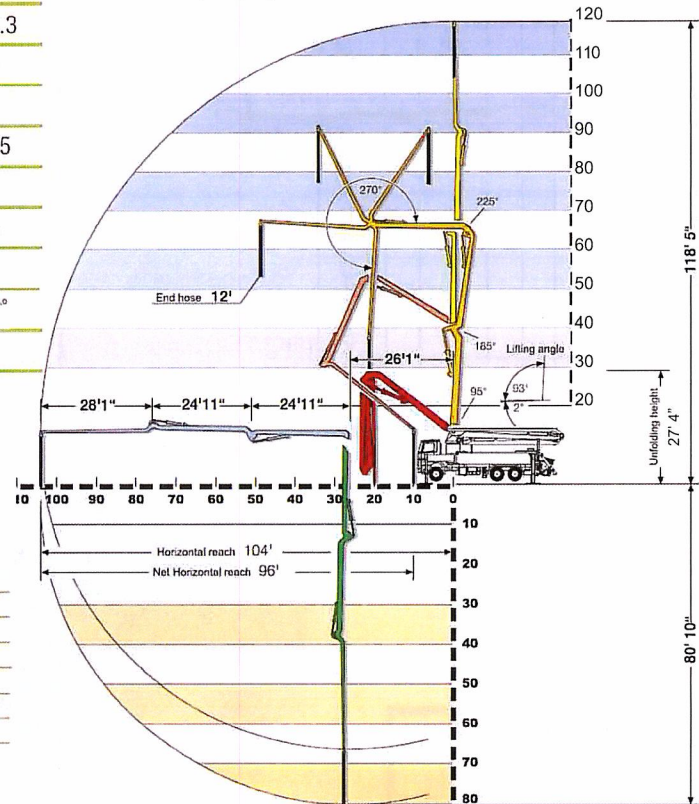
Boom Specifications

	U.S.	Metric
Pipeline Diameter (in. - mm)	5	125
Vertical Reach (ft.-in. - m)	118-5	36.1
Horizontal Reach (ft. - m)	104	31.7
Net Horizontal Reach (ft. - m)	96	29.3
Unfolding Height (ft.-in. - m)	28-10	8.8
Section Lengths		
First Section (ft.-in. - m)	26-1	7.95
Second Section (ft.-in. - m)	24-11	7.6
Third Section (ft.-in. - m)	24-11	7.6
Fourth Section (ft.-in. - m)	28-1	8.6
Slewing Range (degrees)	370°	370°
End hose length (ft. - m)	12	3.7

Specifications are subject to change without prior notice.



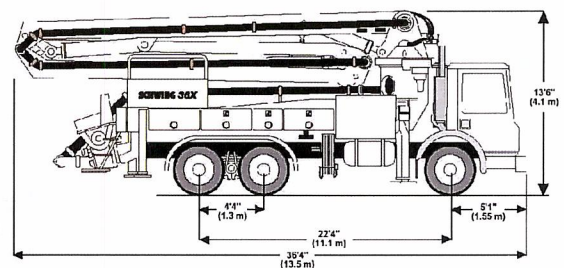
FOOTPRINT



SPECIFICATIONS

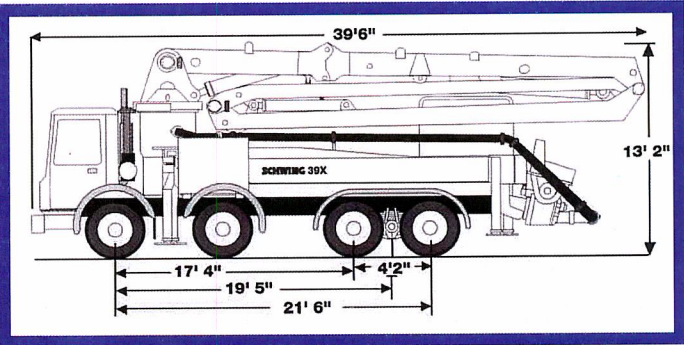
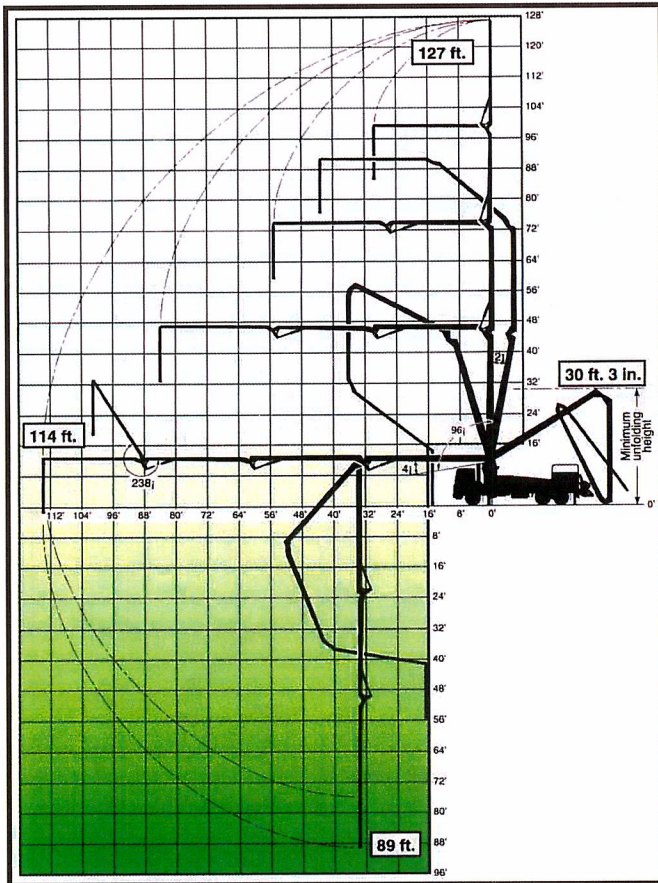
PUMP KIT ON 36 X

	2023-5	
	U.S.	Metric
Theor. Concrete Output Per Hour (cubic yards - cubic meters)	178	136
Maximum Pressure on Concrete (psi - bar)	1233	85
Maximum Strokes Per Minute	23	23
Pump Cylinder Diameter (in. - mm)	10	250
Pump Cylinder Stroke Length (in. - mm)	79	2000
Differential Cylinder Size (in. - mm)	4.7	120
Maximum Aggregate Size (in. - mm)	2.5	63.5



LENGTH & HEIGHT SPECS

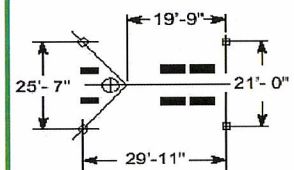
Schwing 39 meter



Boom Specifications

	U.S.	Metric
Pipeline Diameter	5"	125 mm
Vertical Reach	127'	39 m
Reach from Slewling Axis	114'	35 m
Net Horizontal Reach	105'-2.5"	32 m
Unfolding height	30'-3"	9.2 m
Section Length	First Section	30'-7"
	Second Section	27'-6"
	Third Section	27'-6"
	Fourth Section	27'-2"
Slewling Range	550°	550°
End hose length	12' 6"	4 m

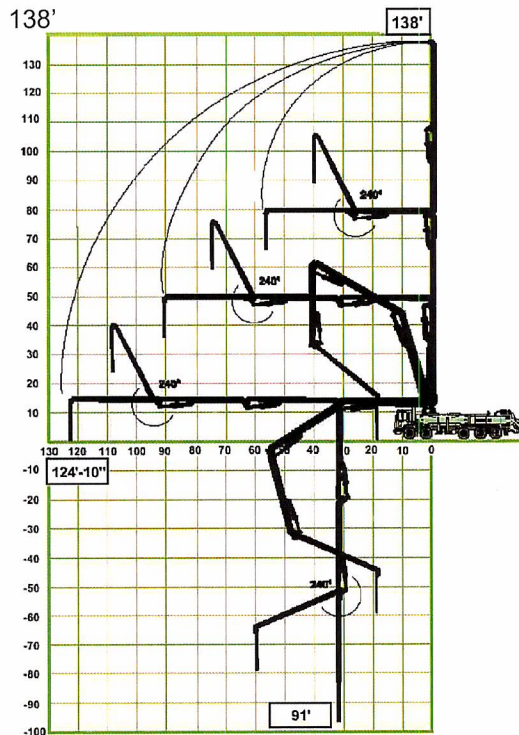
39X OUTRIGGER SPREAD



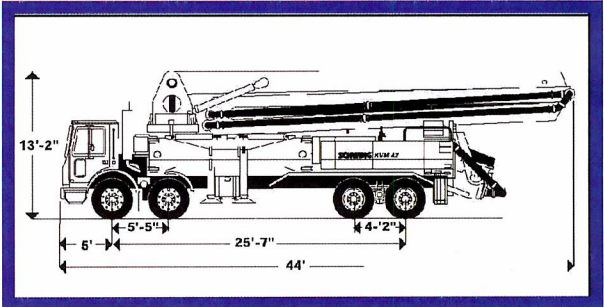
FOOTPRINT



Schwing 42 meter



REACH



LENGTH & HEIGHT SPECS

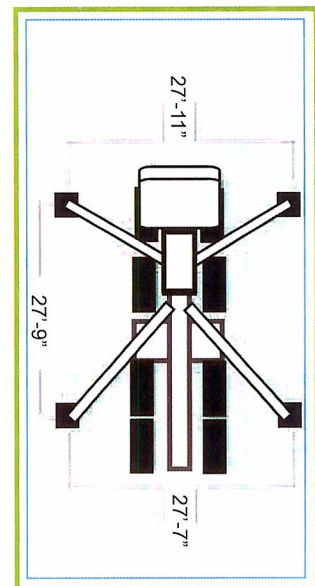
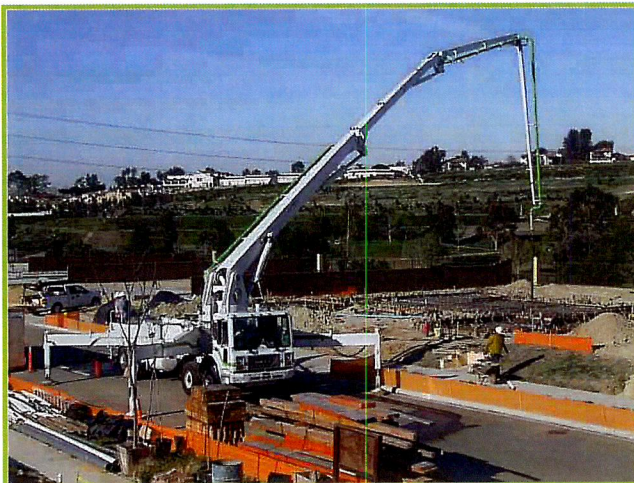
TECHNICAL DATA

Pump Kits on KVM 42	2023-4	2023-5	2023H-6
Theor. Concrete Output (cu./yds/hr)	170	209	182
Max. Pressure on Concrete (psi)	1007	1007	1233
Max. Strokes/Min.	26	32	28
Pump Cylinder Diameter (in.)	9	9	9
Pump Cylinder Stroke Length (in.)	79	79	79
Differential Cylinder Size (in.)	5.1	5.1	4.7
Max. Aggregate Size (in.)	2.5	2.5	2.5
Hydraulic System Pressure (psi)	5075	5075	5075

Specifications are subject to change without prior notice

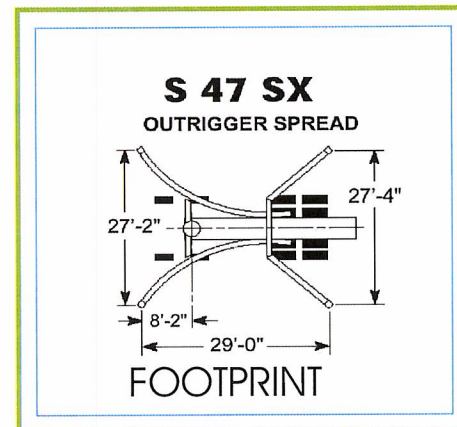
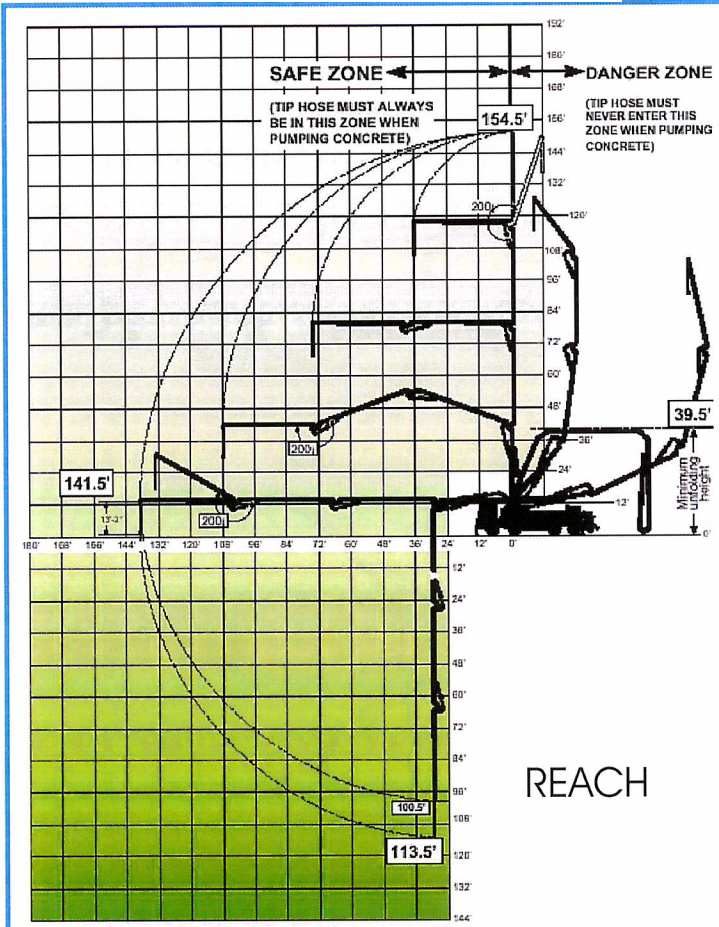
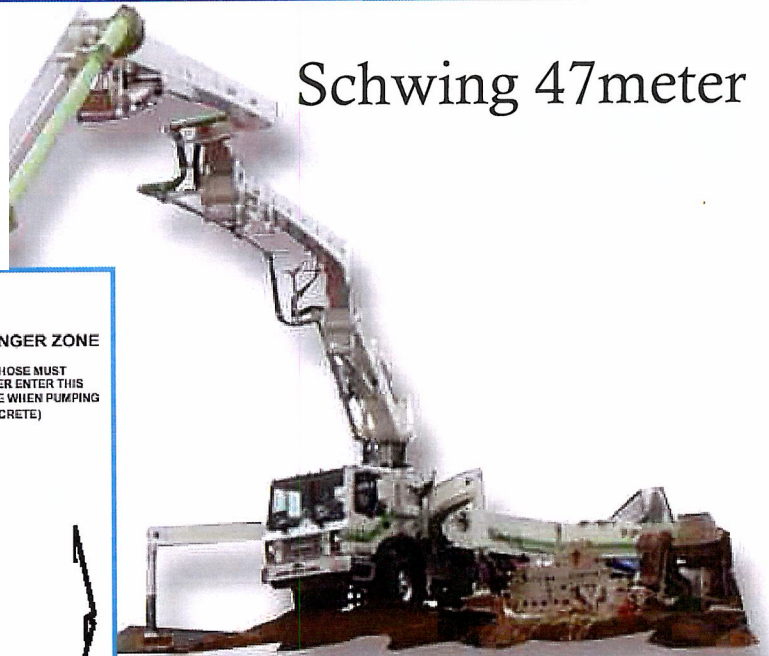
Boom Specifications	U.S.	Metric
Pipeline Diameter	5"	125 mm
Vertical Reach	138'	42 m
Net Horizontal Reach	115'	35 m
Reach from Slewling Axis	125'	38 m
Minimum Unfolding height	32' 11"	10 m
Section Length	First Section 33'10"	10.3 m
	Second Section 30'4"	9.24 m
	Third Section 30'4"	9.24 m
	Fourth Section 30'4"	9.24 m
Slewling Range	380°	380°
End hose length	12.5'	4000 mm

Specifications are subject to change without prior notice



FOOTPRINT

Schwing 47meter



Boom Specifications	U.S.	Metric
Pipeline Diameter	5"	112 mm
Vertical Reach	154.5'	47 m
Reach from Slewing Axis	141.5'	43.1 m
Net Horizontal Reach	129.5'	39.5 m
Unfolding Height	39.5'	12 m
Section Length		
First Section	27.4'	8.35 m
Second Section	38'	11.6 m
Third Section	38'	11.6 m
Fourth Section	38.2'	11.65 m
Slewing Range	380°	380°
4.4" End hose length* (coupled one end only)	9'	2.74 m

Pump Kits on S 47 SX	2023-4	2023-5	2525-5	2525H-6
Theor. Concrete Output (cu yd/hr)	170	209	181	213
Max. Pressure on Concrete (psi)	1007	1007	1169	1169
Max. Strokes/Min.	28	32	18	22
Pump Cylinder Diameter (in.)	9	9	10	10
Pump Cylinder Stroke Length (in.)	79	79	98	98
Differential Cylinder Size (in.)	5.1	5.1	4.7	4.7
Max. Aggregate Size (in.)	2.5	2.5	2.5	2.5
Max. Hydraulic System Pressure (psi)	5075	5075	5075	5075

Schwing 52meter

SPECIFICATIONS

Pump Kit on S 52 SX / S 55 SX

2525H-6 120/85 MPS

U.S.

Metric

	U.S.	Metric
Theor. Concrete Output Per Hour (cubic yards - cubic meters)	213	163
Maximum Pressure on Concrete (psi - bar)	1169	81
Maximum Strokes Per Minute	22	22
Pump Cylinder Diameter (in. - mm)	10	250
Pump Cylinder Stroke Length (in. - mm)	98	2500
Differential Cylinder Size (in. - mm)	4.7	120
Maximum Aggregate Size (in. - mm)	2.5	63.5

Boom Specifications

S 52 SX / S 55 SX

U.S.

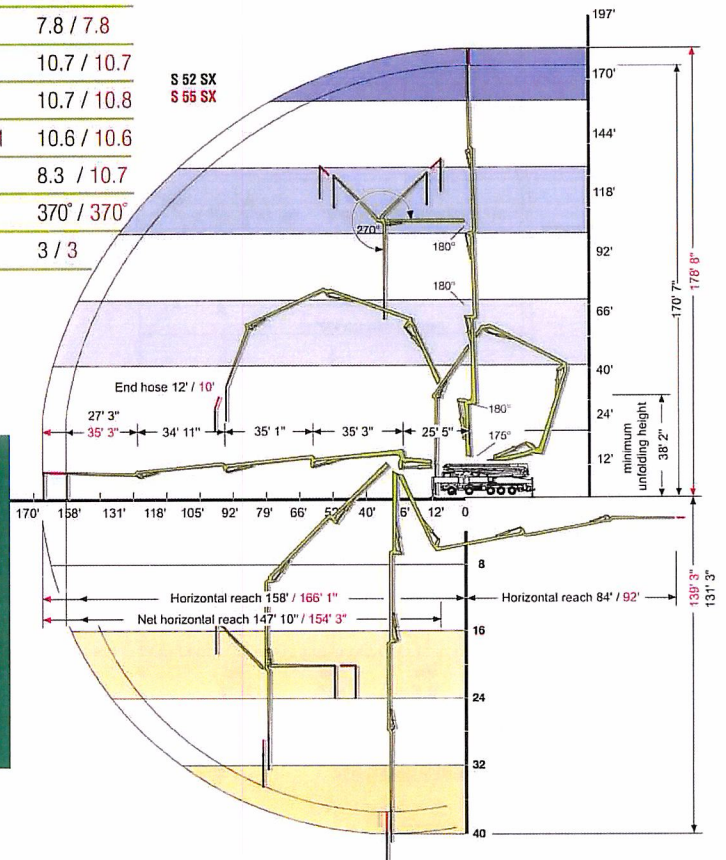
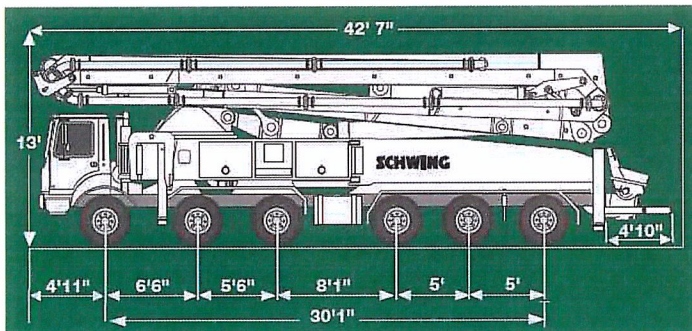
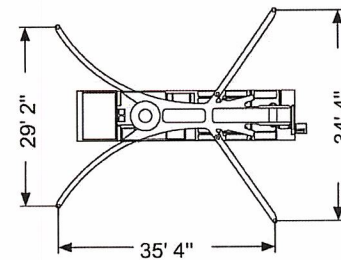
Metric

Pipeline Diameter (in. - mm)	5 / 4.5	125 / 112
Vertical Reach (ft.-in. - m)	170'-7" / 178'-8"	52 / 54.5
Horizontal Reach (ft.-in. - m)	158' / 166'-1"	48.2 / 50.6
Net Horizontal Reach (ft. - m)	146' / 154	44.5 / 47
Unfolding Height (ft.-in. - m)	38'-2" / 38'-2"	11.7 / 11.7

Section Lengths

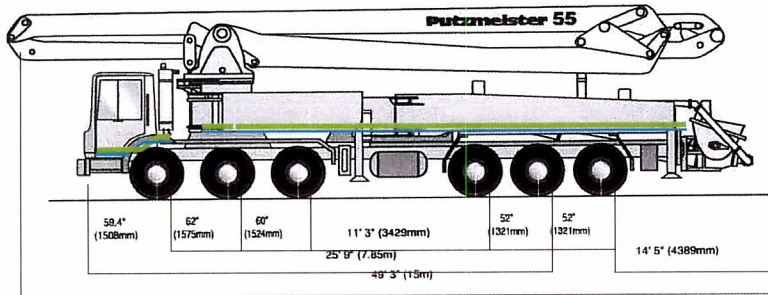
First Section (ft.-in. - m)	25'-5" / 25'-5"	7.8 / 7.8
Second Section (ft.-in. - m)	35'-3" / 35'-3"	10.7 / 10.7
Third Section (ft.-in. - m)	35'-1" / 35'-1"	10.7 / 10.8
Fourth Section (ft.-in. - m)	34'-11" / 34'-11"	10.6 / 10.6
Fifth Section (ft.-in. - m)	27'-3" / 35'-3"	8.3 / 10.7
Slewing Range (degrees)	370° / 370°	370° / 370°
End hose length (ft. - m)	10 / 10	3 / 3

Specifications are subject to change without prior notice.



Putzmeister 55 meter

55 Meter Specifications



Truck-Mounted Specifications

Based on Model MACK MR688S

Length	49' 3"	(15.00m)
Width	8' 2"	(2.50m)
Height	12' 11"	(3.94m)
Wheelbase	309"	(7,849mm)
Front axle weight	53,395 lbs	(24,217kg)
Rear axle weight	51,540 lbs	(23,375kg)
Approx. total weight	104,935 lbs	(47,592kg)

Weights are approximate and include pump, boom, truck, full hydraulic oil, driver and some fuel. Varies with options selected.

Dimensions will vary with different truck makes, models and specifications.

Boom Specifications • Roll and Fold Design

Height & Reach

Vertical reach	180'	(54.86m)
Horizontal reach	167' 4"	(51.00m)
Reach from front of truck*	158' 9"	(48.40m)
Reach depth	135'	(41.15m)
Unfolding height	48'	(14.63m)

4-Section Boom

1st section articulation		180°
2nd section articulation		180°
3rd section articulation		180°
4th section articulation		210°
1st section length	29'10"	(9.10m)
2nd section length	43'6"	(13.25m)
3rd section length	46'9"	(14.25m)
4th section length	46'11"	(14.29m)

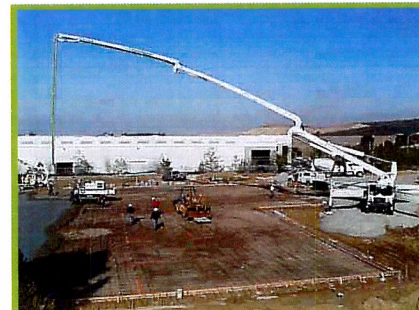
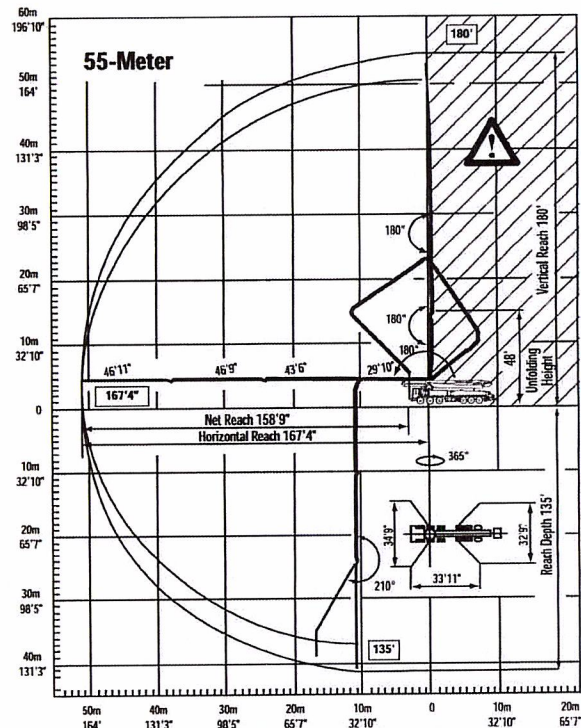
General Specifications

Pipeline size (ID) metric ends	5"	(125mm)
with couplings (133x4mm)+	5.5"	(140mm)
Rotation		365°
End hose-length (heavy duty)	13'	(4m)
End hose-diameter	5"	(125mm)
Outrigger spread L-R-front swing out & telescope	34' 9"	(10.60m)
Outrigger spread L-R-rear swing out	32' 9"	(9.98m)

Pump Specifications

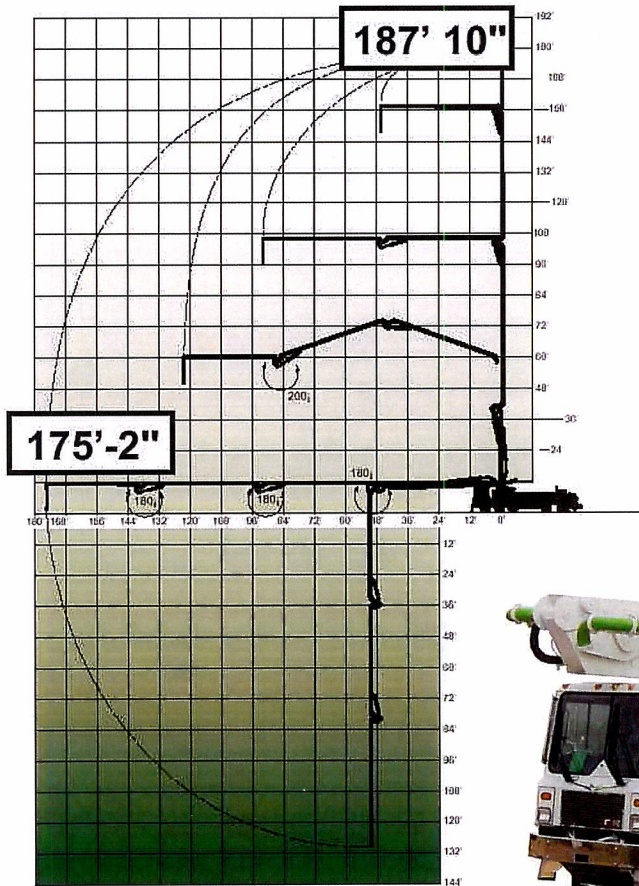
	55.16H	55.20H
Output- rod side	210 yd ³ /hr (160m ³ /hr)	—
piston side	146 yd ³ /hr (112m ³ /hr)	260 yd ³ /hr (200m ³ /hr)
Pressure-rod side	1233 psi (85 bar)	—
piston side	1885 psi* (130 bar)*	1233 psi* (85 bar)*
Concrete cylinder dia.	9" (230mm)	11" (280mm)
Stroke length	83" (2100mm)	83" (2100mm)
Max strokes per minute-		
rod side	31	—
piston side	21	28
Volume control	0-Full	0-Full
Vibrator	Standard	Standard
Hard chromed concrete cylinders	Standard	Standard
Hydraulic system	Free Flow	Free Flow
Hyd. system pressure	5075 psi (350 bar)	5075 psi (350 bar)
Differential cylinder dia.	5" (140mm)	5.5" (140mm)
Rod diameter	3.1" (80mm)	3.1" (80mm)
Maximum size aggr.	2.5" (63mm)	2.5" (63mm)
Water tank - pedestal	238 gal (900L)	238 gal (900L)
- outrigger	185 gal (700L)	185 gal (700L)

Maximum theoretical values listed



58 METER

S 58 SX Boom Chart



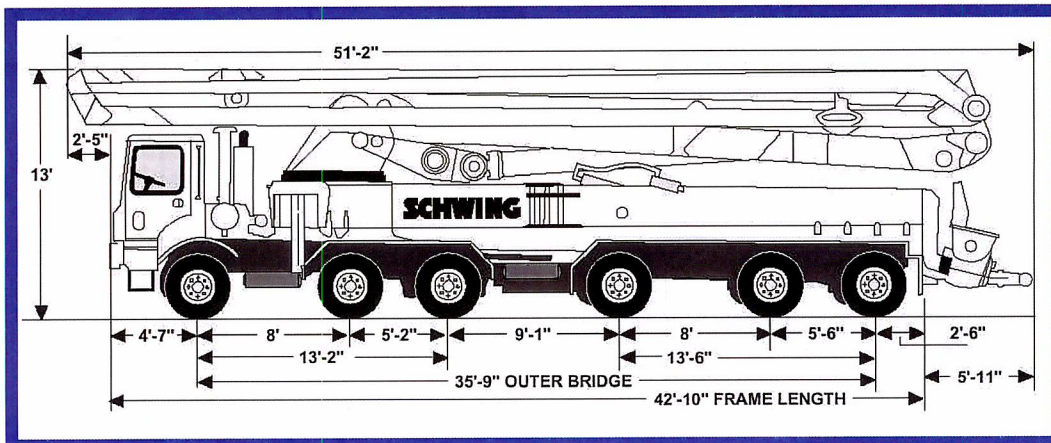
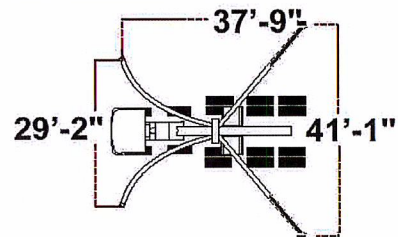
Pump Kits on S 58 SX	2525H-5	2525H-6
Theor. Concrete Output (cu.yds/hr)	181	213
Max. Pressure on Concrete (psi)	1169	1169
Max. Strokes/Min.	18	22
Pump Cylinder Diameter (in.)	10	10
Pump Cylinder Stroke Length (in.)	98	98
Differential Cylinder Size (in.)	4.7	4.7
Max. Aggregate Size (in.)	2.5	2.5
Hydraulic System Pressure (psi)	5075	5075

Specifications are subject to change without prior notice

Boom Specifications	U.S.	Metric
Pipeline Diameter	5"	125 mm
Vertical Reach	187' - 10"	57.24 m
Net Horizontal Reach	159' - 5"	48.6 m
Reach from Slewing Axis	175' - 2"	53.4 m
Unfolding Height	48' - 5"	14.8 m
Section Length		
First Section	33' - 1"	10.8 m
Second Section	47' - 3"	14.4 m
Third Section	47' - 3"	14.4 m
Fourth Section	47' - 7"	14.4 m
Slewing Range	370°	370°
End hose length	10'	3 m

Specifications are subject to change without prior notice

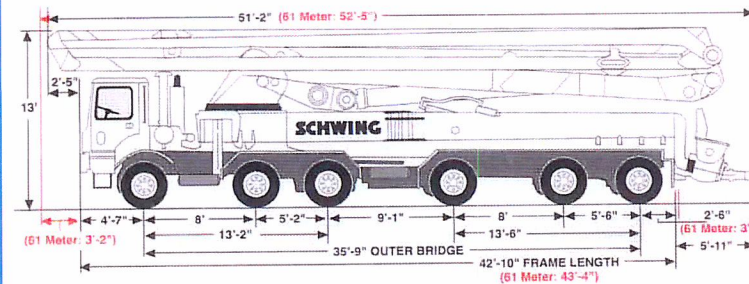
S 58 SX Outrigger Specifications



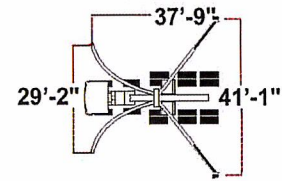
61 METER



Boom Specifications	58 US	61 US	58 metric	61 Metric
Pipeline Diameter	5"	4.5"	125 mm	112 mm
Vertical Reach	187'-10"	197'-2"	57.24 m	61 m
Net Horizontal Reach	162'-9"	172'-3"	49.6 m	52.7 m
Horizontal Reach	175'-2"	184'-6"	53.4 m	56.4 m
Unfolding Height	48'-6"	52'-3"	14.8 m	15.9 m
Section Length	1st Section 33'-1"	34'	10 m	10.4 m
	2nd Section 47'-3"	49'	14.4 m	14.9 m
	3rd Section 47'-3"	50'-8"	14.4 m	15.4 m
	4th Section 47'-7"	51'	14.5 m	15.5 m
Swinging Range	370°	370°	370°	370°
End hose length	10'	10'	3 m	3 m

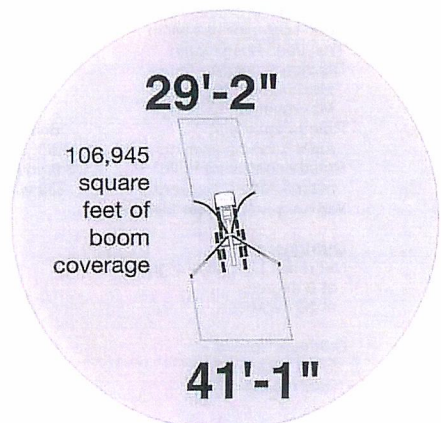
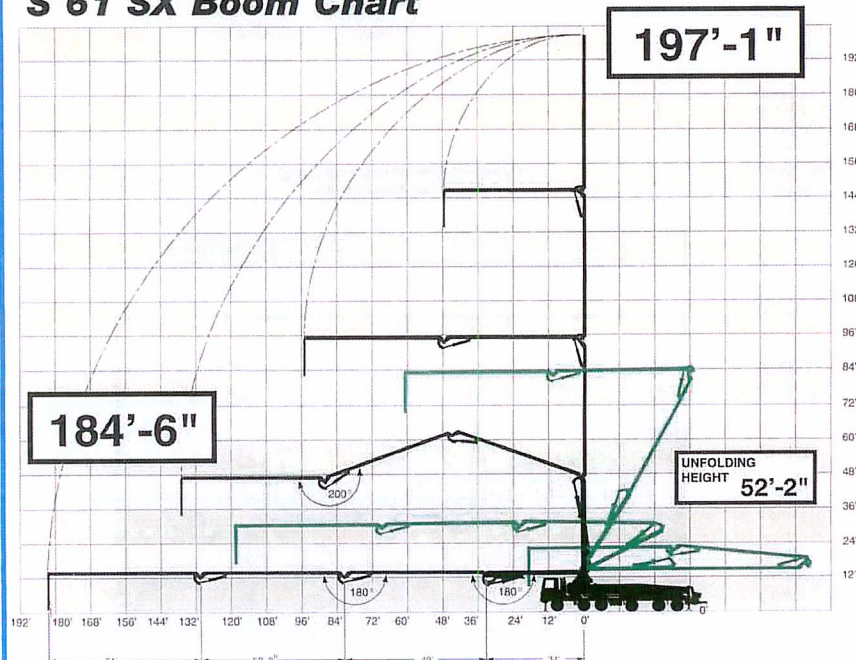


S 58 SX Outrigger Specifications



FOOTPRINT

S 61 SX Boom Chart



All outriggers full deployed.

Outrigger soil pressure
Front: 157 psi • Rear: 166 psi

Consult operators manual for
details on outrigger set-up.