

* 270 kW (362 HP)	* 290 kW (389 HP)	* 290 kW (389 HP)
▲ 41600 - 43300 kg	▲ 49000 - 50800 kg	▲ 52000 - 53800 kg
🗑️ 1.44 - 2.31 m ³	🗑️ 1.71 - 3.60 m ³	🗑️ 1.71 - 3.60 m ³



DX420LC-3 / DX490LC-3 / DX530LC-3 | Crawler Excavator



Technical specifications

* Engine

• Model	DX420LC-3 / DX490LC-3 & DX530LC-3
	ISUZU AL-6UZ1X / ISUZU AL-6WG1X 4-Cycle Water-Cooled, Variable Geometry Turbocharged, Common Rail Direct Injection, Exhaust Gas Recirculation (EGR)
• No. of cylinders	6
• Rated power	DX420LC-3 / DX490LC-3 & DX530LC-3
	367 PS (270 kW) at 2000 rpm / 394 PS (290 kW) at 1800 rpm (ISO 9249) 270 kW (362 HP) at 2000 rpm / 290 kW (389 HP) at 1800 rpm (SAE J1995) 258 kW (345 HP) at 2000 rpm / 276 kW (370 HP) at 1800 rpm (SAE J1349)
• Max. torque	DX420LC-3 / DX490LC-3 & DX530LC-3
	146 kgf/m (1430 Nm) at 1500 rpm / 198 kgf/m (1940 Nm) at 1350 rpm
• Idle (low - high)	DX420LC-3 / DX490LC-3 & DX530LC-3
	900 [+/-25] - 2000 [+/-30] rpm / 950 [+/-25] - 1950 [+/-30] rpm
• Piston displacement	DX420LC-3 / DX490LC-3 & DX530LC-3
	9389 cm ³ / 15681 cm ³
• Bore x stroke	DX420LC-3 / DX490LC-3 & DX530LC-3
	120 mm x 145 mm / 147 mm x 154 mm
• Starter	
	24 V / 6.0 kW
• Batteries / Alternator	
	2 x 12 V, 150 Ah / 24 V, 80 Ah
• Air filter	
	Double element and pre-filtered SY-KLONE® cyclone dust separator with automatic dust evacuation.

* Weight

Boom: 6500 mm • Arm: 3200 mm • GP Bucket: SAE 1.61 m³ • Counterweight: 7400 kg

	Shoe width (mm)	Operating weight (t)			Ground pressure (kgf/cm ²)		
		DX420LC-3	DX490LC-3	DX530LC-3	DX420LC-3	DX490LC-3	DX530LC-3
Triple grouser	600 (Std)	41.9	49.0	52.0	0.76	0.85	0.90
	750	42.6	50.0	53.0	0.62	0.69	0.73
	800	42.9	50.3	53.3	0.58	0.65	0.69
	850	43.3	50.8	53.8	0.53	0.58	0.62
Double grouser	600	42.0	49.1	52.1	0.76	0.85	0.90

* Undercarriage

Very robust construction throughout. All welded structures designed to limit stresses. High-quality, durable materials. Lateral chassis welded and rigidly attached to undercarriage. Track rollers lubricated for life. Idlers and sprockets fitted with floating seals. Track shoes made of induction-hardened alloy with triple grouser. Heat-treated connecting pins. Hydraulic track adjuster with shock-absorbing tension mechanism.

• Number of rollers and track shoes per side	DX420LC-3 / DX490LC-3 & DX530LC-3
Upper rollers (standard shoe):	2 / 1
Lower rollers:	9 / 11
Number of links & shoes per side:	50 / 53
Overall track length:	5200 mm / 5455 mm

* Hydraulic system

The brain of the excavator is the e-EPOS (Electronic Power Optimizing System). It allows the efficiency of the hydraulic system to be optimised for all working conditions and minimises fuel consumption. The e-EPOS is connected to the engine's electronic control unit (ECU) via a data transfer link to harmonise the operation of the engine and hydraulics.

- The hydraulic system enables independent or combined operations
- Two travel speeds offer either increased torque or high speed
- Cross-sensing pump system for fuel savings
- Auto deceleration system
- Four operating modes, four power modes
- Button control of flow in auxiliary hydraulic circuits
- Computer-aided pump flow control
- Closed centre MCV (Main Control Valve) with electro-hydraulic pump control

• Maximum system pressure

Implement (boom/arm/bucket):	
Work, travel:	330 kg/cm ² [+10/0]
Swing:	350 kg/cm ² [+10/0]
Pilot:	350 kg/cm ² [+10/0]

* Pumps

Pump	Type	Displacement (cm ³ /rev)		Max. flow @ 1800 rpm (l/min)		Relief valve pressure (kgf/cm ²)
		DX420LC-3	DX490LC-3 / DX530LC-3	DX420LC-3	DX490LC-3 / DX530LC-3	
Main (2)	Tandem, Axial piston	185.0	200.0	2 X 333	2 X 360	-
Pilot	Gear	10.8	10.8	24.1	24.1	40.8
Steering	Gear	19.1	19.1	35.5		175
Brake	Gear	7.3	7.3	13.6		160

* Hydraulic cylinders

Piston rods and cylinder bodies of high-strength steel. Shock-absorbing mechanism fitted in all cylinders for shock-free operation and extended piston life.

Cylinders	Quantity	Bore x rod diameter x stroke (mm)	
		DX420LC-3	DX490LC-3 & DX530LC-3
Boom	2	170 x 115 x 1485	170 x 115 x 1650
Arm	1	180 x 120 x 1820	190 x 130 x 1980
Bucket	1	160 x 110 x 1320	170 x 115 x 1341

* Swing mechanism

- High-torque, axial piston motor with planetary reduction gear bathed in oil
- Swing circle: single-row, shear type ball bearing with induction-hardened internal gear
- Internal gear and pinion immersed in lubricant

• **Max. swing speed** DX420LC-3 / DX490LC-3 & DX530LC-3

(Eff.=95%) 0 to 8.8 rpm / 0 to 8.5 rpm

• **Max. swing torque** DX420LC-3 / DX490LC-3 & DX530LC-3

(Eff.=79%) 16360 (13740) kgf/m / 20130 (15880) kgf/m

* Drive

Each track is driven by an independent, high-torque axial piston motor through a planetary reduction gearbox. Two levers / foot pedals guarantee smooth travel with counter-rotation on demand.

• **Travel speed (low - high)** DX420LC-3 / DX490LC-3 & DX530LC-3

(Eff.=95.2 / 99.0%) 3.3 / 5.5 km/h / 3.1 / 5.4 3.2 / 5.8 km/h

• **Maximum traction (low - high)** DX420LC-3 / DX490LC-3 & DX530LC-3

(Eff.=75 / 85%) 18.6 - 34.8 t / 19.5 - 38.8 t

• **Maximum gradeability**

35° / 70%

* Buckets

Bucket Type	Capacity (m ³)	Width (mm)			Weight (kg)	DX420LC-3 Standard 3.35 m / narrow track 3.00 m				Bucket Type	Capacity (m ³)	Width (mm)			Weight (kg)	DX490LC-3 Standard 3.90 m /			DX530LC-3 Standard 3.90 m / narrow track 3.49 m		
		SAE	With side cutters	W/O side cutters		Boom: 6.7 m - CW: 8.2 t - Shoe: 600 mm						SAE	With side cutters	W/O side cutters		Boom: 7.1 m - CW: 8.5 t - Shoe: 600 mm			Boom: 7.1 m - CW: 11.1 t - Shoe: 600 mm		
						Arm: 2.60 m	Arm: 2.95 m	Arm: 3.25 m	Arm: 3.95 m							Arm: 2.90 m	Arm: 3.35 m	Arm: 3.98 m	Arm: 2.90 m	Arm: 3.35 m	Arm: 3.98 m
GP	1.44	1273	1192	1415	A/A	A/A	A/A	A/A	GP	1.80	1474	1381	1718	A	A	A	A/A	A/A	A/A		
	1.68	1429	1348	1516	A/A	A/A	A/A	A/C		2.14	1682	1588	1910	A	A	A	A/A	A/A	A/A		
	1.90	1547	1466	1636	A/A	A/B	A/B	B/C		2.39	1837	1744	2027	A	A	B	A/A	A/A	A/B		
	2.16	1745	1664	1755	A/C	B/C	B/C	C/D		2.86	2130	2037	2279	B	C	C	A/B	A/C	B/C		
HD	1.55	1298	1224	1653	A/A	A/A	A/A	A/B	HD	1.73	1301	1224	1831	A	A	A	A/A	A/A	A/A		
	1.80	1452	1374	1762	A/A	A/B	A/B	B/C		2.01	1451	1374	1948	A	A	A	A/A	A/A	A/A		
	2.05	1602	1524	1910	A/B	B/C	B/C	C/D		2.29	1601	1524	2106	A	A	B	A/A	A/A	A/B		
	2.31	1758	1680	2020	B/C	C/D	C/D	D/-		2.85	1901	1824	2381	B	C	C	A/B	A/C	B/C		
	-	-	-	-	-	-	-	-		3.20	2101	2024	2601	C	C	D	B/C	B/D	C/D		
	-	-	-	-	-	-	-	-		3.60	2306	2229	2740	D	D	-	B/D	C/D	D/-		
Rock	1.51	-	1497	1623	A/A	A/A	A/A	A/B	Rock	1.71	-	1572	1971	A	A	A	A/A	A/A	A/A		

Based on ISO 10567 and SAE J296, arm length without quick-coupler. For reference only.

A: Suitable for materials with a density less than or equal to 2100 kg/m³

B: Suitable for materials with a density less than or equal to 1800 kg/m³

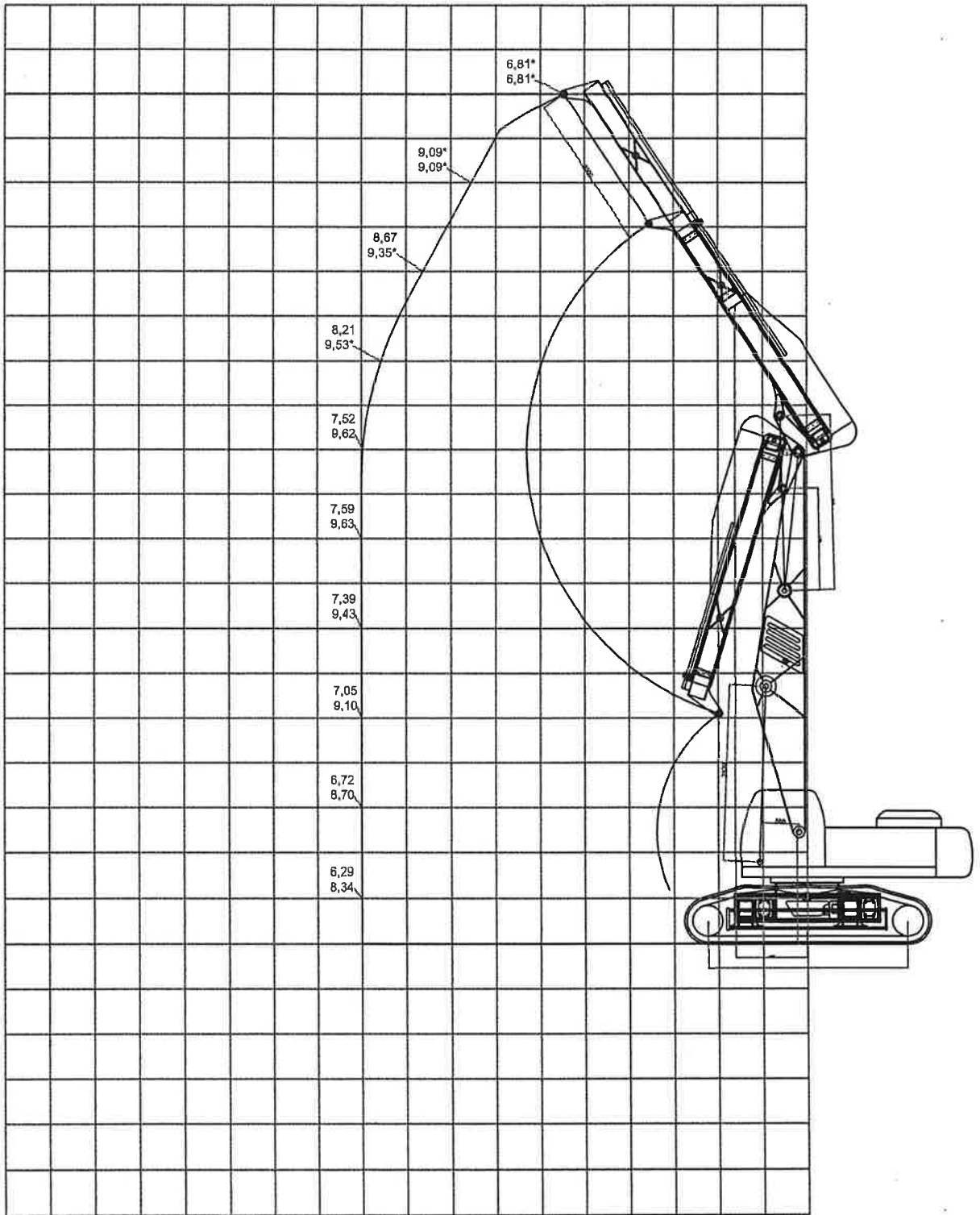
C: Suitable for materials with a density less than or equal to 1500 kg/m³

D: Suitable for materials with a density less than or equal to 1200 kg/m³

* Digging forces (ISO)

DX420LC-3		Boom: 6700 mm Arm: 3250 mm Bucket: 1.90 m ³	Boom: 6700 mm Arm: 2600 mm Bucket: 2.16 m ³	Boom: 6700 mm Arm: 2950 mm Bucket: 1.90 m ³	Boom: 6700 mm Arm: 3950 mm Bucket: 1.44 m ³	Boom: 6700 mm HD Arm: 3250 mm Bucket: 1.51 m ³
BUCKET (Normal/Press. Up)	t	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1
	kN	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7
ARM (Normal/Press. Up)	t	18.6 / 19.7	23.0 / 24.4	20.7 / 21.9	16.0 / 16.9	18.6 / 19.7
	kN	182.4 / 193.2	225.5 / 239.3	203.0 / 214.7	156.9 / 165.7	182.4 / 193.2
DX490LC-3		Boom: 7100 mm Arm: 3350 mm Bucket: 2.14 m ³	Boom: 7100 mm Arm: 2900 mm Bucket: 2.39 m ³	Boom: 7100 mm Arm: 3980 mm Bucket: 1.80 m ³	HD Boom: 7100 mm HD Arm: 3350 mm Rock Bucket: 1.71 m ³	
BUCKET (Normal/Press. Up)	t	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	
	kN	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	
ARM (Normal/Press. Up)	t	18.6 / 19.7	23.0 / 24.4	20.7 / 21.9	16.0 / 16.9	
	kN	182.4 / 193.2	225.5 / 239.3	203.0 / 214.7	156.9 / 165.7	
DX530LC-3		Boom: 6300 mm Arm: 2900 mm Bucket: 3.20 m ³	Boom: 6300 mm Arm: 2400 mm Bucket: 3.60 m ³	Boom: 9000 mm Arm: 6000 mm Bucket: 1.27 m ³	Boom: 11000 mm Arm: 8000 mm Bucket: 0.93 m ³	
BUCKET (Normal/Press. Up)	t	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	25.6 / 27.1	
	kN	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	251.0 / 265.7	
ARM (Normal/Press. Up)	t	18.6 / 19.7	23.0 / 24.4	20.7 / 21.9	16.0 / 16.9	
	kN	182.4 / 193.2	225.5 / 239.3	203.0 / 214.7	156.9 / 165.7	

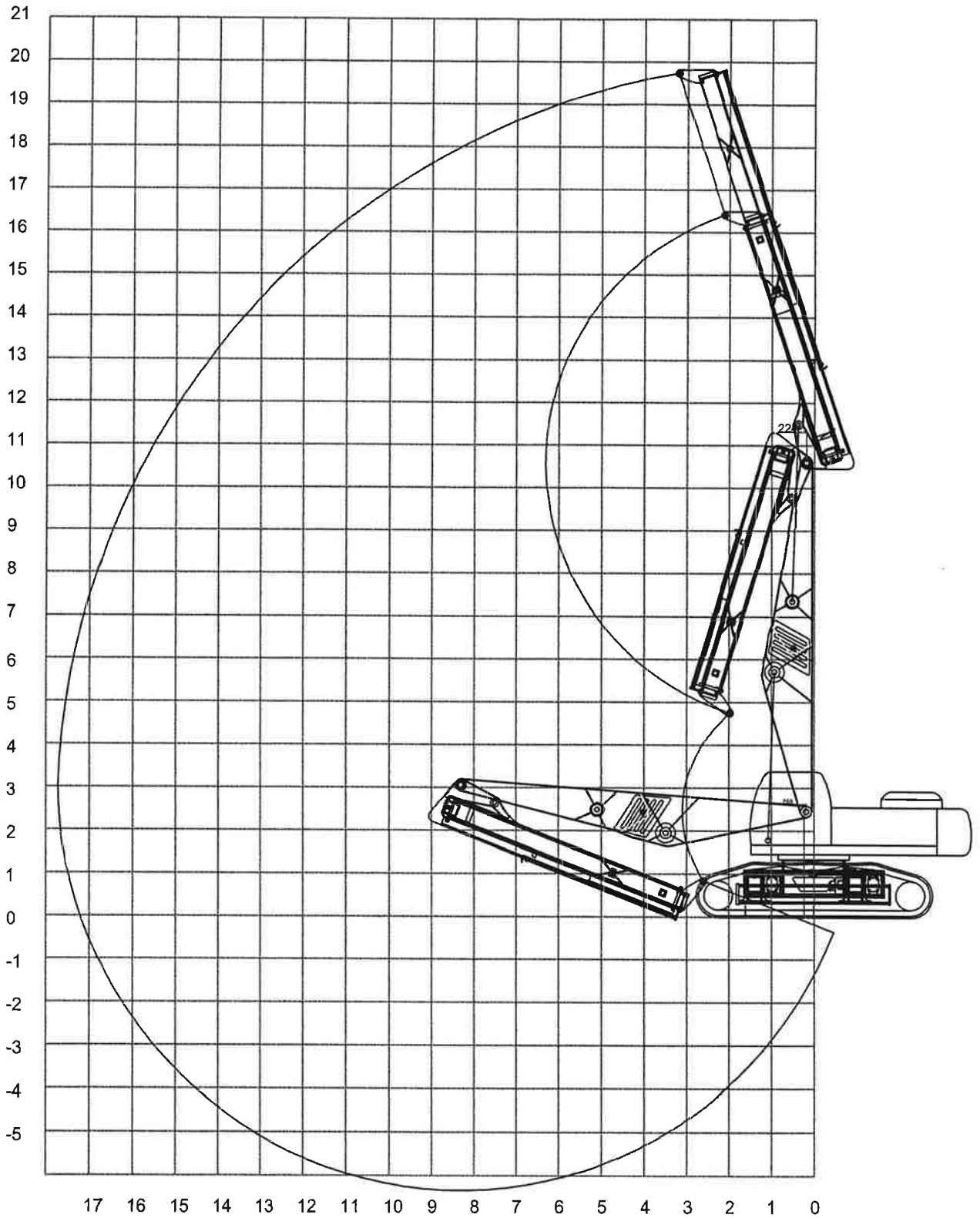
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oberer Wert > Traglast quer mit ausgefahrenen Unterwagen
 unterer Wert > Traglast längs
 Werte mit * > Traglast hydraulisch begrenzt
 Angaben in t ohne Anbauwerkzeug gem. SAE J1097

erforderlich Beistellung:
 Basismaschine DX490 LC3 mit 2x Hubzylinder, Hauptauslegerbolzen
 2x Hubzylinder DX490 (170x 115x1650) incl. Vorsteuerventil
 4x Buchsen+ Abstreifer Hauptausleger
 1x Hauptauslegerbolzen
 2x Zylinderbolzen (Monolager)

(Zul. Abw.)	(Oberfl.)	Maßstab	(Gewicht)
		(Projekt)	DX490 Arbeitsbereich
		Datum	Name
Bearb.	06.12.2012	-----	-----
Gepr.	-----	-----	-----
Norm	-----	-----	-----
		6,1m Teleskopstiel mit Greiferbuchse (ca.3,5l) 8,5m Industrieausleger mit 2x Hubzylinder (ca.4,2l) hydr. verstellbarer Unterwagen Spurweite von 2400mm auf 3200mm ausfahrbar (800er Bodenplatten) Tragfähigkeit 6,8t / max. Höhe 19m Transporthöhe 3,4m Transportbreite 3,2m Einsatzgewicht ca. 57t	Blatt 1 Bl.
		(Ers. f.)	(Ers. d.)



oberer Wert > Traglast quer mit ausgefahrenen Unterwagen
 unterer Wert > Traglast längs
 Werte mit * > Traglast hydraulisch begrenzt
 Angaben in t ohne Anbauwerkzeug gem. SAE J1097

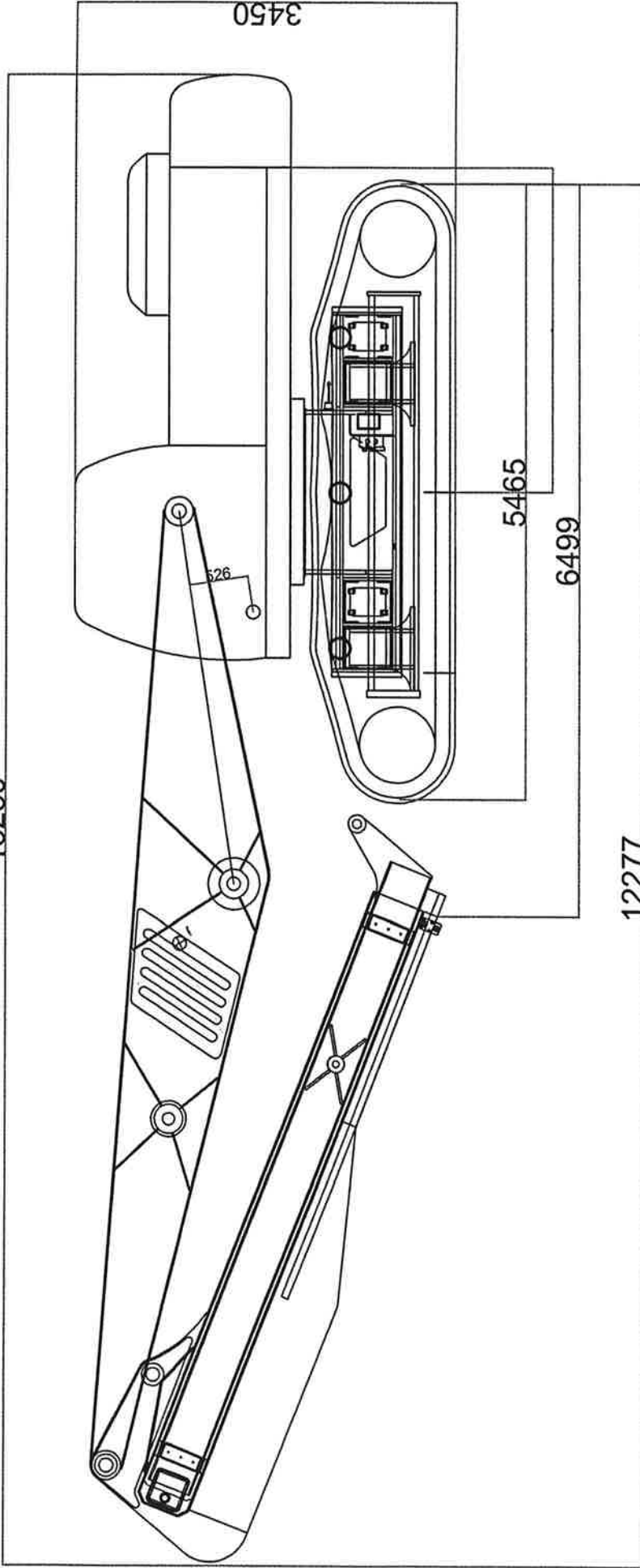
Theoretische Reichweite


erforderlich Bestellung:
 Basismaschine DX490 LC3 mit 2x Hubzylinder, Hauptauslegerbolzen
 2x Hubzylinder DX380 (170x 115x1724) incl. Vorsteuerventil
 4x Buchsen+ Abstreifer Hauptausleger
 1x Hauptauslegerbolzen
 2x Zylinderbolzen (Monolager)

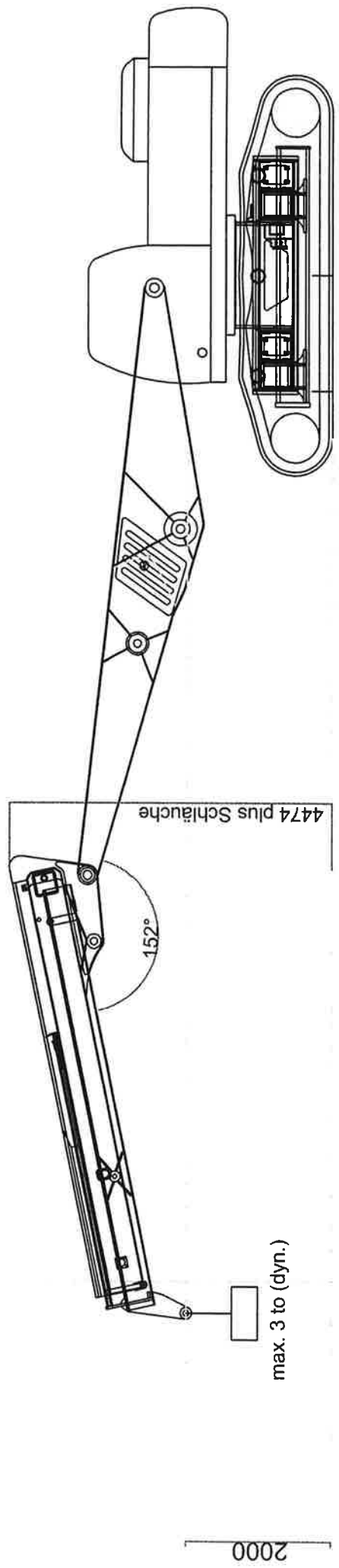
(Zul. Abw.)	(Oberfl.)	Maßstab	(Gewicht)
		(Projekt)	DX490 Arbeitsbereich
	Datum	Name	6,1m Teleskopstiel mit Greiferbuchse (ca.3,5t) 8,5m Industrieausleger mit 2x Hubzylinder (ca.4,2t) hydr. verstellbarer Unterwagen Spurweite von 2400mm auf 3200mm ausfahrbar (700er Bodenplatten) Tragfähigkeit 6,8t / max. Höhe 19,7m
Bearb.	06.12.2012	-----	
Gepr.	-----	-----	
Norm			
		Maschinenbau GmbH Manfred Kaiser	Transporthöhe 3,4m Transportbreite 3,2m Einsatzgewicht ca. 57t
		(Ers. f.)	(Ers. d.)

Blatt 1
Bl.

13250



(Zul. Abw.)	(Oberfl.)	Maßstab	(Gewicht)
		(Projekt)	DX490 Arbeitsbereich
Datum	Name	6,1m Teleskopstiel mit Greiferbuchse (ca.3,5t)	
Bearb. 06.12.2012		8,5m Industrieausleger mit 2x Hubzylinder (ca.4,2t)	
Gepr.		hydr. verstellbarer Unterwagen	
Norm		Spurweite von 2400mm auf 3200mm ausfahrbar (800er Bodenplatten)	
	Tragfähigkeit 6,8t / max. Höhe 19m		Blatt 2
	Transporthöhe 3,4m		
	Transportbreite 3,2m Einsatzgewicht ca. 57t		
(Urspr.)	(Ers. f.)	(Ers. d.)	



eingefahrener Stiel