

Summary of Quotes

			Quantity	Total
Single Axle Chassis	\$	253,353.31	3	\$ 760,059.93
Dump Body	\$	35,834.80	3	\$ 107,504.40
Spreader Body	\$	54,659.18	3	\$ 163,977.54
Grand Total				\$ 1,031,541.87

Prepared for:
 M K
 ANN ARBOR CITY OF
 301 E HURON ST
 ANN ARBOR, MI 48104
 Phone. 734-994-9124

Prepared by:
 Edward Merrill
 D & K TRUCK COMPANY
 3020 Snow Rd
 LANSING, MI 48917
 Phone: (517) 484-1905 Ext. 129

2025 47X SINGLE AXLE

Updated: 7/19/24

MI DEAL CONTRACT # 240000000095

STREETS (3) UNITS

--Updated reduced body upfit price included.

WESTERN STAR 47X

SET BACK AXLE - TRUCK	20,000# FLAT LEAF FRONT SUSPENSION
CUM L9 330 HP @ 2200 RPM; 2200 GOV RPM, 1000 LB-FT @ 1200 RPM	111.6 INCH BBC CONVENTIONAL ALUMINUM CAB
ALLISON 3000 RDS AUTO TRANS WITH PTO PROVISION	4675MM (184 INCH) WHEELBASE
RS-23-160 23,000# R-SERIES SINGLE REAR AXLE	11.0MM X 85.0MM X 287.0MM STEEL FRAME (0.43X3.35X11.30 INCH) 120 KSI
NEWAY ADZ 126 26,000# REAR AIR SUSPENSION	1650MM (65 INCH) REAR FRAME OVERHANG
DETROIT DA-F-20.0-5 20,000# SINGLE FRONT AXLE	

3 Additional units/Piggyback orders

	PER UNIT
VEHICLE PRICE	SUB-TOTAL \$ 343,572.29 \$
CHASSIS, BOX, MI-DEAL FEES, WARRANTIES	\$ \$
CUSTOMER PRICE BEFORE TAX	\$ \$

TAXES AND FEES

FEDERAL EXCISE TAX (FET)	\$ 0 \$
TAXES AND FEES	\$ 0 \$
TITLE/DOC	\$ 275 \$
TOTAL (EACH)	\$ 343,847.29 EA

PAYMENT SCHEDULE:

1. **D & K TRUCK CHASSIS PORTION NET 30 DAYS**..... \$ 128,315.31 EACH
 (INCLUDES DOC, MI-DEAL FEES, TITLE FEE AS RECORDING DEALER)
2. **TRUCK & TRAILER UPFITTER COMPLETED PORTION**..... \$ 215,531.98 EACH
 (PAID TO D & K TRUCK CO, AS RECORDING DEALER)
- **ABOVE INCLUDES ALL MI-DEAL FEES AND DELIVERY**

APPROVAL: Please indicate your acceptance of this quotation by signing below:

Customer: X _____ Date: ___ / ___ / ___.

TRUCK & TRAILER *Specialties, Inc.*

900 Grand Oaks Drive | Howell, MI 48843 | www.ttspec.com | ph: (517) 552-3855 | fx: (517) 552-3666

July 16, 2024

City of Ann Arbor

4251 Stone School Road, Ann Arbor, MI 48108

Attn: CJ Stegink, ph: (734) 646-1846

Equipment to be purchased turnkey via D&K, Edward Merrill, ph: (517) 749-2799

Equipment Quotation

Streets Single Axle SwapLoader

HQ0004403

Install SwapLoader Hooklift hoist model #SL-2418 including the following:

24,000 lbs. dumping capacity and a minimum lifting capacity of 24,000 lbs. with gross weight evenly distributed in and/or on container/body

Hooklift shall be able to handle skid-mounted containers/bodies with lengths of 10-13'

Hooklift shall have a minimum of 57-degree dump angle, on a 41" truck frame height chassis

Skid-mounted containers/bodies shall be supported with a pair of 6 1/4" minimum diameter outside

flanged rollers at the rear of the hoist, and be adjustable to accommodate bodies/containers with outside subframe rail widths of 40-1/2" or 41-5/8"

Hooklift operation:

The lift shall adjust weight distribution of the container/body horizontally on the chassis while remaining in the body locks and without lifting the container/body rails off the hoist frame

Hooklift has a dual rear pivot section incorporated into the hoist design to allow for both a true dump

truck operation, with the container/body secured to the hooklift via body locks during the entire dump cycle, and increased mounting leverage at the beginning of the container lift cycle

Hooklift jib to reach rearward to the A-frame lifting bar by means of double articulating hinge points (dual rear pivot) incorporated into the hoist mechanism

All lift sections shall lock into a common rigid full-length frame to support the body/container when in a dump mode. This must be accomplished by mechanical operated latches, which lock the mast

It has a jib lockout valve to prevent jib operation while in dump mode

Hydraulic cylinders:

Dump/lift cylinders are double acting, twin cylinders, sized for the unit capacity with dual integral counterbalance valves

Dump/lift cylinders are 5.5" bore, 2.5" rod diameter and 39" stroke

Telescopic jib cylinder shall be double acting, single cylinder, sized for unit capacity with a single counterbalance valve

Jib cylinder to be a 4" bore, 2" rod diameter and 24" stroke

Hydraulic operating pressure not to exceed 2800 PSI

Mainframe design:

The mainframe of the hoist is constructed of a "Z" rail configuration

The "Z" rail mainframe is a maximum of 8.5" in height and constructed of 1/4" thick A572 50 KSI steel

Hoist "Z" frame rails to include 6 (or 3 per side) 11-3/4" x 2-3/4" x 1/2"

Nylatron wear pads for container/body support

Nylatron pads allow containers/bodies to slide back and forth horizontally on "Z" rail of hoist with ease

Jib hook design:

Vertical Jib is constructed of an 8" x 8" x 3/8" wall square tube of A500 46 KSI steel

Jib hook height is 54" from bottom of container/body subframe rails to the bottom of the A-frame lift bar

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Hooklift is to be able to pick up a container/body that rests 21" below the grade that the truck chassis is on (assumes a 41" truck frame height)

Jib hook is designed to secure container/body to hoist without the need for a hook latch mechanism to cover the hook opening

Jib hook to be permanently welded to jib

Pins:

All hooklift pins are constructed of high-strength CFR steel bar

All pinned connections are greaseable to both lubricate the joint and flush out all contaminants

Body locks:

Hooklift has passive integral slide through body locks to secure the container/body latch plates to the hooklift in dump and transport positions; to accommodate different length bodies and to allow for weight distribution changes while remaining in body locks when in the transport or in dump cycle

Hooklift warranty:

The complete mechanism, including hydraulics, will be factory warranted free of defects in material and workmanship for a period of forty-eight (48) months on parts, and twelve (12) months on labor from the date of installation

Origin of Manufacture:

Hooklift is engineered, manufactured, and assembled in the U.S.A.

Install Rexroth A10VO85 Hydraulic Load-Sense Piston Pump including the following:

Pump is front-mounted with 85CC displacement

Front crossmember for pump mounting

Spicer drive line with companion flange for easy removal

12-volt auto shutdown block

Low-oil shutdown valve and override circuit switch in-cab

Install Monroe Combo Fuel/Hydraulic Oil/Valve Enclosure including the following:

Valve enclosure installed on the fuel side/ driver's side of the combo tank with a lockable T-handle latch
100-gallon fuel capacity, 35-gallon oil capacity (mos. 00166450 & 248896)

7-gauge, type 201 stainless steel construction

5 PSI pressurized tank cap on hydraulic tank

3" supply port on hydraulic tank with 3" x 2" suction strainer

2" ball valve shutoff for supply line to the hydraulic pump

¾" case drain shutoff

Tank-mounted return line Zinga oil filter

35-gallon AW32 hydraulic oil

Ball valve shutoffs on both fuel supply and return lines

Fuel gauge sending unit

Low oil sensor mounted in the top of the tank with an adjustable height

Install labels to indicate diesel fuel/hydraulic oil

Install fuel hook mounted on tank for safety

Install Rexroth 10m4-12 Load-Sense Hydraulic Valve Assembly including the following:

Air-operated Scraper up/down section

Air-operated Scraper swing section

Air-operated Front Plow up/down section

Air-operated Front Plow swing section

Air-operated Hoist up/down section

Air-operated Jib in/out section

EPC 3-way section for Auger

EPC 4-way section for Spinner & on/off Hose Reel

EPC 4-way section for Directional Spinner

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- EPC 4-way asymmetrical section for Pre-wet/Anti-ice operations
- Above valves within above frame-mounted stainless steel combo tank enclosure
- Return line manifold
- Stainless steel piping to the rear of the body for pre-wet, spinner and auger
- Stainless steel hydraulic couplers for spreader and front plow circuits with dust caps and plugs
- Install TTS Pneu-Logic 8-button air-operated joystick controller for all scraper, jib, hoist & plow functions:**
- Install dash-mounted heads-up display to indicating function activation
- Padded arm rest
- Function buttons include:
 - Scraper (up/down, left/right)
 - Front Plow (up/down, left/right)
 - Jib/Hoist (in/out, hoist up/down)
 - Spinner Left
 - Spinner Right
- Includes a safety trigger switch mounted in the handle
- Wire "White Pause" button as safety to enable Jib in/out
- Install Dickey-john model CPPWM GRAN Control Point Spreader Control including the following:**
- Controller is capable of closed-loop and groundspeed-oriented operation
- Liquid and granular drivers
- All necessary wiring for valves and application rate sensors
- Control Point controller shall include a switch console
- Blast button on side of controller
- Dickey-john unit shall be connected to the City of Ann Arbor-supplied (AVL) system
- The system includes display unit, GPS antenna, scraper sensor & interface box
- Salt spreader granular/pre-wet/anti-ice/dust control functions to be calibrated/operational upon delivery
- Install City of Ann Arbor-supplied GPS/AVL system components with special wiring and sensors**
- Install Monroe 29" Husting-type truck-portion Front Hitch including the following:**
- 12" channel front bumper with tapered ends
- Mounted at standard 38-39" hitch height
- 3" x 10" DA lift cylinder with Socatri rod
- All necessary supports and braces
- 36" poly markers on the ends of the bumper
- Install Monroe 10' model MS4510 Underbody Scraper including the following:**
- 20" x 1" heat-treated moldboard
- ½" thick hanger board with grease manifold brackets installed
- 2-½" O.D. hinge shaft
- Two heavy-duty shock absorbers
- Bolt-in trunnion caps for canisters; outer arm remains bolt-on style
- Two, 3-½" x 10" actuating cylinders with Socatri rods
- Cushion valve
- 1" solid circle with 5" center pin, center pin is piloted into hanger board
- Two, 4" x 12" reversing cylinders with Socatri rods
- Three hinge anchor points
- Hydraulic pipes, hose kit and j-50 type relief valve
- 20.5" x 7" poly hold-down blocks
- Mounting hardware
- Parts-installation manual
- ¾" solid hanger plates
- Grease line kit with manifolds

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Scraper is powder-coated Black

Install Kennametal single-insert carbide cutting edges

Install one (1) Kennametal carbide curbguard on curbside end of moldboard

Install serrated safety step on streetside end of moldboard

Install Ray Stop moldboard protection kit

Paint both ends of moldboard Yellow to match cab for visibility

Install Custom Lighting & Electrical including the following:

Utilizing chassis switches: Front Flashers, Rear Flashers, Attachment Flashers, Scraper Light, Spreader Light & Opt 6

Joystick consoles switches: Pump shutdown/override, Tarp open/close & Tailgate release w/safety cap

Heads-up Display indicators: Body-up, low oil, low liquid, joystick functions

Two (2) Grote Heated LED plow lights & aluminum brackets (mo. GR-84661-4) mounted 68" from ground

Two (2) SoundOff (mo. ELB45BCHOPC) amber/green 6" beacon strobes cab-mounted on the SS brackets

Install branch guard for on curbside beacon strobe

Two (2) SoundOff mPower (mo. EMPS20V38-P) amber/green LED flashers flush-mounted in chassis grille

Two (2) Maxxima LED work lights for the scraper, one each side

Two (2) Maxxima LED work lights rear-facing on top of stainless steel light bars

LED marker light in cab skirt beneath driver-side door wired to chassis electrical disconnect switch

LED body marker lights

Proximity switch for body-up light

Proximity switch for Scraper to be Eaton model

Wiring to front plow proximity switch at hitch with weather pack

Betts junction box

Back-up alarm

Chassis grille flashers to be wired on one switch

Top strobes & rear flashers to be wired on one switch

Install Frame-mounted (3) hole stainless steel light boxes at chassis rear including the following:

6" oval LED STT lights, LED back-up lights & SoundOff nForce (mo. ENFSLSRV12) amber/green flashers

Two (2) SoundOff mPower (mo. EMPS20V38-P) amber/green flashers, side-facing on rear light boxes

Mounted aft of rear tires/fender both sides of chassis

Rear light oval warning flashers to be wired "on" in reverse with oval Backup light

Install Rearview Camera with Wash System including the following:

Camera mounted on rear stainless steel light box

System tying into chassis wiper fluid reservoir

Chassis wiper controls for activating wash system, momentary in-cab switch for air puffer

Air puffer & washer fluid tubing

VCMS24B color camera, high performance and waterproof

CEC34L1 loomed 34' main cable for monitor

VOSHD6MNT double-knuckle monitor mount

MSF5000 stainless steel camera box

VOM719WP 7" LCD color monitor, waterproof

Install Groeneveld Model #EP-O autolube grease system for Chassis, SwapLoader Hoist & Scraper

Install ¾" Rear Hitch Plate and 20-ton pintle hook including the following:

Pintle Hitch model PH-20, mounting height 20"

The hitch plate is to have multiple holes for adjustment height of pintle hitch

There shall be two (2) ¾" D-rings welded on each side for tow chains

The rear hitch shall have support bracing welded for extra strength and stability

7-way RV flat-pin plug

7-way round pin plug

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License plate to be mounted at center of hitch plate

Install Electric Brake Controller, Tekonsha-preferred

Install Stainless Steel Fender Kit for single axle chassis including the following:

All necessary mounting brackets

1 pair of full radius fenders

Mudflaps mounted at the bottom of the fenders

Install Miscellaneous items including the following:

Driver's side shall provide a 3-step egress to cab, painted Yellow to match cab

Hanging unpainted aluminum step to passenger-side of cab

Install Minimizer Floor Mats for Western Star 47X (mo. 10002323 / 103739)

Paint Front & Rear Hitch, Hoist and attaching hardware painted Black

Above installed, non-stainless painted pricing: \$123,800.00 ea.

HQ0004404

Base Attachment #1

Install Skid-mounted Crysteel 11' Select Stainless Steel Dump Body including the following:

132" length, 58" front height, 36" side height, 42" rear height, 84" inside width (8.5-10 cu yd capacity)

Single panel, pressed-in horizontal side braces

7-gauge 201 stainless steel front, sides and rear pillars

¼" AR450 floor

14" wide rear pillar

6-panel tailgate design constructed of 7-gauge type 201 stainless steel

Tailgate finger latches and pivot plate are stainless steel construction

8" floor-to-sides radius

9" cabshield constructed of 10-gauge type 201 stainless steel

Install side-mounted ladder, fold-down on driverside rear

Install two (2) shovel spring-paddle holders on sides of dump

Install banjo-style chain holders on tailgate

Install 12" stainless steel asphalt apron spillshield

Single-acting "pancake-style" air cylinder for air tailgate with stainless steel coupler mounted at rear

Install Custom Lighting including the following:

2-hole tapered stainless steel light boxes mounted at rear pillar posts

Two (2) SoundOff LED nForce (mo. ENFSLSRV12) amber/green flashers

Two (2) SoundOff LED stop/turn/taillights mounted in the middle holes

LED body marker lights

Install Roll-Rite Electric 6300 Tarp System including the following:

Plug in at the back driver side for clearance when dumping Mesh-type tarp material

Tarp housing mounted on top of cabshield

Tarp arms mounted center of the dump with elbows

Install SwapLoader skid assembly for model SL-2418 including the following:

Front A-frame and longsills for body mounting, A-frame lift bar set at 54"

Skid with rear heavy-duty 6" roller drums, painted Black, mild steel construction

Paint Dump underbody and attaching hardware painted Black

Base Attachment #1 installed pricing: \$35,480.00 ea.

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HQ0004405

Base Attachment #2

Install Skid-mounted Monroe 11' MCV-132-84-56 Dual Auger V-box Spreader including the following:

10-gauge 201 stainless steel hopper (7.2 cubic yards)
Hopper length is 132", hopper width is 84" and hopper height is 56"
Stainless steel hopper and spinner construction
2' sloped front and doghouse for hook/loop
45-degree sloped sides with 2" double-crimped top edge
7-gauge 201 stainless steel longitudinals tied together with 3" formed channel cross-sills
Dual 7" auger conveyor system with planetary gearbox drive system
Integral speed sensor in one auger motor
Inverted-V installed over augers; 201 stainless
Auger units include a top-grate kit with safety lock-down provisions
Bolt-down top screens with center H-beam installed, Galvanized
Stainless steel front spillshield, installed
Stainless steel fold-down ladder, side-mounted at front, driverside
20" directional spinner assembly with poly disc, hydraulic cylinder all necessary plumbing to the rear with stainless steel hydraulic disconnects and cab controls
Stainless steel hydraulic pipe kit for augers/spinner/pre-wet/return, installed and plumbed to the left front corner of the body with jumper hoses and stainless steel couplers
Wire sensors to with WP electrical disconnects to the front of the body with electrical connections

Install Monroe Pre-Wet System including the following:

7 GPM closed-loop pre-wet system, Dickey-john flow meter (no hydraulic valve)
Enclosure mounting kit
Twin 75-gallon tanks (150-gallon total capacity) with stainless steel brackets
Remote vent kit for liquid tanks
Bulk fill, flusher kit & crossover hose kit
Pre-wet spray tube installed in auger trough
Install all necessary supports and brackets
Install stainless steel pipe kit from the rear of the spreader to the front of the spreader and equip with stainless couplers for the auger, spinner and pre-wet circuits

Install Custom Lighting & Electrical including the following:

Install two (2) stainless steel 2-hole light boxes mounted at rear including:
Two (2) SoundOff nForce (mo. ENFSLSRV12) green/amber LED flashers & two (2) STT lights
LED marker lights
Install Betts junction box at the rear of the body
Lights wired to junction box and wiring extended to the left front corner for hook up with a plug

Install SwapLoader skid assembly for model SL-2418 including the following:

Front A-frame and longsills for body mounting, A-frame lift bar set at 54"
Skid with rear heavy-duty roller drums on long legs, hot-dipped galvanized
Install ½ poly between v-box and SwapLoader skid
Long leg provides the ability to unload the v-box skid without tipping up the spinner

Base Attachment #2 installed pricing: \$54,118.00 ea.

Above total equipment installed, non-stainless painted pricing: \$213,398.00 ea.

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Chassis requirements to be confirmed at time of order:

Western Star 47X, Cummins L9, Allison 3000
CA: 119"
Highest ground clearance
Three (3) batteries mounted driverside as far aft as possible
Horizontal DPF and SCR mounted under the cab
13-gallon DEF tank driverside behind front fender
Front of engine PTO
Air tanks mounted between the frame rails
Trailer pre-wiring to the rear for electric brake controller
Front frame extension
Delete OEM bumper
Temporary 50-gallon fuel tank positioned under driver's door
Stationary grille standard on Western Star 47X
Plow light/Headlight switch and related OEM wiring
6-pack programmable chassis switches
30K-063 150 AMP service between seats with blunt cuts
Stainless steel cab brackets for beacons and wiring

Exceptions:

Truck & Trailer Specialties, Inc. declares with the enclosed bid submittal that we do not comply with the Fair Living Wage proposal of the City of Ann Arbor as defined in Section 1:811-1:821 of Chapter 23 of Title I of the Code. Truck & Trailer Specialties, Inc. also declares that we do not comply with Chapter 112 of Title IX of the Code of the City of Ann Arbor and in particular the following Section 1:811-1:821 of Chapter 23 of Title I of the Code.

Truck & Trailer Specialties, Inc. does affirm that we do comply with both the minimum wage requirements as defined and governed by the State of Michigan as well as the non-discrimination laws as defined and governed by the State of Michigan.

Payment Terms: Net 30. Pricing effective for 30 days.

FOB: City of Ann Arbor

Delivery: 14-16 months ARO, depending on chassis arrival

Thank you for the opportunity to quote.

Respectfully submitted by,
Jon Luea/Brian Bouwman