



HD Machines

HD 120D / HD 160D / HD 220D



Large is the smallest way to describe STC

From our home base in Coevorden, the Netherlands, we design, build and modify heavy-duty machines and machine components for customers worldwide. Our machines, with operating weights of up to 500 tons, are used in demolition, recycling and infrastructure projects across the globe.

What defines STC is not only the size of the machines we build, but also the way we work. We take the time to understand each customer's requirements and translate them into the right technical solution. In many cases, this solution is based on one of our proven concepts, including the machines shown in the brochure you are reading now.

When the application requires it, we develop a tailor-made solution for the specific project. Safety is an essential part of our process. From engineering and manufacturing to final assembly, we design our machines with safe operation and practical use on site in mind. The same applies to the suppliers we work with and to the way we organize our own workshop.

Quality is equally important. By working in a structured and standardized way, we aim to deliver reliable machines with predictable performance, built to last in demanding working environments. Together with our partners, we build solutions that are made to perform.





2.





Engineered for extreme demolition power

The chassis and undercarriage are fully reinforced to ensure maximum durability and stability when operating with heavy tools and high reach configurations. The swing bearing can be upgraded to a heavy-duty variant for exceptional load-bearing capacity, providing smooth, reliable motion and a significantly extended service life during continuous operation.

Engineered for ultimate flexibility, our HD lineup can be easily adapted for different requirements. With highly versatile configurations, it reaches up to 62 mtr / 203 ft and handles Attachment weights up to 3,000 - 25,000 kg / 6,600 - 55,000 lb.

With its robust design, advanced hydraulics, and precision engineering, the STC HD machines deliver unmatched performance, making it an ideal choice for contractors tackling the toughest demolition challenges.



Working height

Max height: 62 mtr / 203 ft
Max reach: 30 mtr / 98 ft



Operating weight

130 - 250 tons /
290,000 - 550,000 lb



Attachment weight

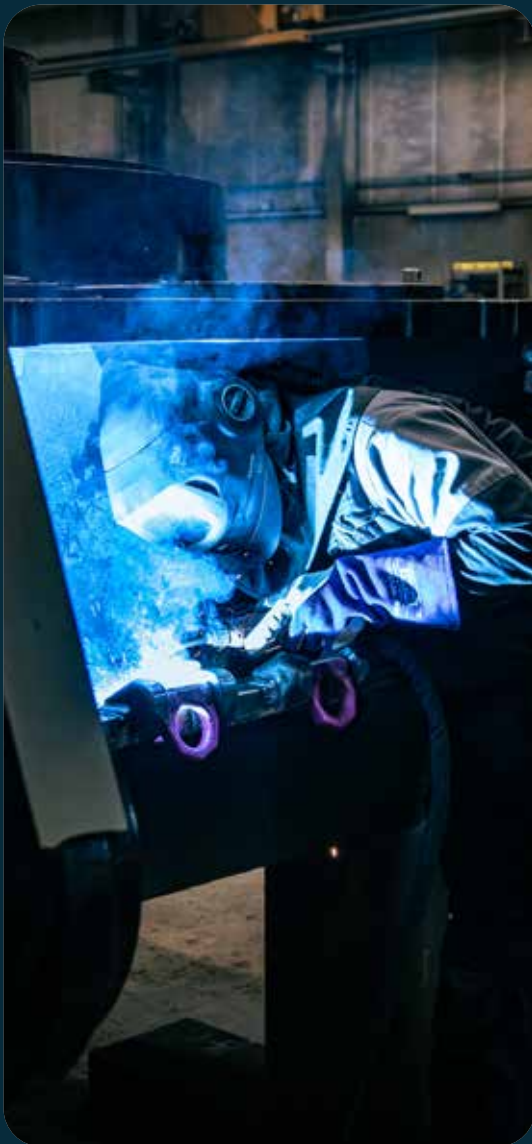
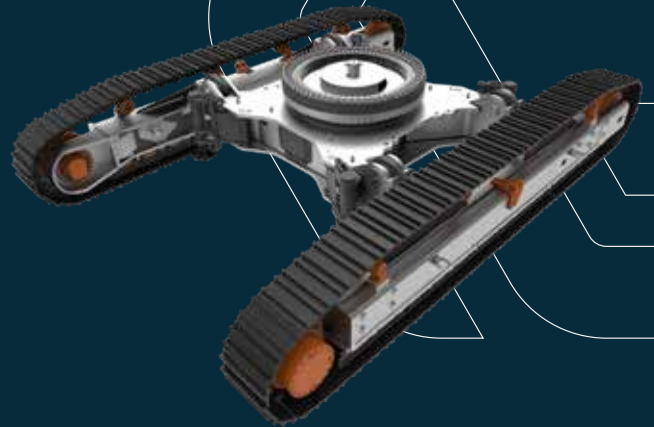
3,000 - 25,000 kg /
6,600 - 55,000 lb

Scan the QR-code
for more technical
information



It starts at the base

Demolition at great height requires great precision and concentration from the operator: small movements at ground level are magnified at 40, 50, 60 meters height. Therefore, the rigidity of the machine itself is just as important as the smoothness of its controls. Rigidity is provided by custom built heavy duty frames. These important properties make an STC HD-line machine easy to control, reducing operator fatigue and contributing to more productive workdays.



Undercarriage Quick Connect

To increase the stability STC has developed a new generation of heavy duty demolition undercarriages, the Undercarriage Quick Connect (UQC). These minimize operator fatigue due to their high stiffness and robustness, yet easy to disassemble into manageable sections all within the 3.5mtr transport width limit. The undercarriages are equipped with hydraulic outriggers that can fold out and lift the machine off the ground. Then the machine can disassemble its own tracks and place them on trailers using an optional integrated lifting system.

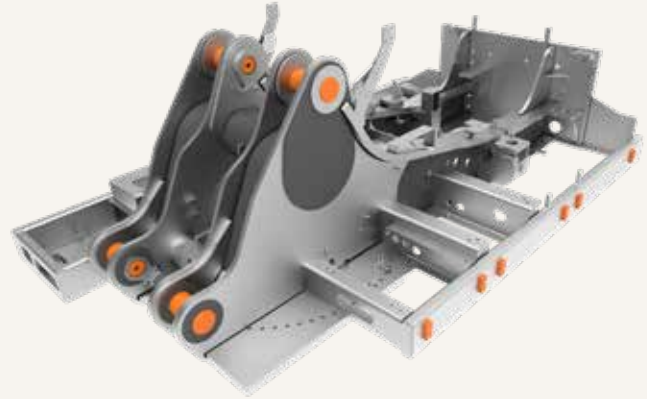
To ensure trouble free operation in shoreline works such as dredging, breaker construction or shipwreck demolition, the locking pins are hardened and chrome plated and slide in hardened and and bushings with grooves. The grooves distribute grease and ensure that foreign particles can evade so they do not scratch and jam the pins. Whether your business is at great height downtown, reaching out on the shores, or ripping up quays underwater, the STC UQC gets you easily on any jobsite and provides a stable, durable and universally suitable base to support your large demolition and infrastructural jobs.

Upper Frame

Industrial demolition is one of the toughest applications for an excavator. Heavy hydraulic hammers send constant vibrations through the base machine, large scrap shears challenge its stability, and prying loose foundation structures pushes every component to its limits.

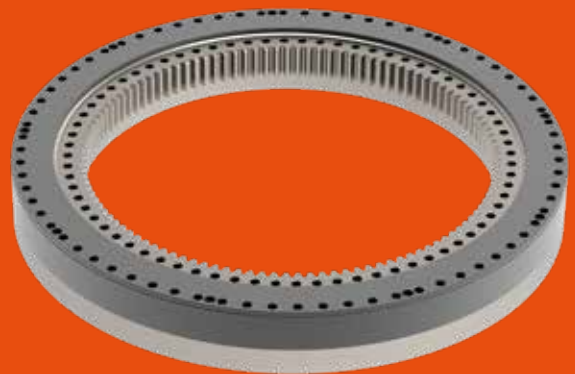
The standard upper frame is replaced by a STC custom designed upper frame, far exceeding the original design strength of the standard frame. The STC frame is designed for the optimal rigidity to carry larger ballasts, yet dampen any vibration of the tools on the front end. This maximizes

the lifespan of the frame itself, as well as the components installed on it.



Slew bearing

STC uses a custom made triple row slew bearing on all HD models, that are designed to last, even in the most demanding load set. The slew bearing provides stability to ensure a low, but even wear. The bearing is secured to the frames exceeding the usual number of bolts. Six greasing lines are fitted per roller row, which are lead to a centralized lubrication block.





Protection meets perfect visibility

Cabin Tilt & Lift System

STC tackled cabin visibility issues since its founding. There are multiple solutions available like: Cabin Tilt Systems for high reach demolition, Cabin Lift Systems to look over the edge of a construction pit or a combination of both (CTLs), to ensure maximum versatility. Even on large machines that work in the horizontal plane, cab elevation increases the overview over the jobsite for the operator, enabling more precise and safe work with less fatigue.

Armoured front and top glass is standard on our HD line, where the top window can be optionally enlarged for extra visibility for the operator. A windshield wiper system for the top windshield with a parallel arm is also included as standard equipment.



FOPS

The impact energy of a falling object increases exponentially with increased height. Therefore, STC designed FOPS cages that exceed the ISO 6165 FOPS standard and match the working height of its current demolition machines.

When an object falls down, there is less need to panic. The safest place will then be in the cabin under the STC safety cage. To ensure the best possible visibility, each slat is angled individually towards the operator's eye level so that the percentage of sight of an STC heavy duty demolition cage is no less than the standard excavator FOPS cages.

Front

Our booms are designed based on 30 years of experience, combined with the relevant scientific research on metal fatigue and metal processing. To get the perfect balance between strength and weight we use Finite Element Analysis. STC booms are designed to last the lifetime of the machine, though it is not uncommon for customers to buy a new base machine, and reuse the existing STC booms.

The STC HD 120D is available with the following boom length options:

- High Reach Demolition 42 mtr
- Triple Excavation 22 mtr
- Triple Excavation 20 mtr
- 2PC Straight
- 2PC Bend

The STC HD 160D is available with the following boom length options:

- High Reach Demolition 49 mtr
- High Reach Demolition 45 mtr
- Triple Tool Carrier 28 mtr
- Triple Excavation 24 mtr
- Triple 19 mtr

The STC HD 220D is available with the following boom length options:

- High Reach Demolition 62 mtr
- High Reach Demolition 58 mtr
- High Reach Demolition 45 mtr
- High Reach Demolition 41 mtr
- Triple Tool Carrier 34 mtr
- Triple Tool Carrier 30 mtr
- Triple Excavation 33 mtr
- Triple Excavation 29 mtr

The STC HD line comes standard with a Boom Quick Connect (BQC). This ensures easy disassembly for transport, but also makes it possible to utilize multiple configurations. It is possible to use a high reach demolition boom or a triple boom in several reach and tool weight configurations. These can be combined with an extension piece, or even a long reach excavating boom, or a material handler boom can be fitted.

All configurations can be mounted on the same base machine thanks to the BQC system. This gives the customer full flexibility to choose the front configuration that best suits their specific application and operational needs. The machine can be ordered with a selected configuration from the start, while additional configurations can easily be added later if requirements change or new applications arise.

STC has been one of the pioneers in BQC systems. The current version is based on years of field experience, making it one of the most durable systems on the market. Its integrated design provides a clean appearance while protecting the system from damage during work or transport.

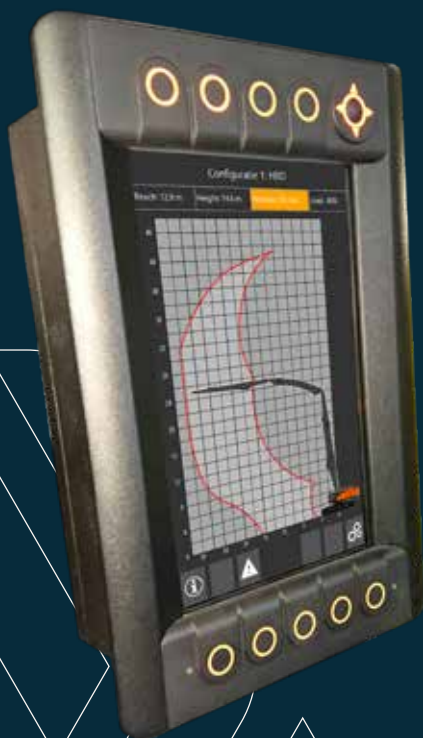


Safety through technology

Hydraulics

STC expands the main hydraulic valves, preferably with additional sections from the OEM. Smaller functions such as BQC pins are controlled by standardised industrial CETOP-valves. Due to the increasing complexity of hydraulic systems, you cannot just plug in any valve section.

With decades of experience with system modifications, we install the system extension with regard to minimal power loss and heat generation and the best controllability.



Load Moment Indicator

The machine will be equipped with a Load Moment Indicator (LMI), which recognises the assembled boom configuration by individual ID codes of each inclination sensor. This ensures that operators have a clear indication of where the stability limit is, so they can take the machine to its limits without taking undue risks.

Because boom parts are recognised by the LMI system, hydraulic joystick and valve sensitivity can be automatically changed, to get the correct speed and feel whether you have the high reach demolition boom attached to work controlled at great height, or that a short triple boom is mounted to dig up concrete slabs at full power.

Dust Suppression System

(optional)

STC dust suppression systems consist of a hydraulically driven high pressure water pump, pushing water through stainless steel water lines mounted on the boom. Pressure washer nozzles are mounted on each side of the stick, to atomize water in the working area. A large filter is installed to clean the water when no domestic water supply is available. To prevent cavitation damage from insufficient water supply to the pump, the system is monitored by a pressure switch that switches off the pump when water pressure in the supply line drops below 0.5 bar.



Demolition Camera System

(optional)

Demolition Camera System (optional) STC demolition camera system consists of 1 or more cameras that can be connected to a 7" or 12" screen installed in the cabin. This creates a better overview and guarantees a safer work environment for the operator. This set can be expanded to a 360° round view system where 4 cameras transmit 4 images on the screen. This provides an even better overview, allowing the operator to clearly see what is happening around the machine.



- Visibility around the machine
- Safer working environment
- Expandable to 360° view
- Easy monitoring from the cabin



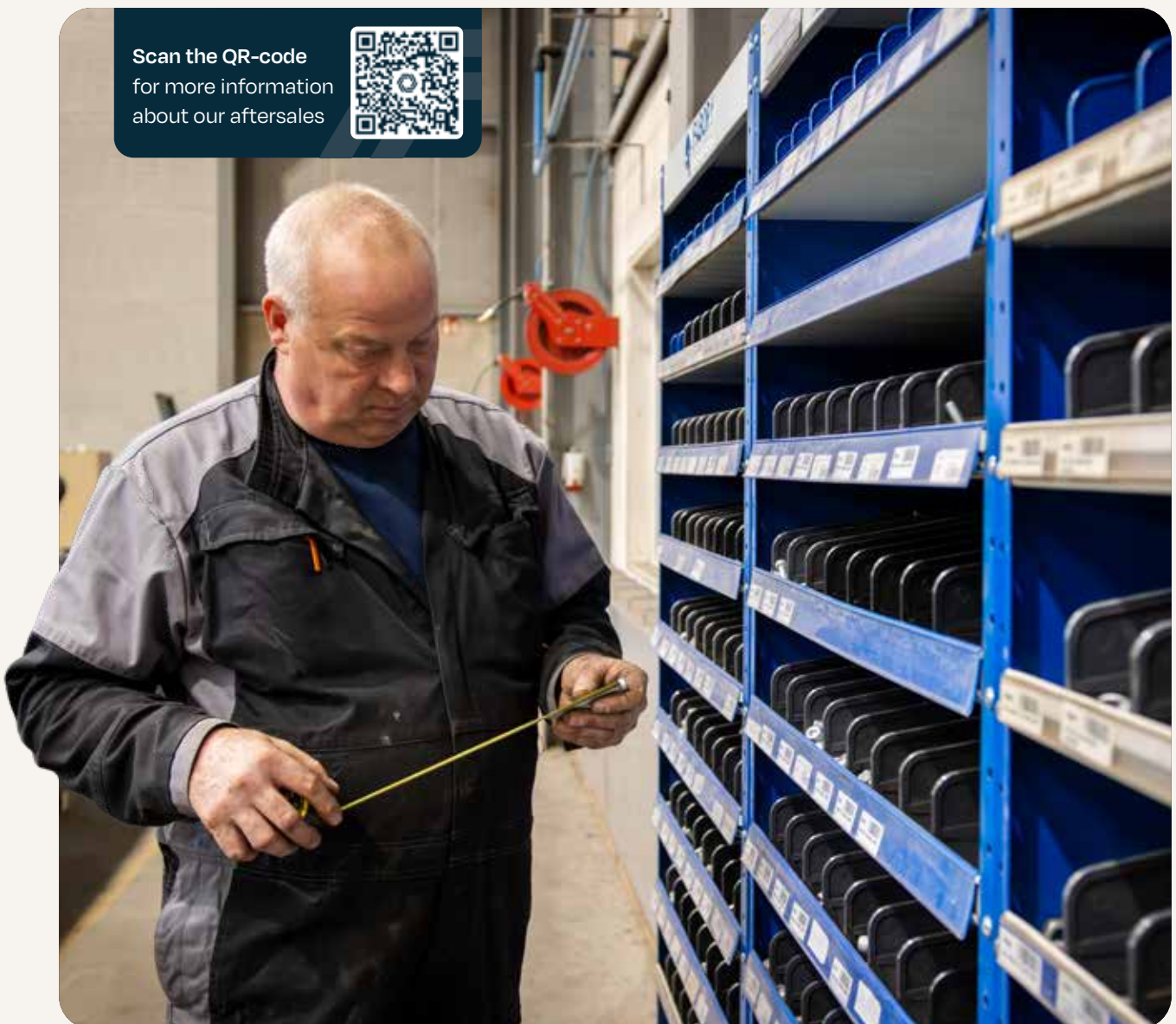
Aftersales

STC provides the necessary support for our machines and products for their operational life. We are committed to providing full support to our customers on a daily basis.

To achieve this product support, we have a dedicated after-sales and service department that, with a wealth of specialist knowledge, ensures a quick response to any problems a customer may encounter.

Regular maintenance on our machines can be done by local OEM technicians as all regular service parts are identical to OEM parts. STC wear parts can be supplied to the local OEM dealer for installation. When a complex technical issue occurs, STC specialist can provide worldwide support to help get your machine back on the job as quickly as possible.

Scan the QR-code
for more information
about our aftersales



Technical specifications

HD 120D



Engine

Engine model	Cat C18	
Engine Power – ISO 9249	404 kW	542 hp
Engine Power – ISO 14396	405 kW	543 hp
Bore	145 mm	6 in
Stroke	183 mm	7 in
Displacement	18.1 L	1,105 in ³

Hydraulic system

Main System – Maximum Flow – Implement (<i>x2 pumps</i>)	1064 L/min	281 gal/min
Maximum Pressure – Equipment – Implement	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	31 000 kPa	4,496 psi

Swing mechanism

Swing Speed	6.3 rpm	
Maximum Swing Torque	362 kN·m	267,333 bf-ft

Weights

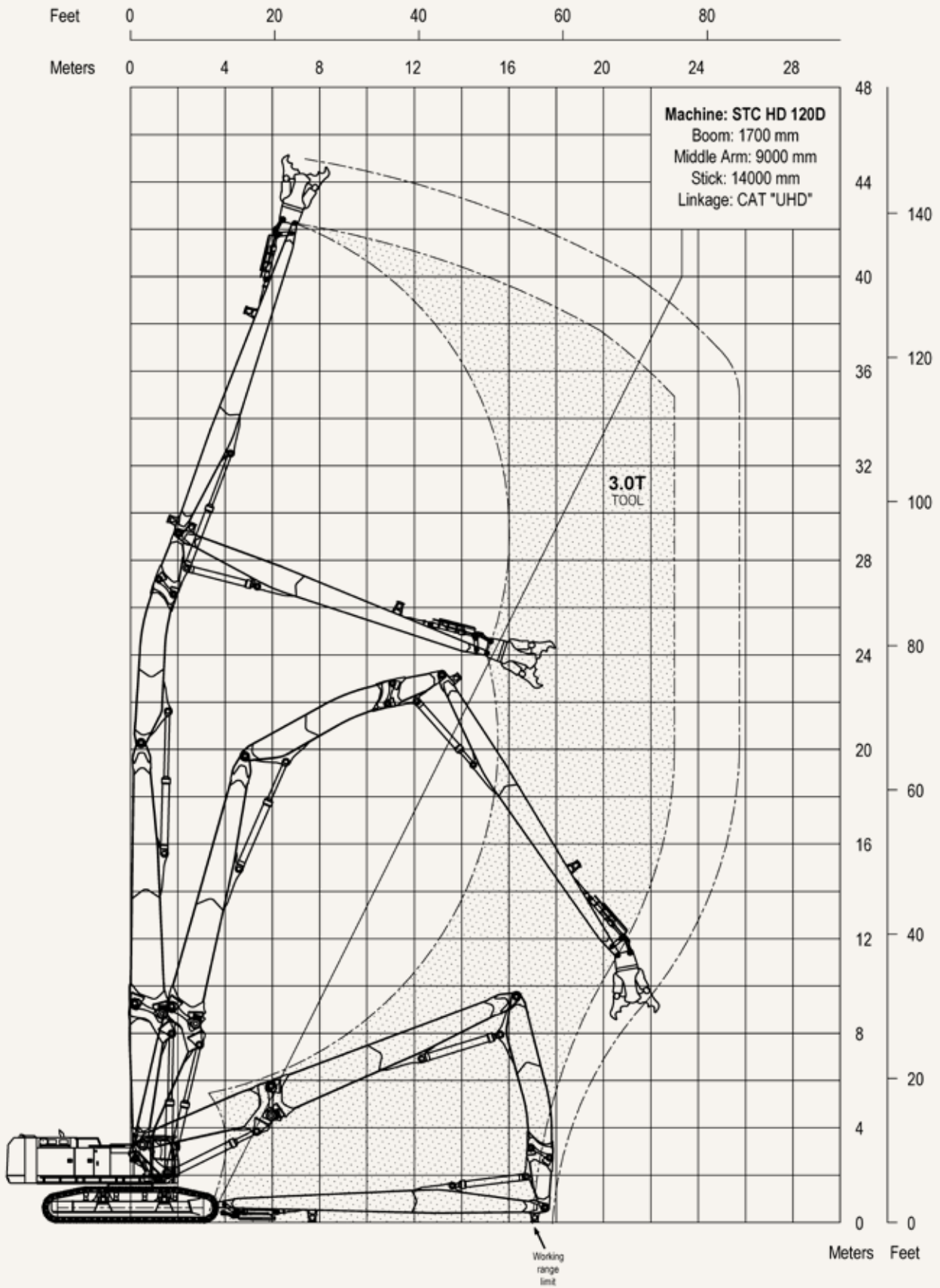
Operating Weight	134 000 kg	295 000 lb
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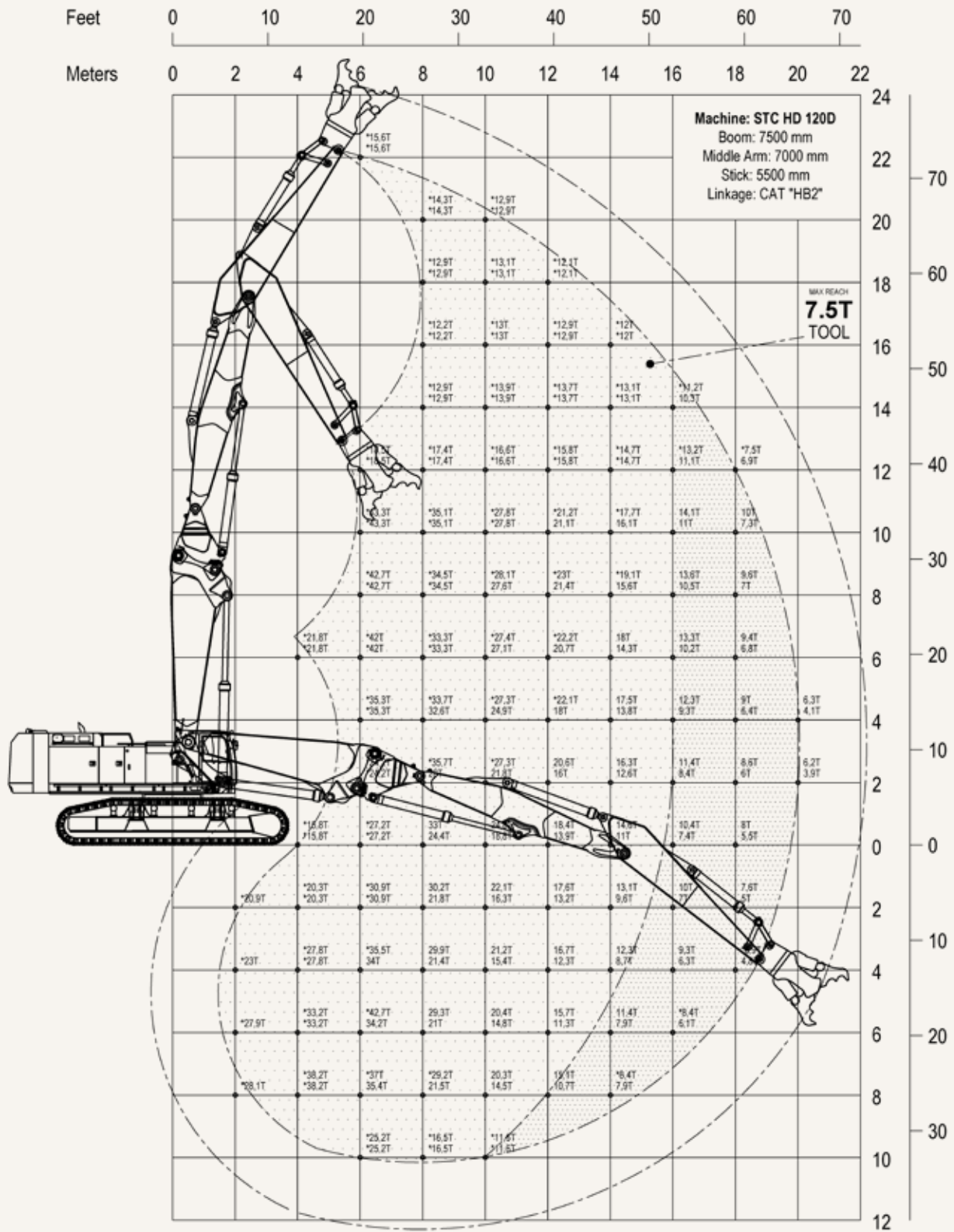
Service refill capacities

Fuel Tank	1220 L	322 gal
Cooling System	71 L	19 gal
Engine Oil (<i>with filter</i>)	67 L	18 gal
Swing Drive	24 L	6 gal
Final Drive (<i>each</i>)	20 L	5 gal
Hydraulic Tank (<i>including suction pipe</i>)	650 L	172 gal
DEF Tank	80 L	21 gal

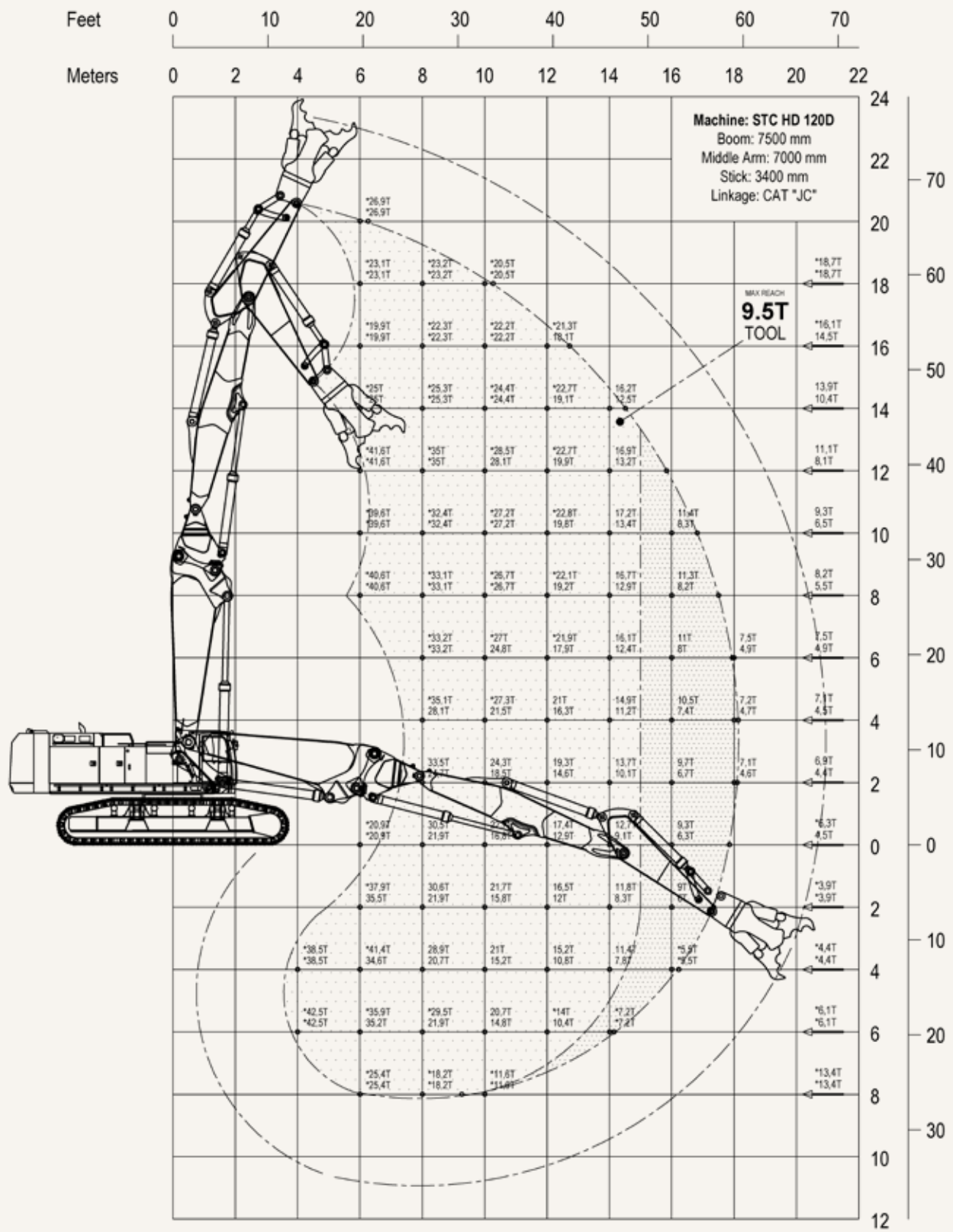
Dimensions

Shipping Height (<i>top of cab</i>)	4000 mm	13'1"
Tail Swing Radius	5400 mm	17'9"
Track Length	7450 mm	24'5"
Track Length to Center of Rollers	6170 mm	20'3"
Track Gauge	4100 mm	13'5"



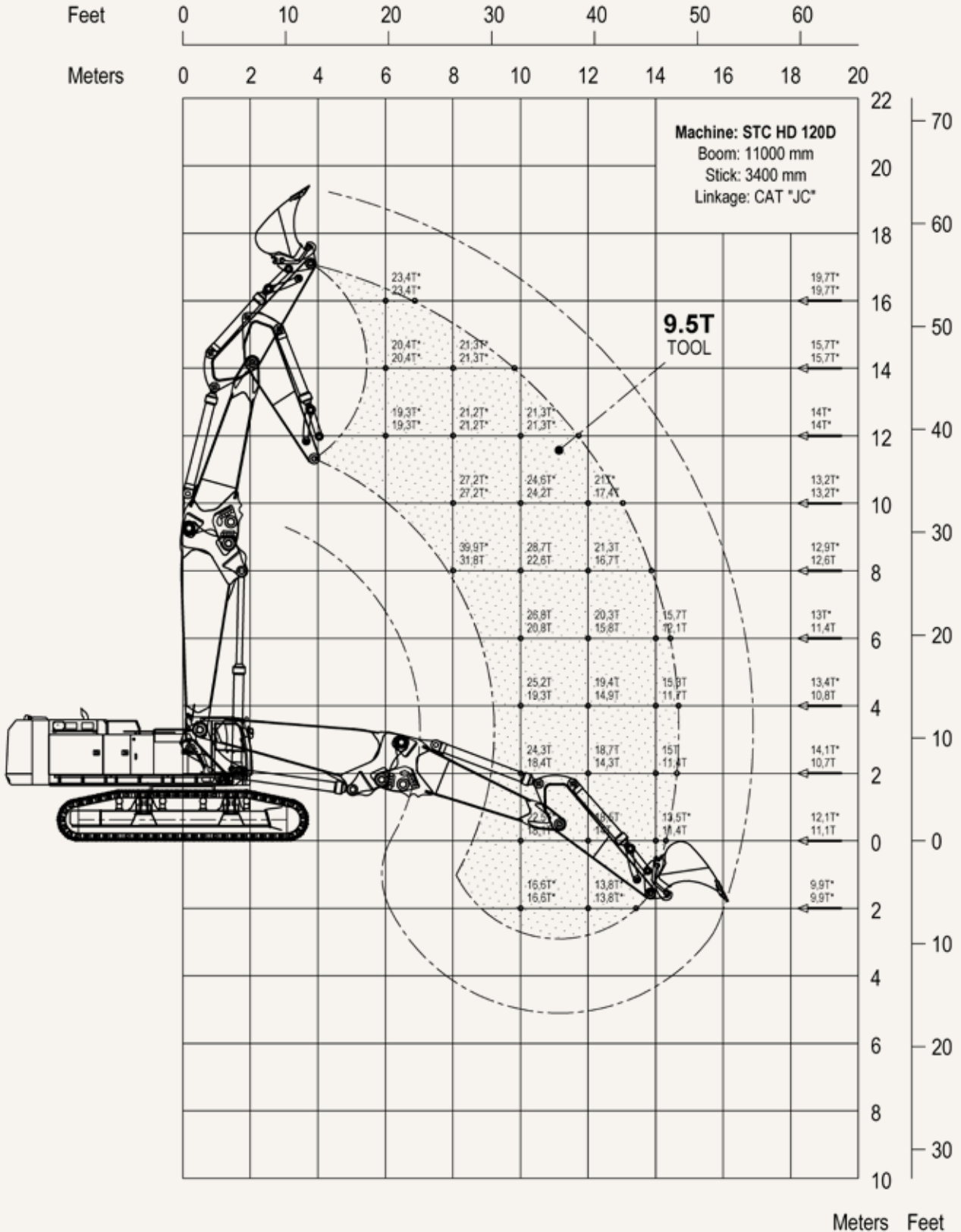


The upper number indicates the maximum load over the front, the lower number over the side.
 The numbers with a * indicates 87% of the hydraulic capacity, and the remaining numbers 75% of the tipping load. Pressure: 350 bar
 The right column shows the load at max. reach of the machine

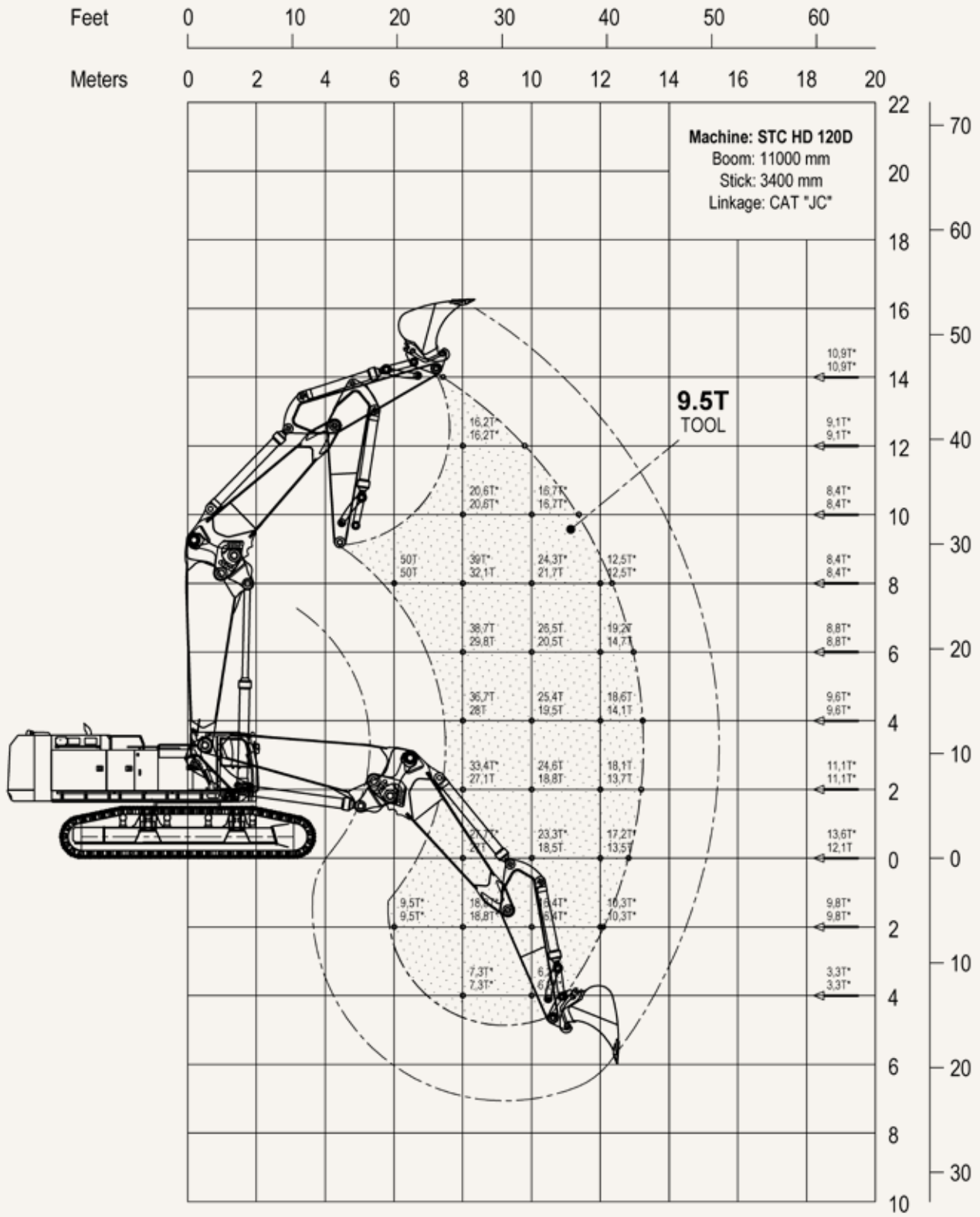


The upper number indicates the maximum load over the front, the lower number over the side.
 The numbers with a * indicates 87% of the hydraulic capacity, and the remaining numbers 75% of the tipping load. Pressure: 350 bar
 The right column shows the load at max. reach of the machine

Meters Feet



The upper number indicates the maximum load over the front, the lower number over the side.
 The numbers with a * indicates 87% of the hydraulic capacity, and the remaining numbers 75% of the tipping load.
 The right column shows the load at max. reach of the machine



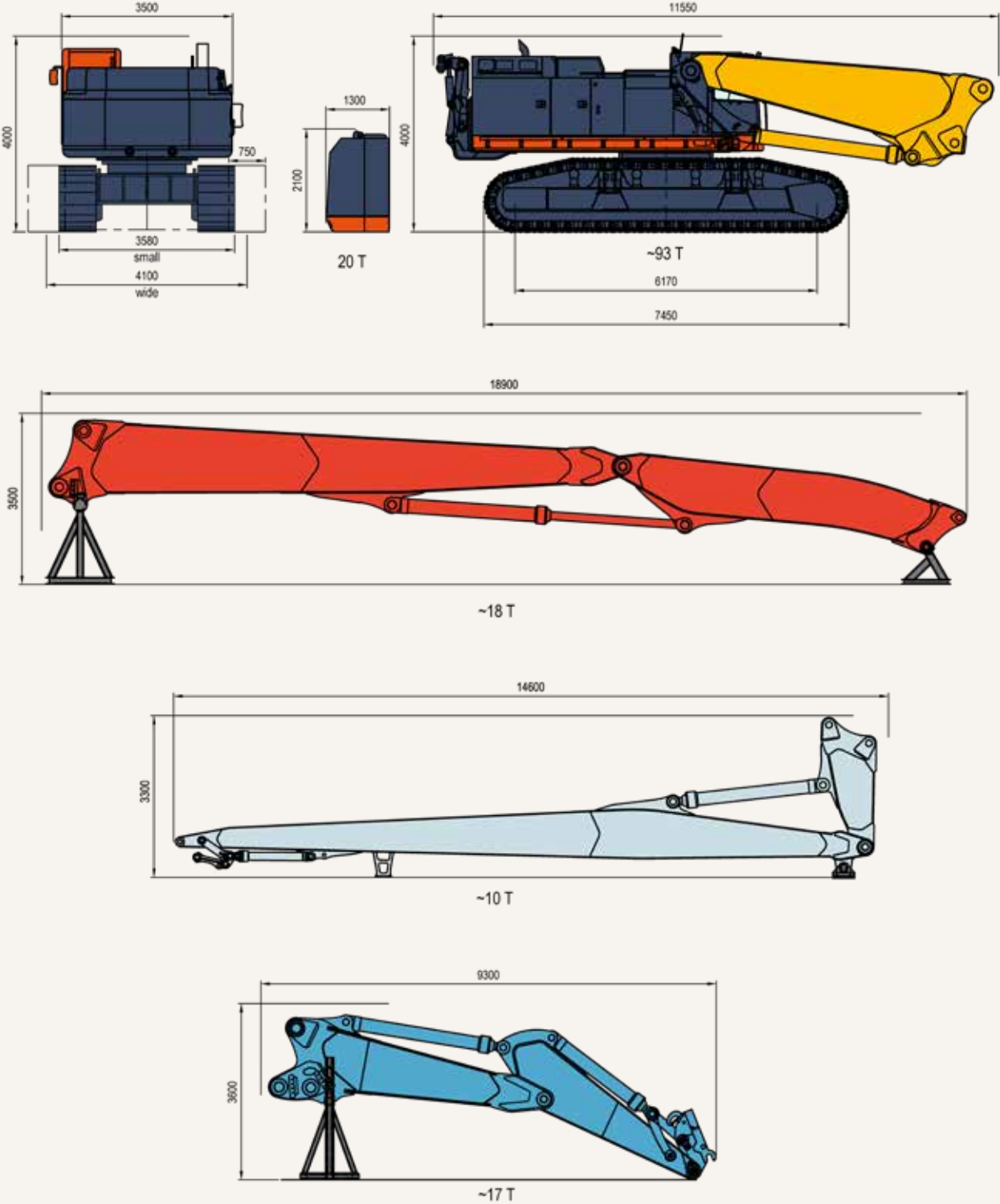
The upper number indicates the maximum load over the front, the lower number over the side.
 The numbers with a * indicates 87% of the hydraulic capacity, and the remaining numbers 75% of the tipping load.
 The right column shows the load at max. reach of the machine

Configurations | HD 120D

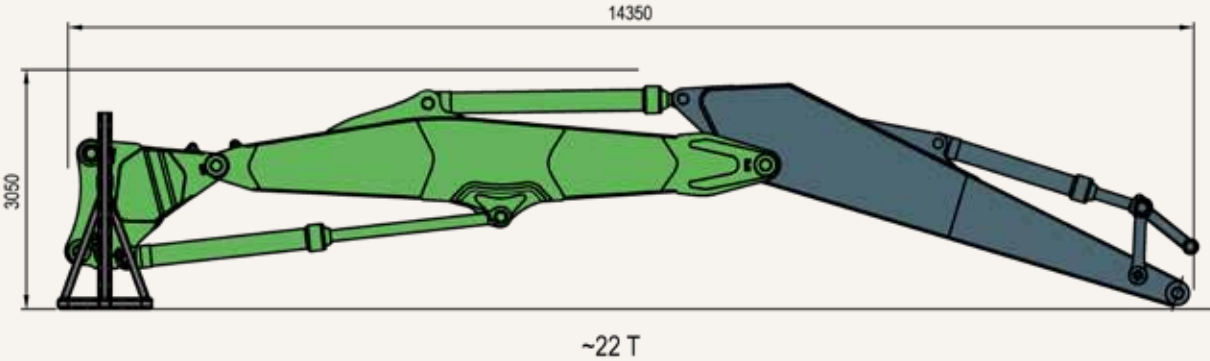
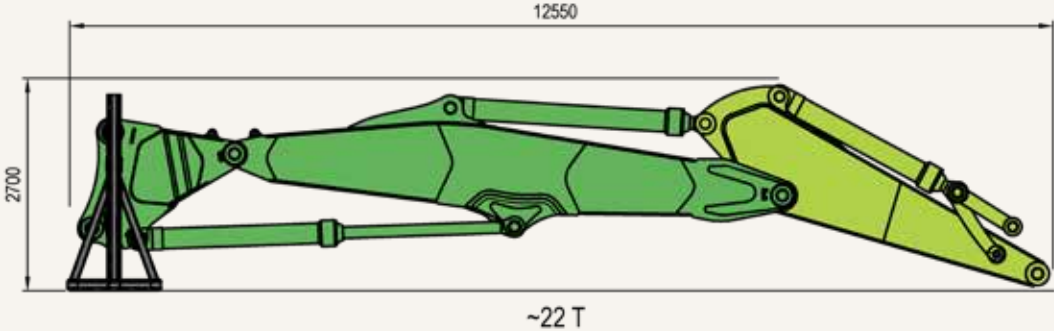


	42 mtr. HRD	22 mtr. Triple	20 mtr. Triple	17 mtr. 2PC Straight	15 mtr. 2PC Bend
HRD Stick 14000mm					
HRD Middlearm					
Triple Stick 5500mm					
Triple Stick 3400mm					
Triple Middlearm					
2PC Digging					
Stubboom					
Toolweight	3T / 6600 lb Crusher 2.4T / 5300 lb Shear	7.5T / 16500 lb Crusher 6T / 13200 lb Shear	9.5T / 20900 lb Crusher 7.6T / 16700 lb Shear	9.5T / 20900 lb Crusher 7.6T / 16700 lb Shear	9.5T / 20900 lb Crusher 7.6T / 16700 lb Shear

Transport table | HD 120D

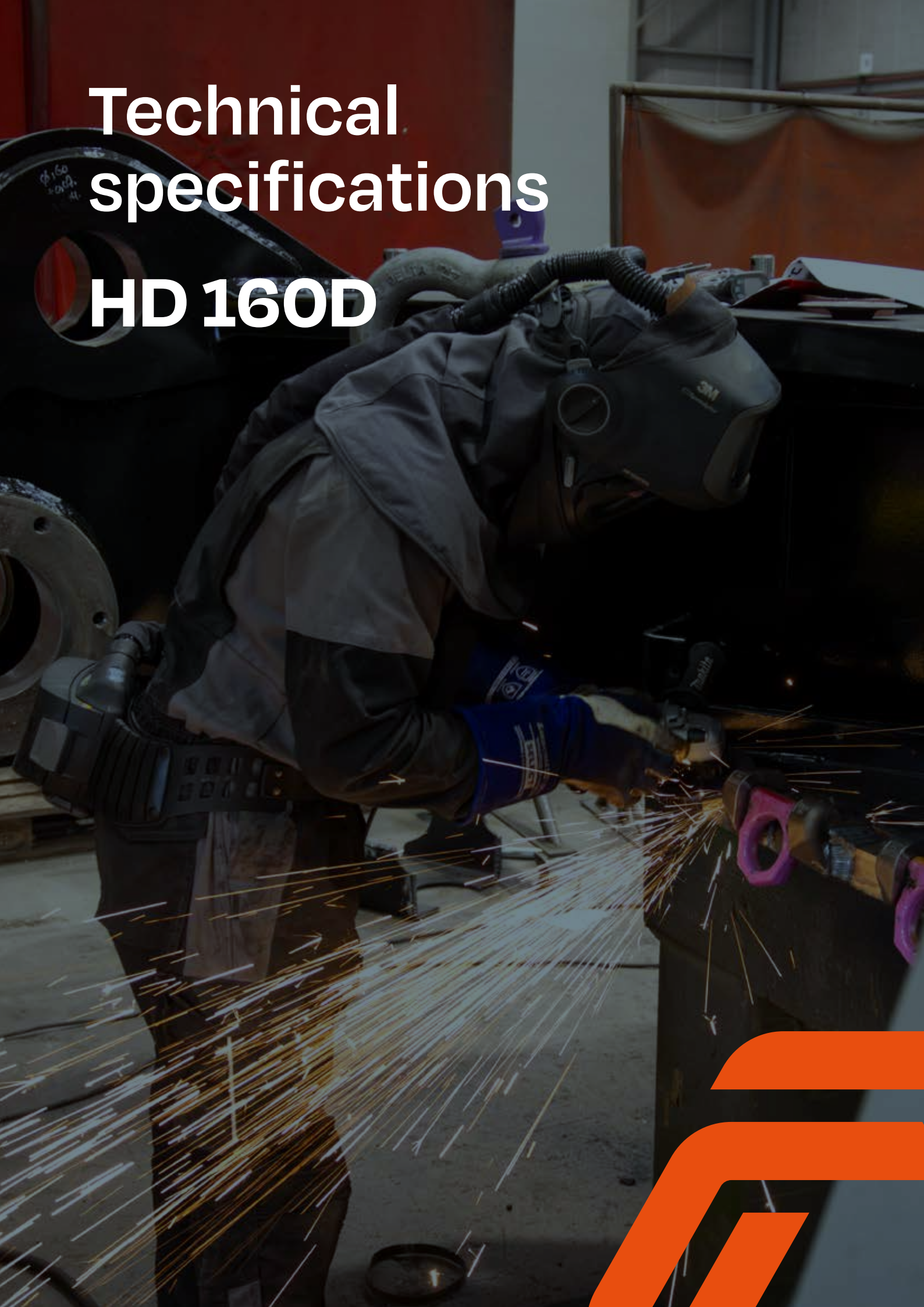


Transport table | HD 120D



Technical specifications

HD 160D



Engine

Engine model	Cat C18	
Engine Power – ISO 9249	404 kW	542 hp
Engine Power – ISO 14396	405 kW	543 hp
Bore	145 mm	6 in
Stroke	183 mm	7 in
Displacement	18.1 L	1,105 in ³

Hydraulic system

Main System – Maximum Flow – Implement (<i>x2 pumps</i>)	1064 L/min	281 gal/min
Maximum Pressure – Equipment – Implement	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	31 000 kPa	4,496 psi

Swing mechanism

Swing Speed	6.3 rpm	
Maximum Swing Torque	362 kN·m	267,333 bf-ft

Weights

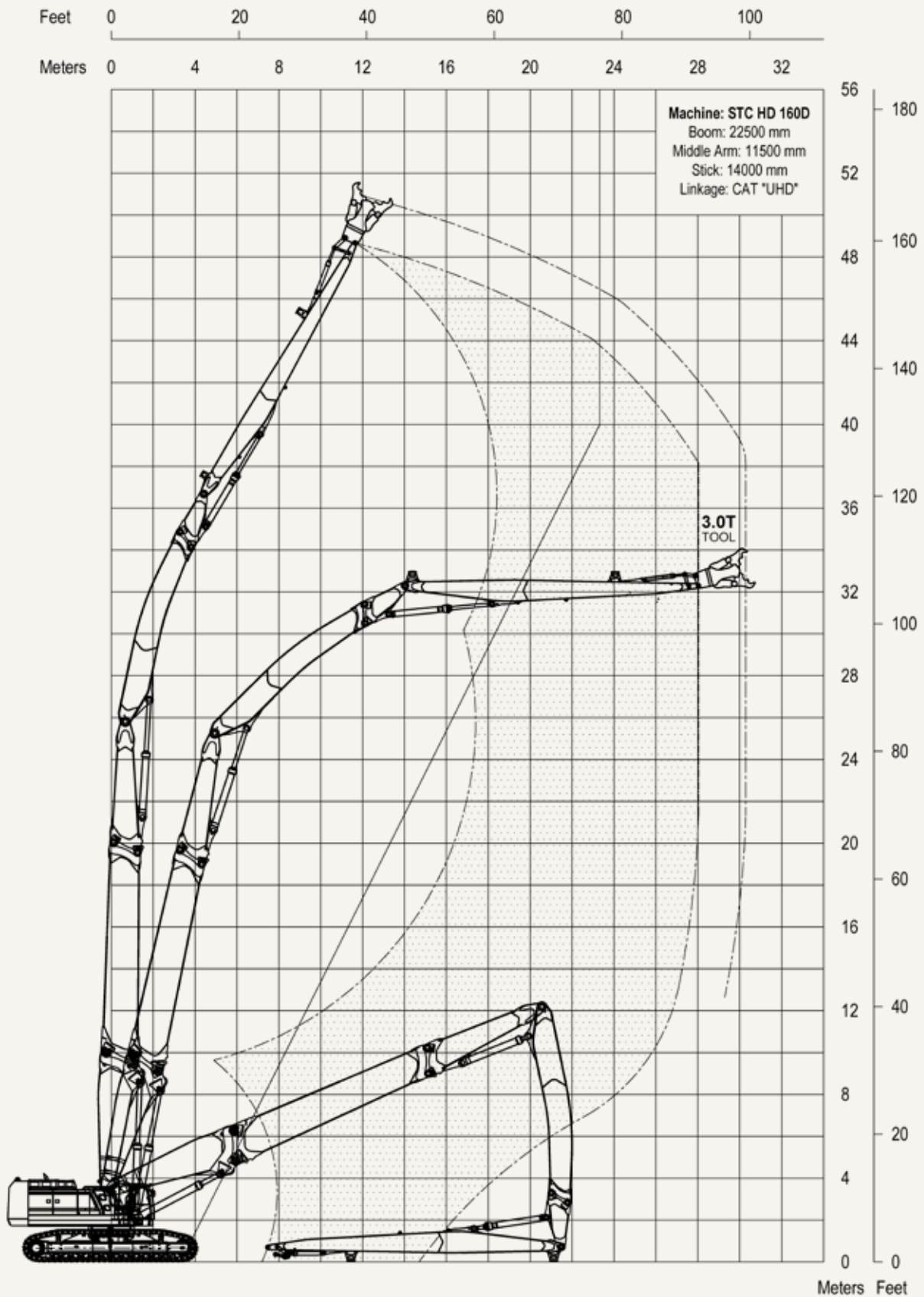
Operating Weight	175 000 kg	386 000 lb
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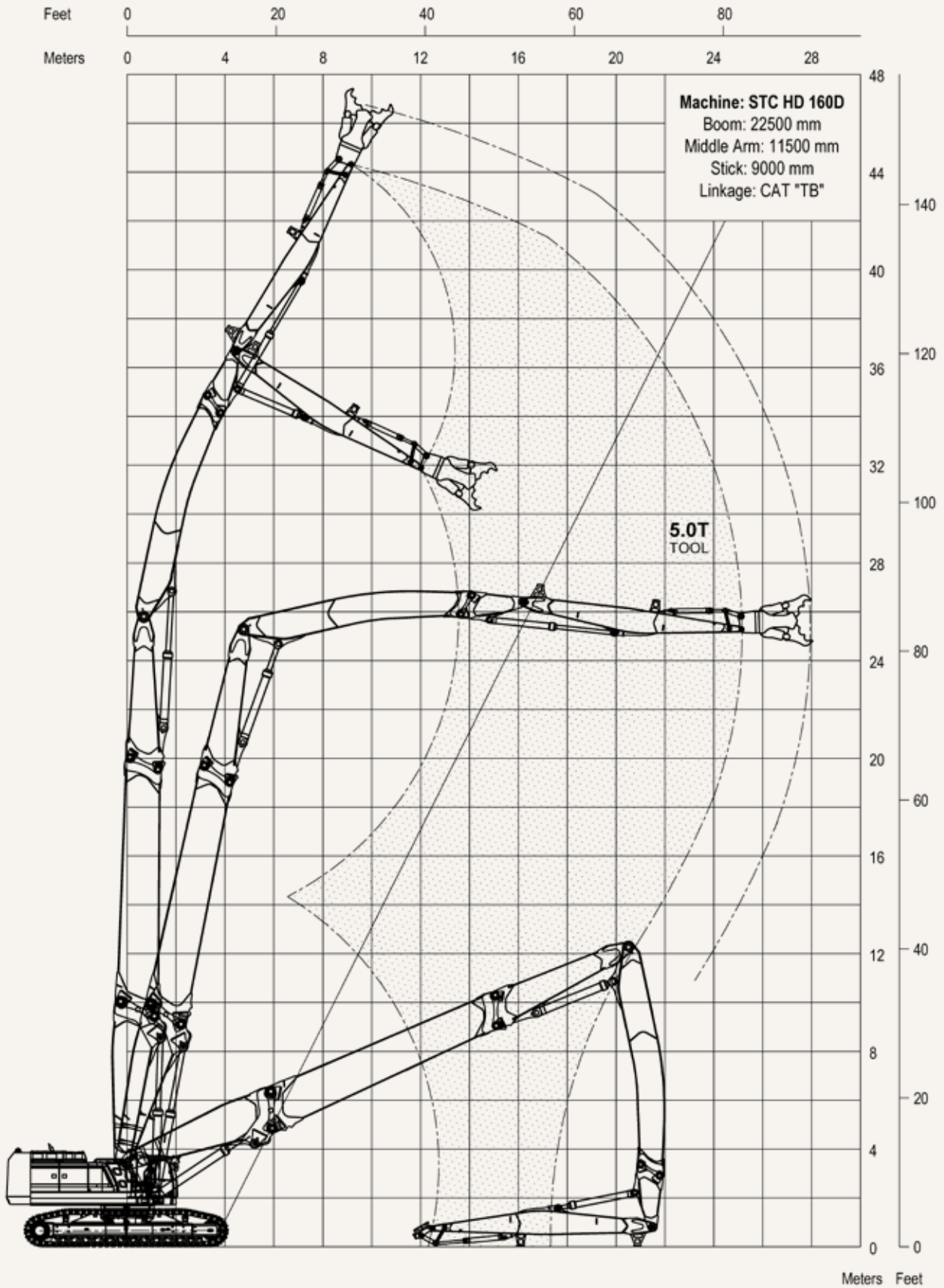
Service refill capacities

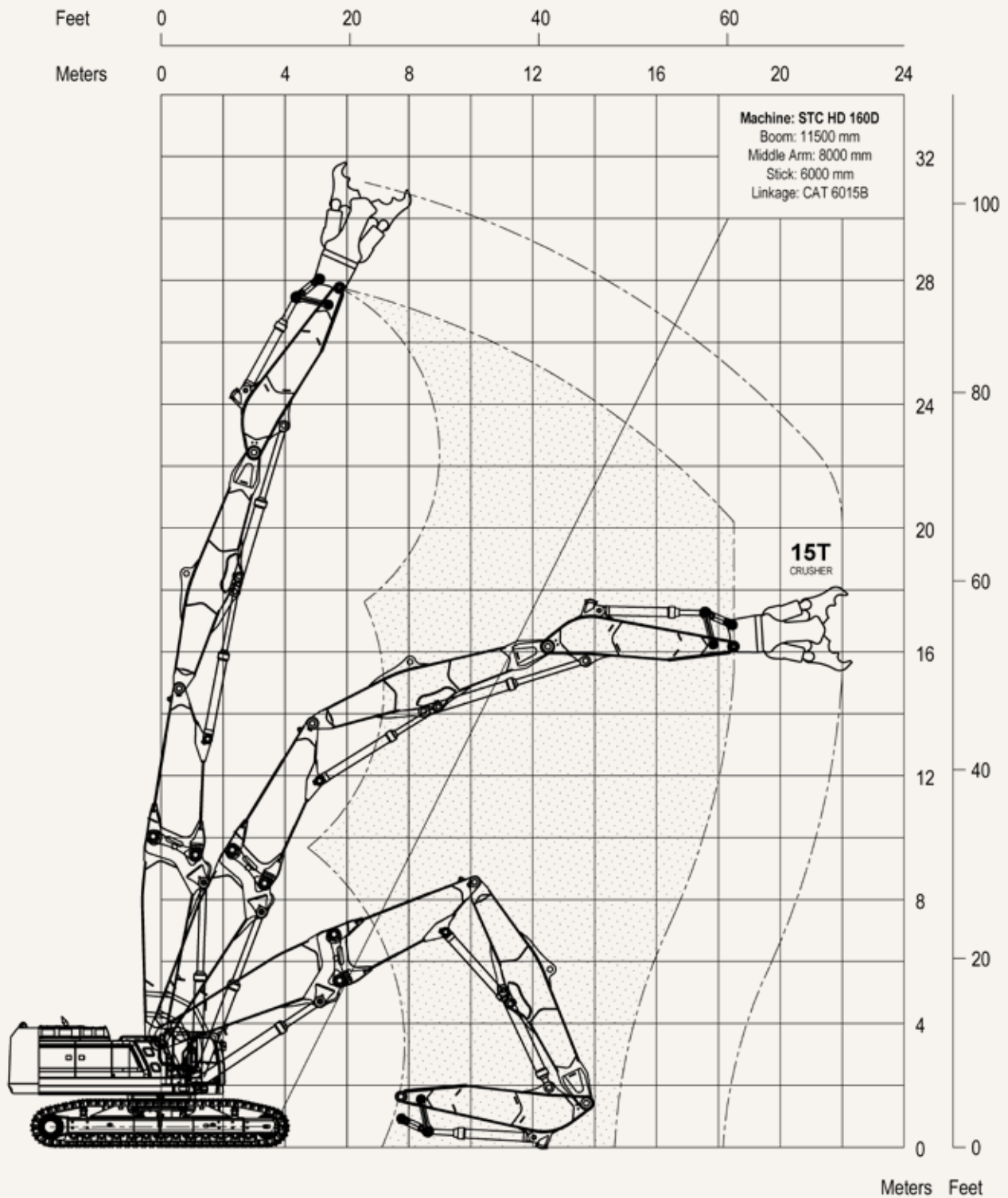
Fuel Tank	1220 L	322 gal
Cooling System	71 L	19 gal
Engine Oil (<i>with filter</i>)	67 L	18 gal
Swing Drive	24 L	6 gal
Final Drive (<i>each</i>)	20 L	5 gal
Hydraulic Tank (<i>including suction pipe</i>)	650 L	172 gal
DEF Tank	80 L	21 gal

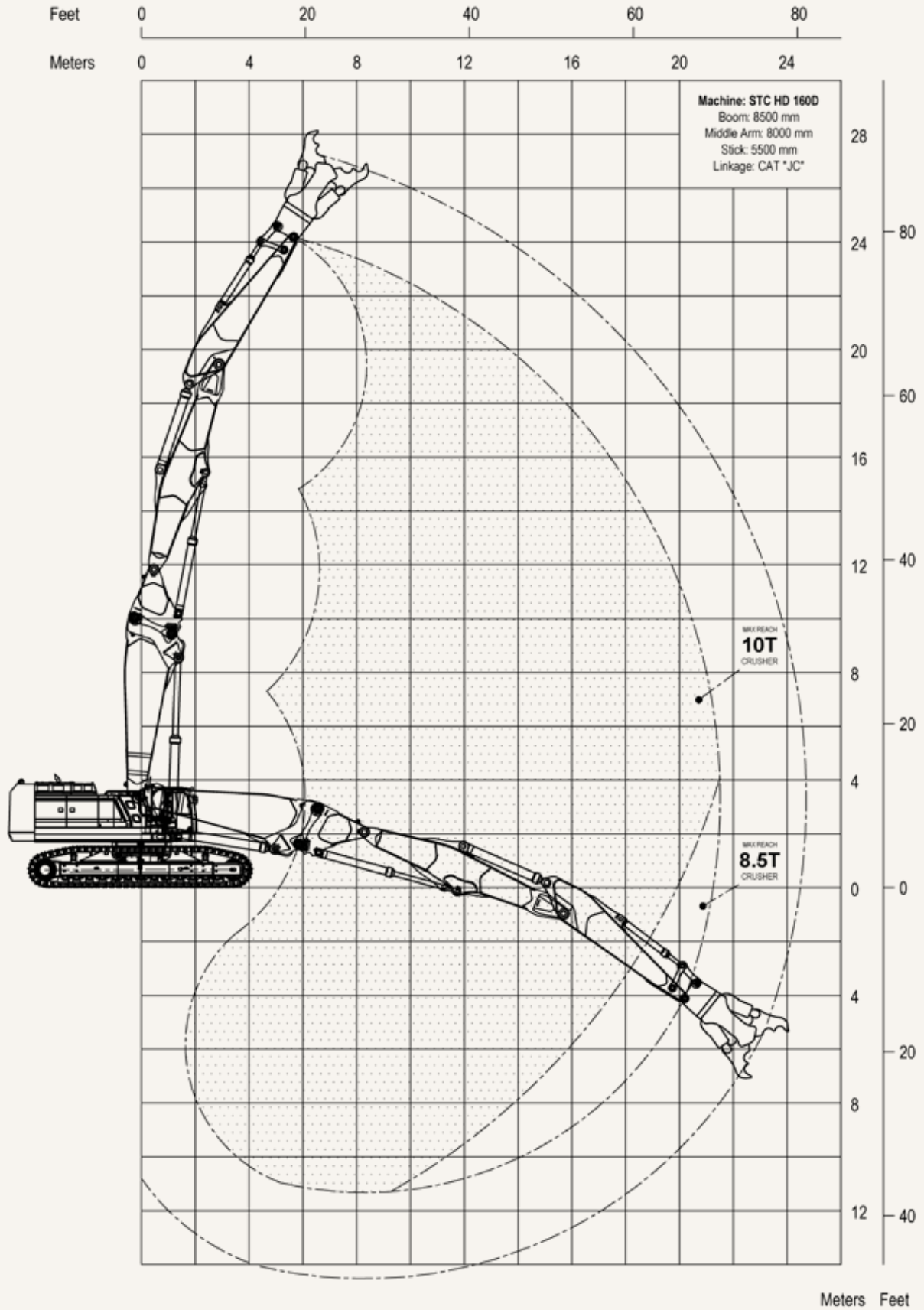
Dimensions

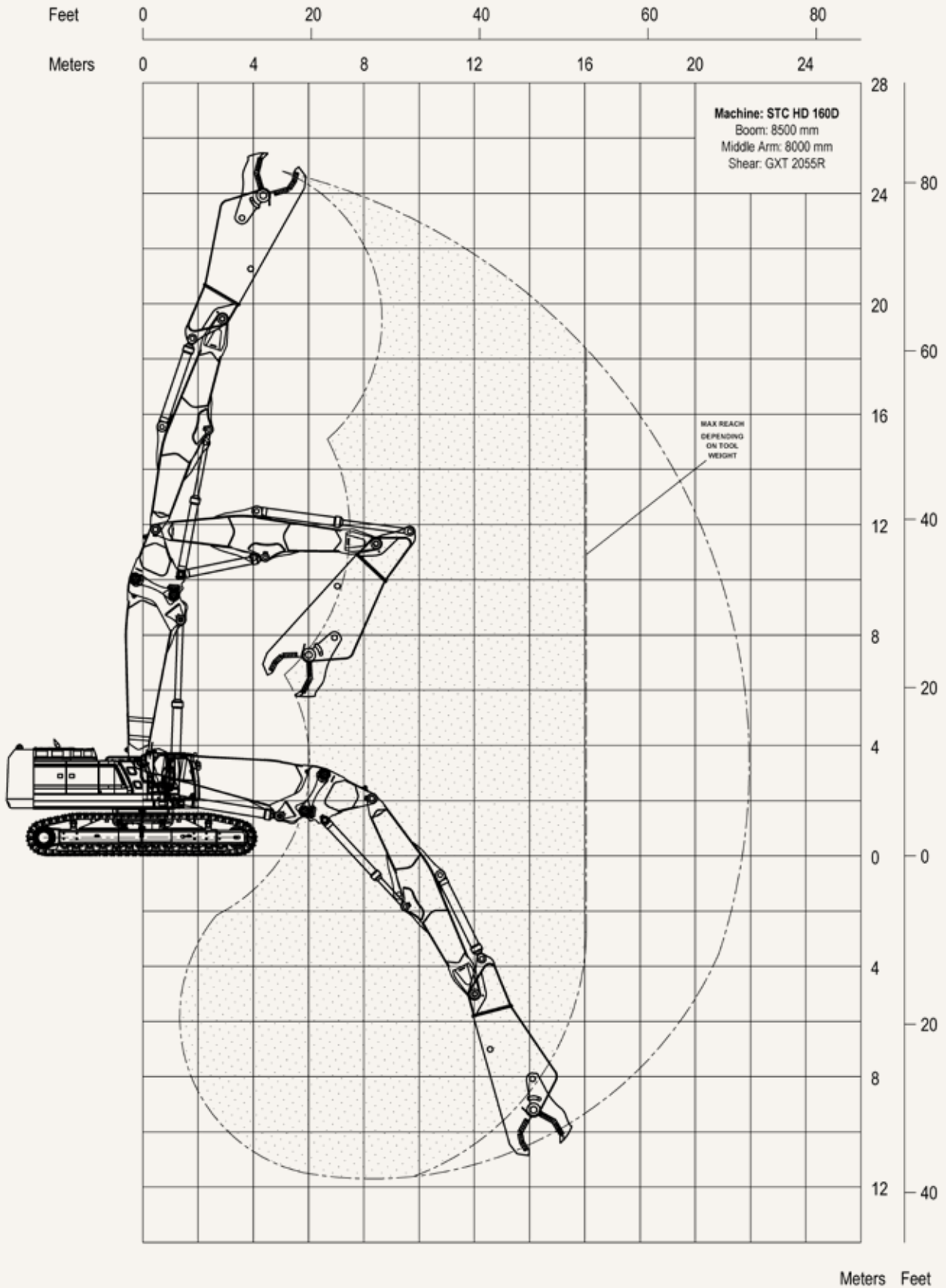
Shipping Height (<i>top of cab</i>)	3250 mm	10'8"
Tail Swing Radius	5400 mm	17'9"
Track Length	8400 mm	27'7"
Track Length to Center of Rollers	7050 mm	23'2"
Track Gauge	5110 mm	16'9"









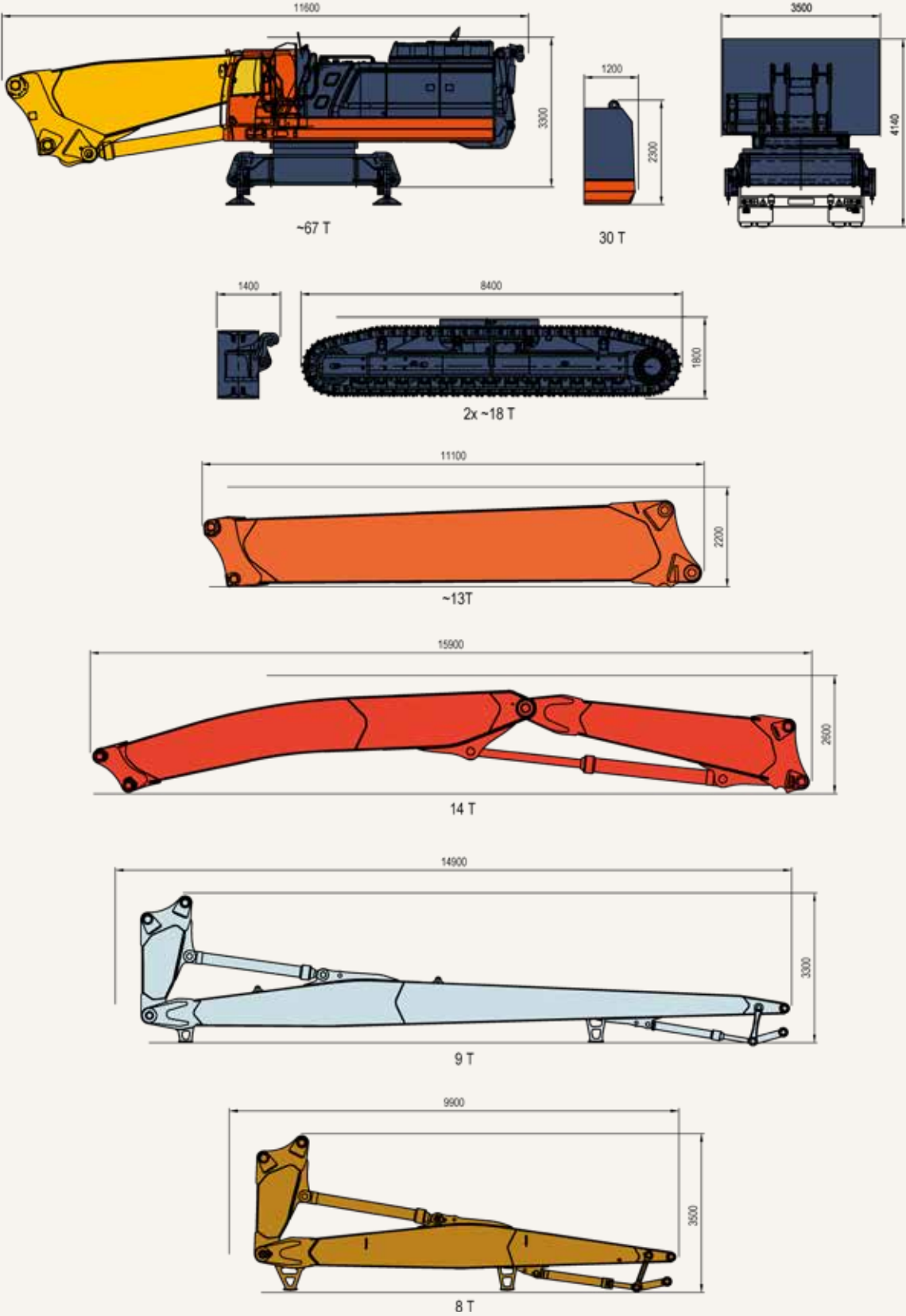


Configurations | HD 160D

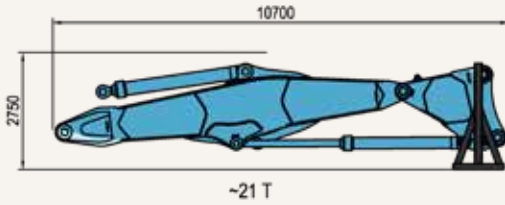
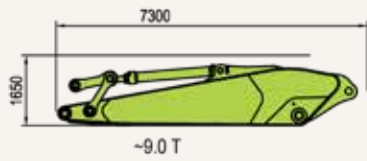
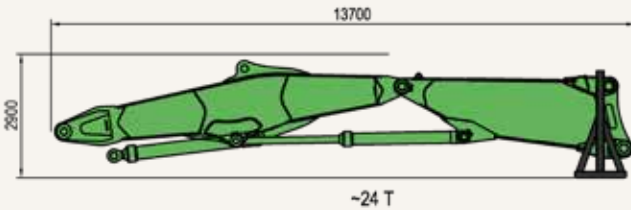
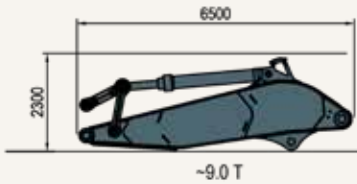
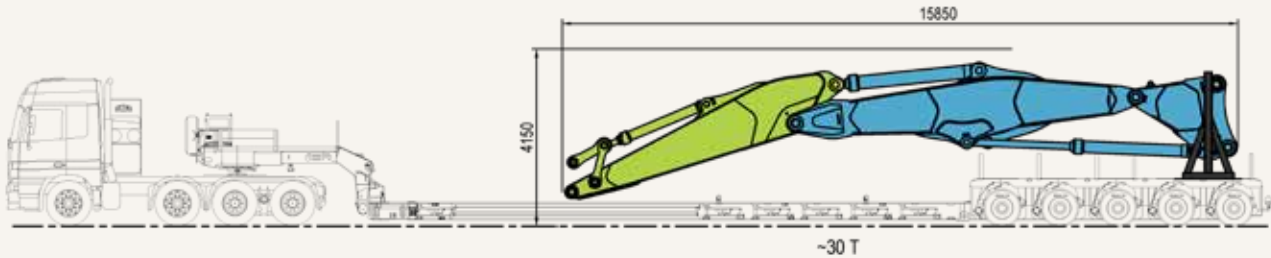
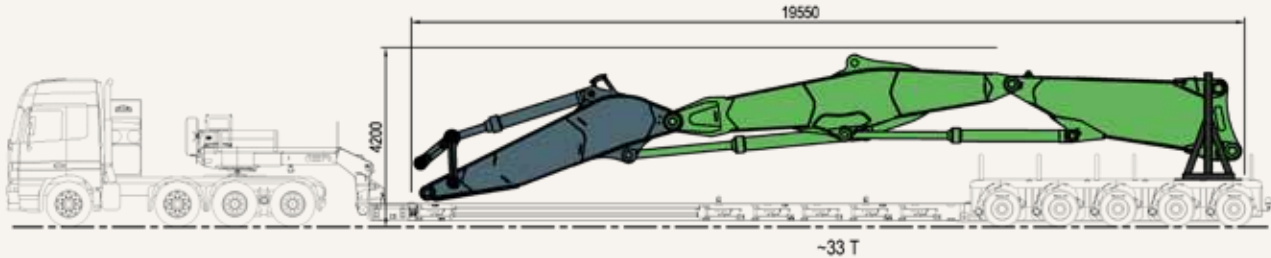


	49 mtr. HRD	45 mtr. HRD	28 mtr. Triple	24 mtr. Triple	19 mtr. Triple
HRD Stick 14000mm					
HRD Stick 9000mm					
HRD Middlearm					
Extension 10000mm					
Triple Stick 6000mm					
Triple Long					
Triple Stick 5500mm					
Triple Short					
Stubboom					
Toolweight	3T / 6600 lb Crusher 2.4T / 5300 lb Shear	5T / 11000 lb Crusher 4T / 8800 lb Shear	15T / 33100 lb Crusher 12T / 26500 lb Shear	10T / 22000 lb Crusher 8T / 17600 lb Shear	~20T/25T Shear ~44000/ 55000 lb Shear

Transport table | HD 160D



Transport table | HD 160D



Technical specifications

HD 220D



Engine

Engine model	Cat C18	
Engine Power – ISO 9249	404 kW	542 hp
Engine Power – ISO 14396	405 kW	543 hp
Bore	145 mm	6 in
Stroke	183 mm	7 in
Displacement	18.1 L	1,105 in ³

Hydraulic system

Main System – Maximum Flow – Implement (<i>x2 pumps</i>)	1064 L/min	281 gal/min
Maximum Pressure – Equipment – Implement	37 000 kPa	5,366 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	31 000 kPa	4,496 psi

Swing mechanism

Swing Speed	6.3 rpm	
Maximum Swing Torque	362 kN·m	267,333 bf-ft

Weights

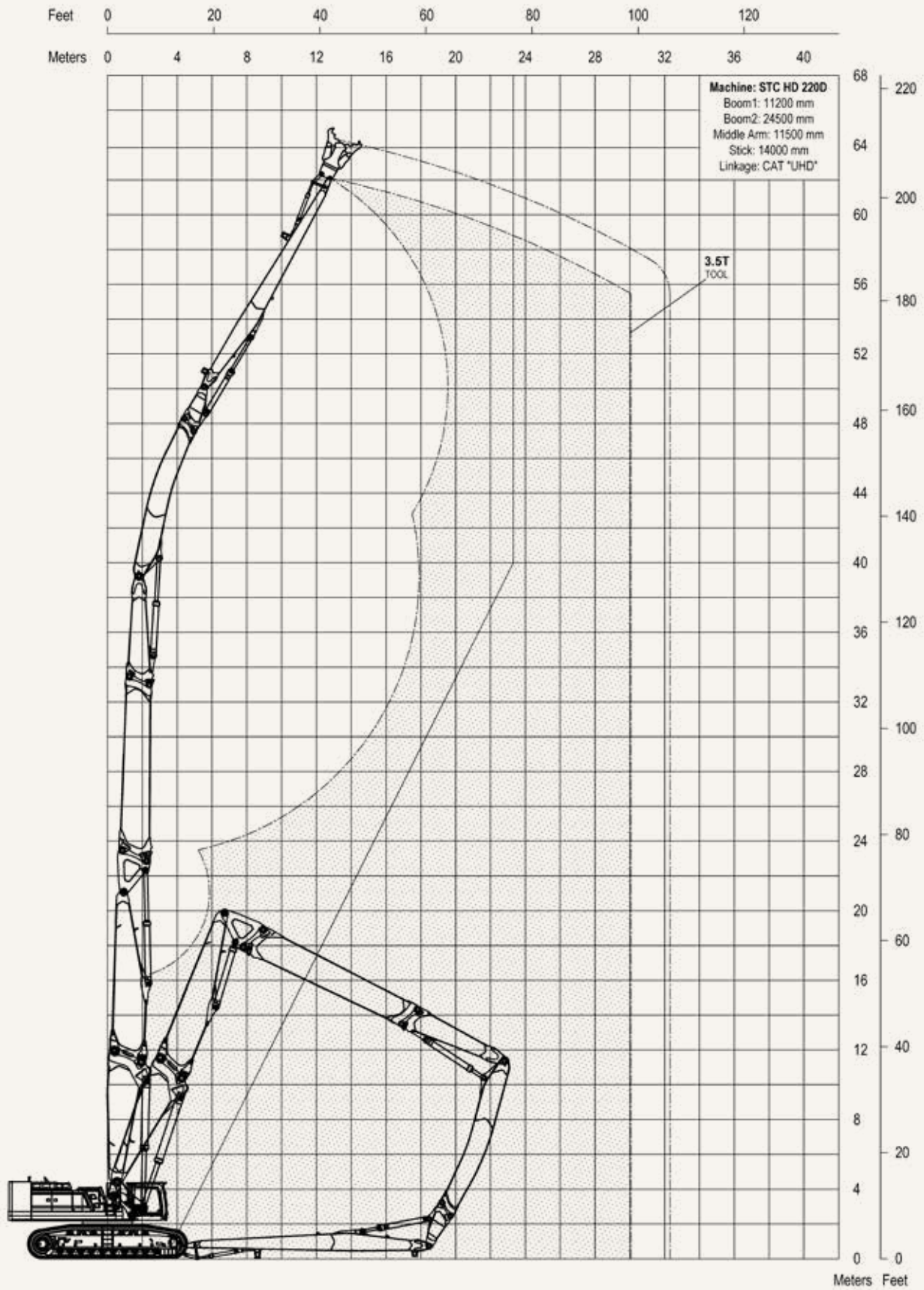
Operating Weight	240 000 kg	529 000 lb
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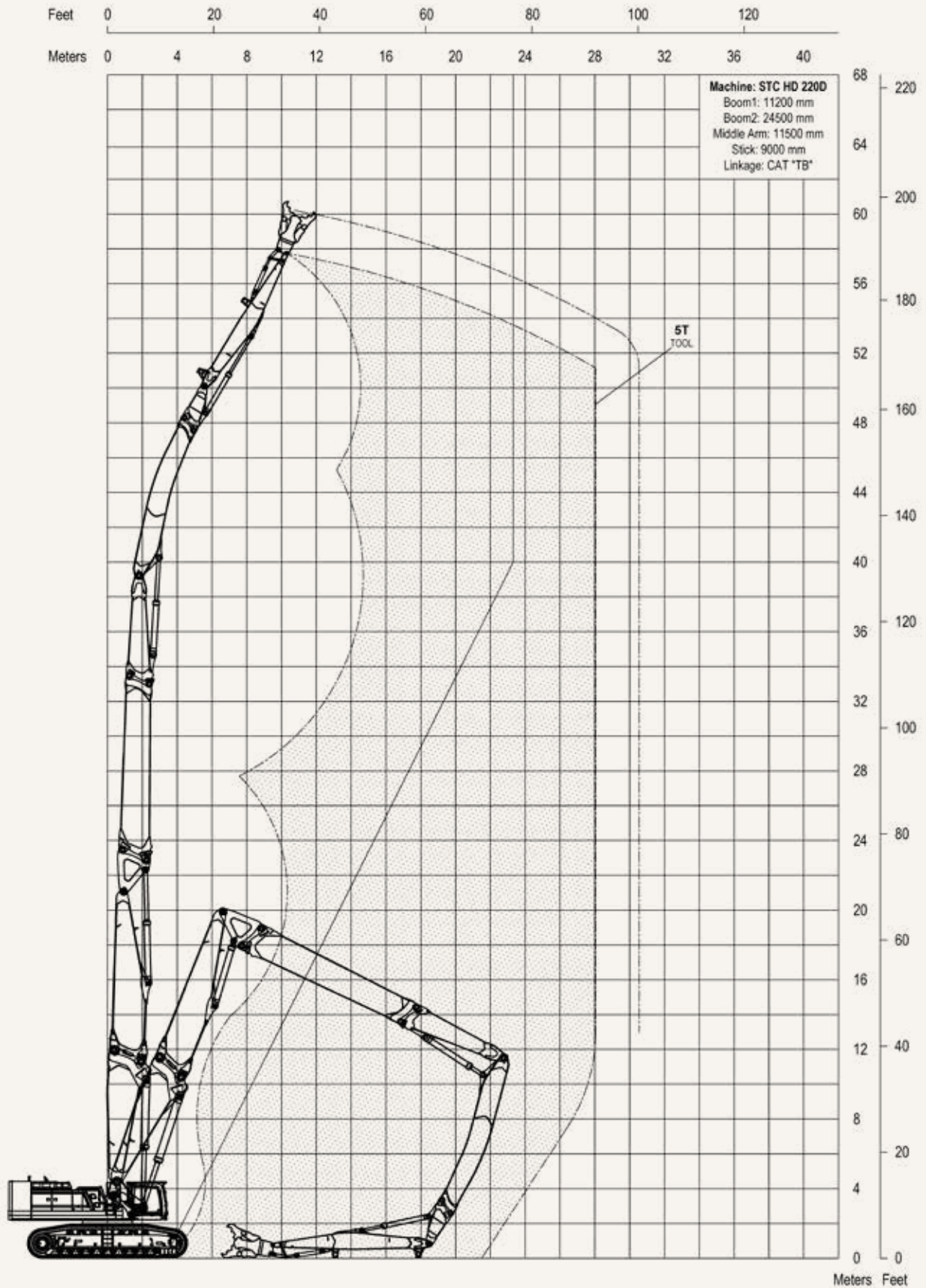
Service refill capacities

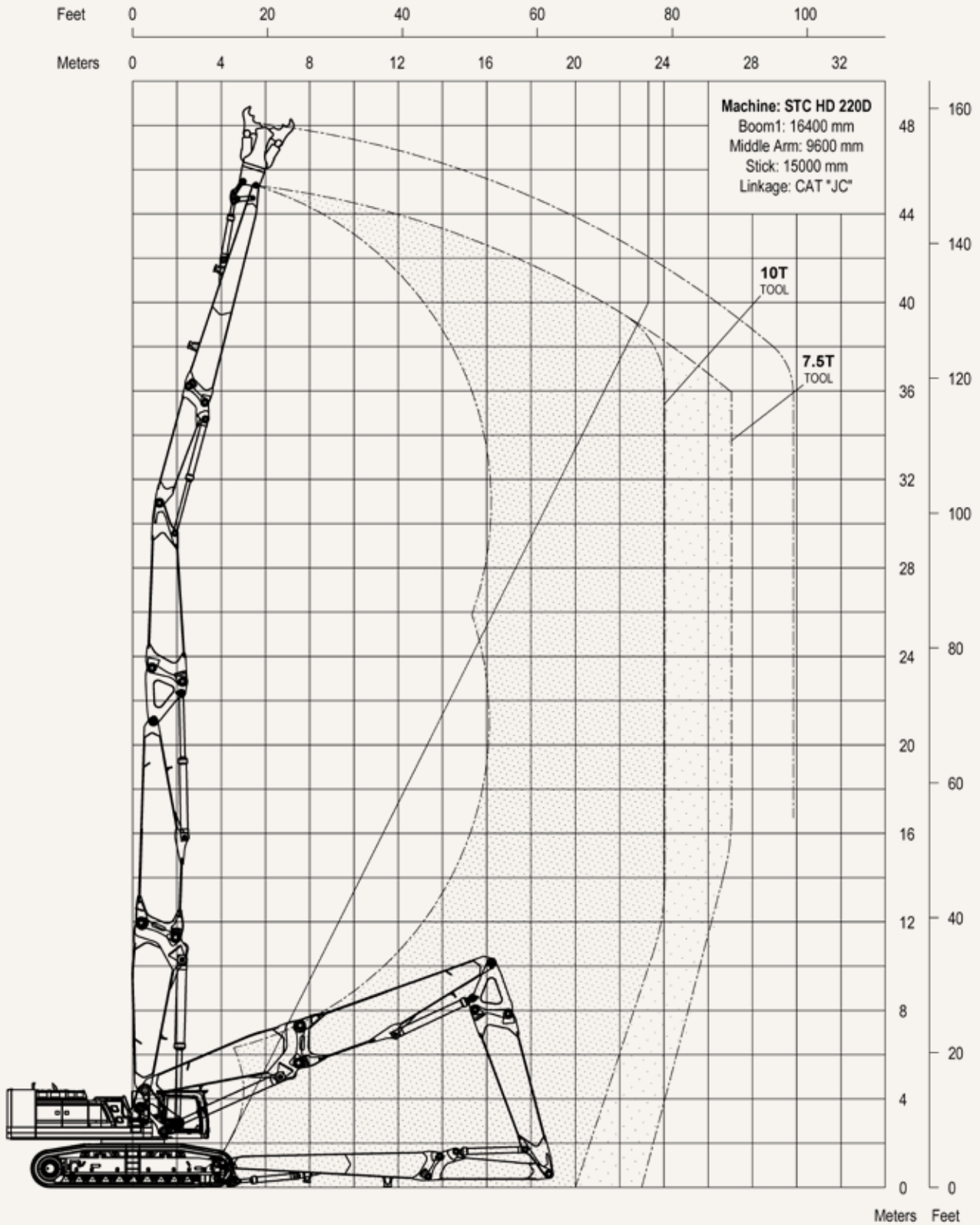
Fuel Tank	1220 L	322 gal
Cooling System	71 L	19 gal
Engine Oil (<i>with filter</i>)	67 L	18 gal
Swing Drive	24 L	6 gal
Final Drive (<i>each</i>)	20 L	5 gal
Hydraulic Tank (<i>including suction pipe</i>)	650 L	172 gal
DEF Tank	80 L	21 gal

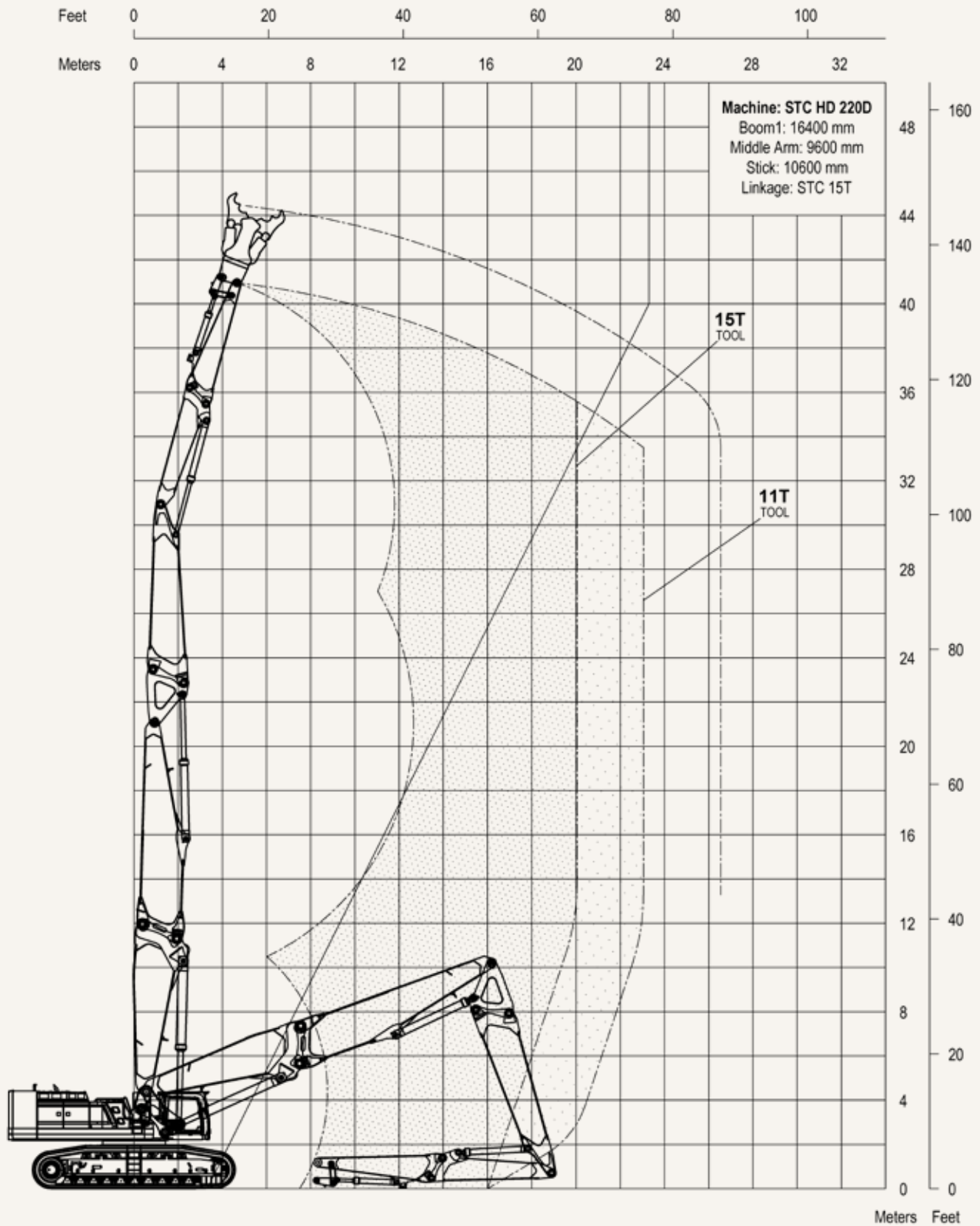
Dimensions

Shipping Height (<i>top of cab</i>)	3400 mm	11'2"
Tail Swing Radius	5800 mm	19'0"
Track Length	9200 mm	30'2"
Track Length to Center of Rollers	7500 mm	24'7"
Track Gauge	6300 mm	20'8"



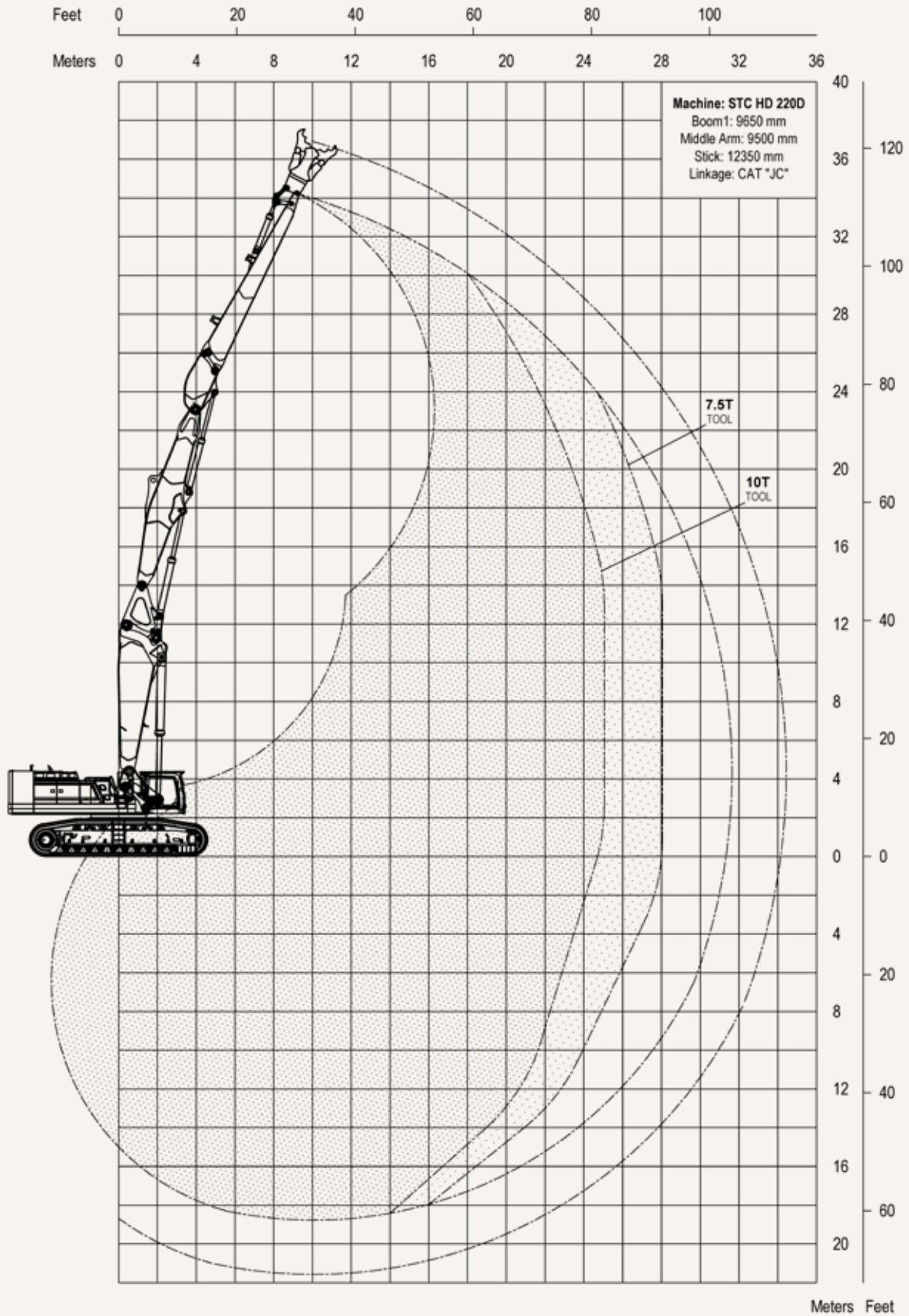


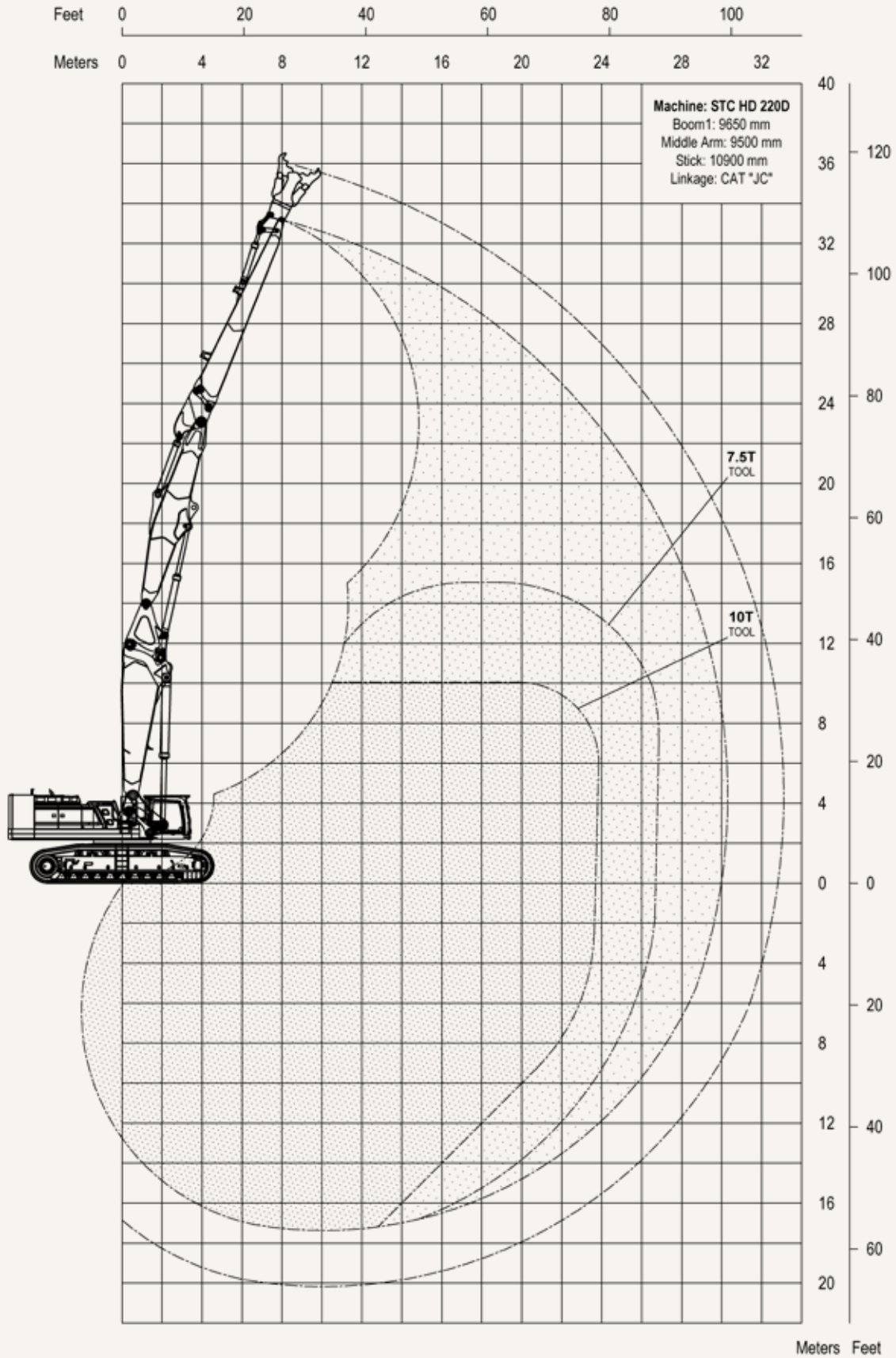


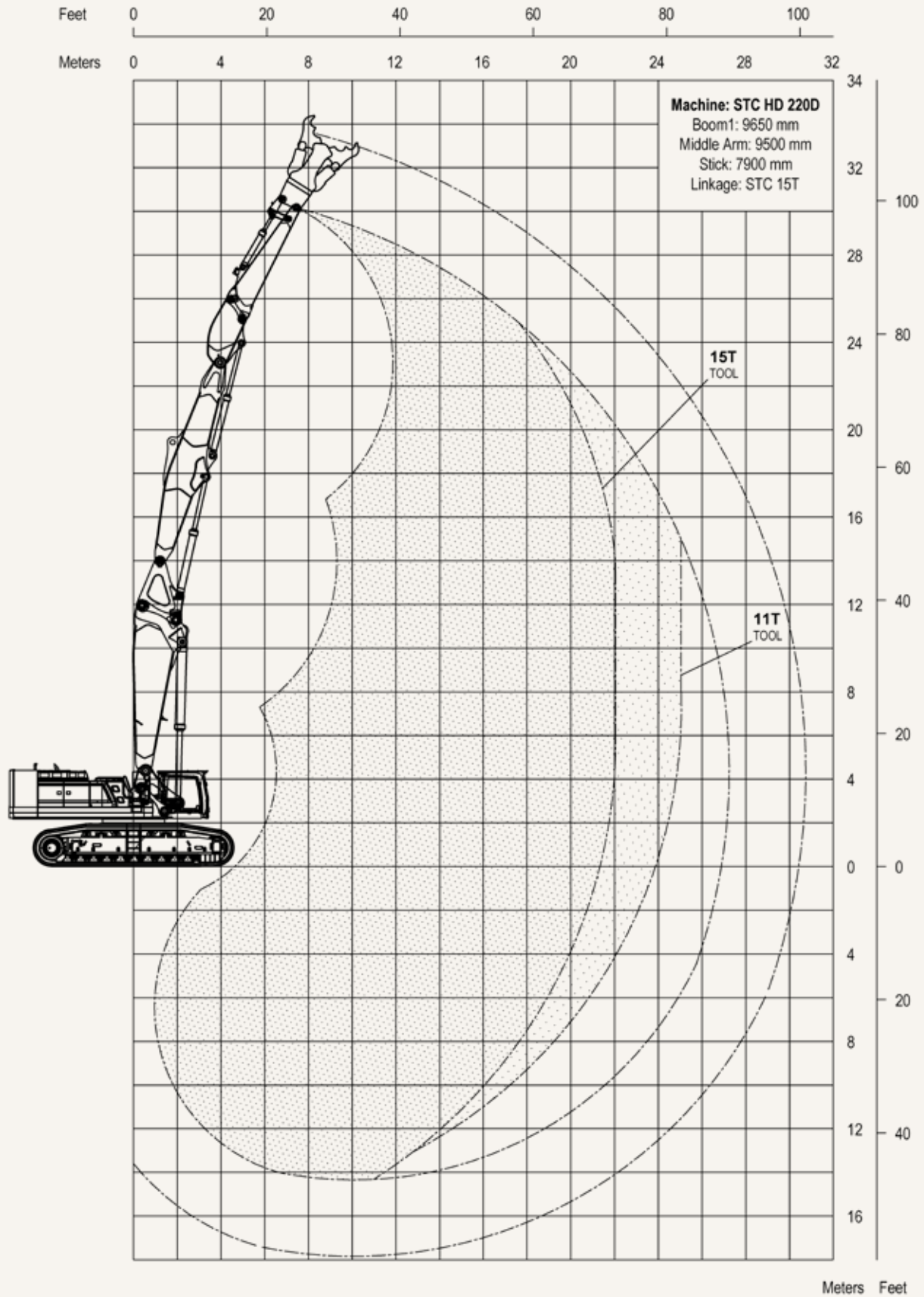


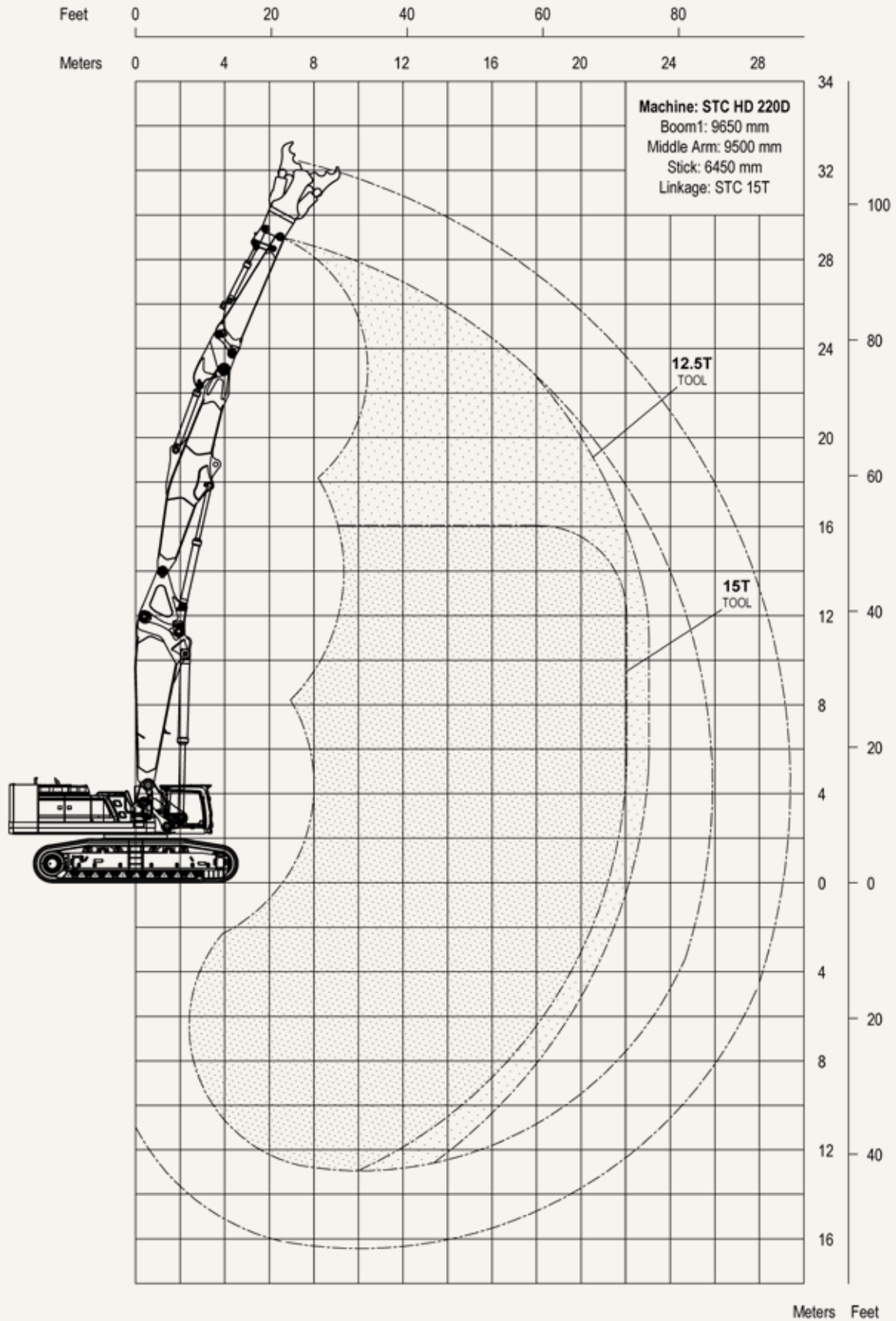
Triple 34 mtr. | HD 220D

5-1666-401







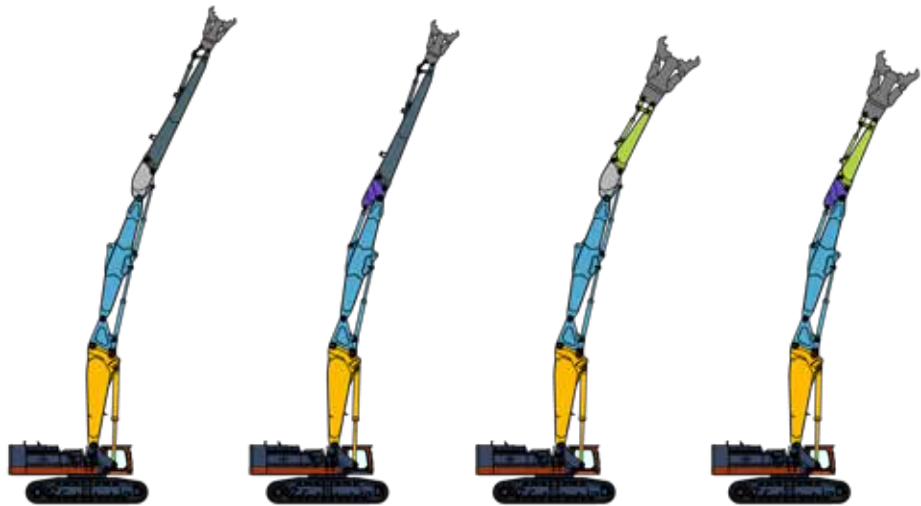


HRD Configurations | HD 220D



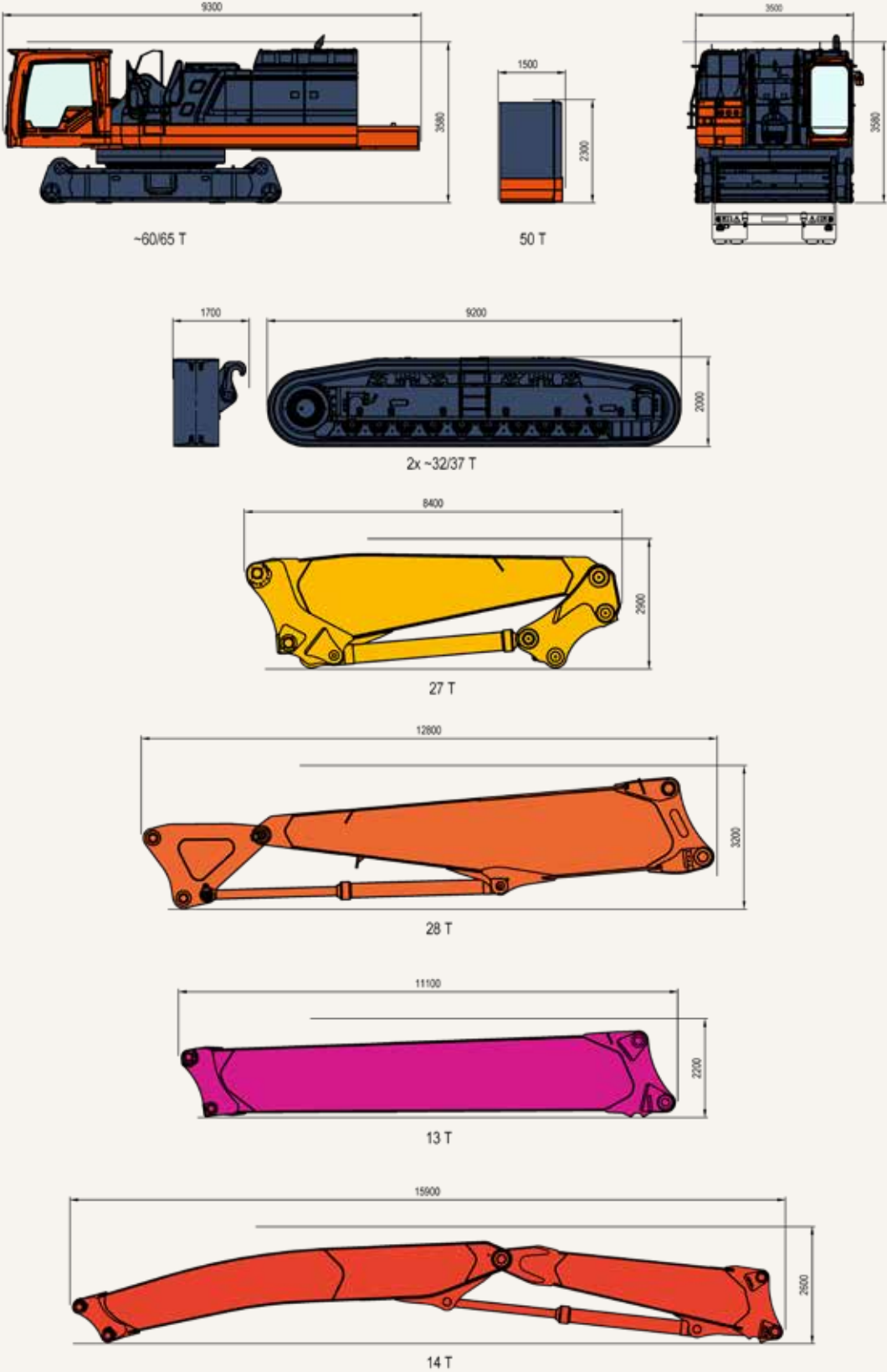
	62 mtr. HRD	58 mtr. HRD	45 mtr. Triple	41 mtr. Triple
HRD Stick 14000mm				
HRD Stick 9000mm				
HRD Middle arm (light)				
Extension 10000mm				
Stick Nose (long)				
Stick Nose (short)				
HRD Middle arm (heavy)				
HRD Boom				
Stubboom				
Toolweight	3.5T / 7700 lb Crusher 2.8T / 6200 lb Shear	5T / 11000 lb Crusher 4T / 8800 lb Shear	10T / 22000 lb Crusher 8T / 17600 lb Shear	15T / 33100 lb Crusher 12T / 26500 lb Shear

Triple Configurations | HD 220D

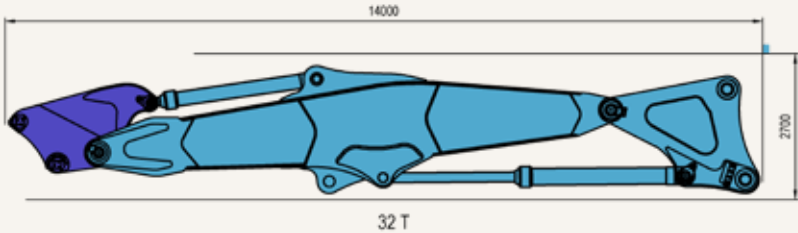
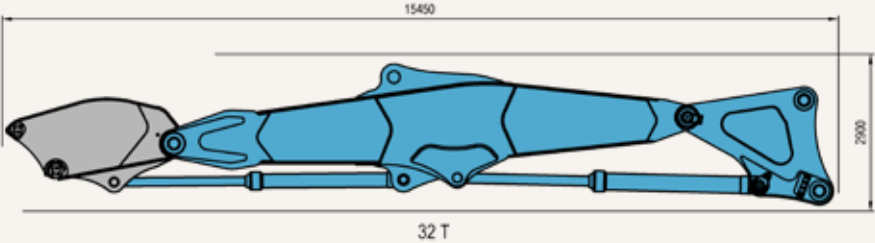
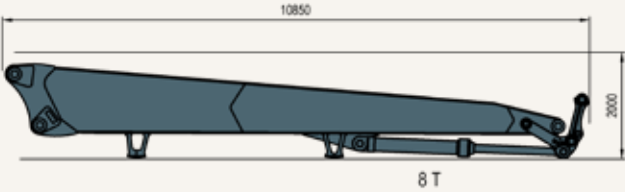
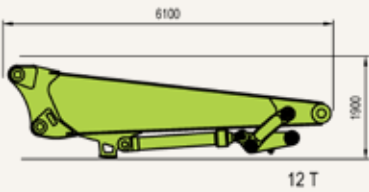
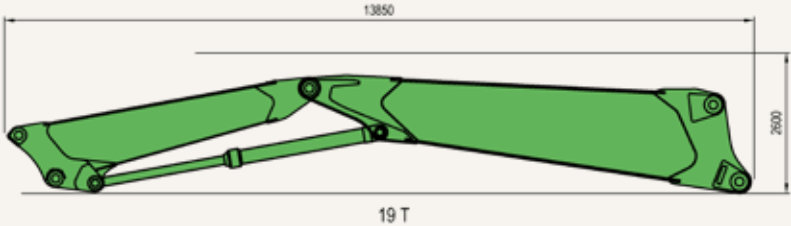
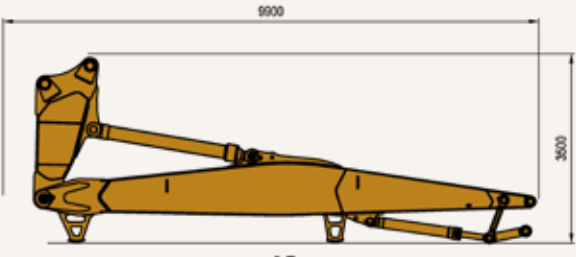
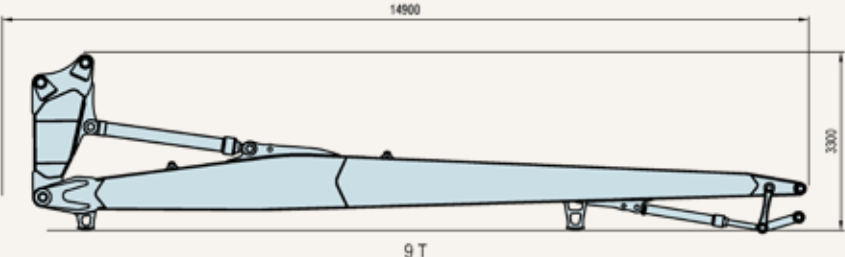


	34 mtr. Triple	33 mtr. Triple	30 mtr. Triple	29 mtr. Triple
Stick Nose (long)				
Stick Nose (short)				
Stick Adapter (tool carrier)				
Stick Adapter (excavation)				
Triple Middle arm				
Stubboom				
Toolweight	10T / 22000 lb Crusher 8T / 17600 lb Shear	10T / 22000 lb Crusher 8T / 17600 lb Shear	15T / 33100 lb Crusher 12T / 26500 lb Shear	15T / 33100 lb Crusher 12T / 26500 lb Shear

Transport table | HD 220D



Transport table | HD 220D





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