



GROUND · CS-220

A BRIDGE THAT DRIVES

600 kg of freight over bad ground. Payload is the product — mobility is the constraint it is bought within.

BULK RESUPPLY · PALLET & CONTAINER · FLUID BLADDER · FIBRE TRUNK

- PATENT PENDING
- EXPORT-CONTROLLED — INTERNATIONAL TRANSFER SUBJECT TO CANADIAN GOVERNMENT PERMITS
- FREIGHT CARRIER — NEVER A STRIKE PLATFORM

1,600 KG GROSS VEHICLE MASS	600 KG FREIGHT ALLOCATION	~27 % LESS ENERGY PER TONNE-KM THAN THE FAMILY ANCHOR	0 RADIO OR GPS LINKS IN ANY GUIDANCE TIER
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OVERVIEW

THE GRIZZLY, SCALED TO HAULER MASS.

Part of the 3-system Ground line — shares its envelope and doctrine with Grizzly, Lynx.

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Moose CS-220 is the ground family's freighter: the anchor's chassis logic stretched to a 1,600 kg-class hauler with a reinforced, tie-down-railed freight deck and a 600 kg payload allocation — four times the Grizzly's load, over the same bad ground.

Structurally it is a bridge that drives: a long, stiff welded-steel bed carried between two track runs, engineered around point loads it does not control — a pallet on two skids, a sloshing bladder, an off-center crate. Empty, it floats like a Grizzly; loaded, it rides the top of the light-muskeg class, and we publish both numbers because both are true.

It shares the family's spine deliberately: the same freight-deck standard, the same operator console, the same safety chain and the same three no-radio guidance tiers as the Grizzly — one ground-family C2 investment, not two. And it carries the same heritage: three decades of the group's heavy mobile-rig engineering, and the tracked-chassis line the family anchor descends from.

THE CLAIM

BIGGER BODIES HAUL CHEAPER PER TONNE.

The same physics that gives the fleet its salvo math gives the ground line its freight math: rolling resistance scales with gross mass while payload fraction rises and hotel load stays flat. At its working point the Moose moves a tonne of freight for roughly 27% less energy than the Grizzly — and both sides of the trade are stated wherever it is sold.

HOW IT WORKS

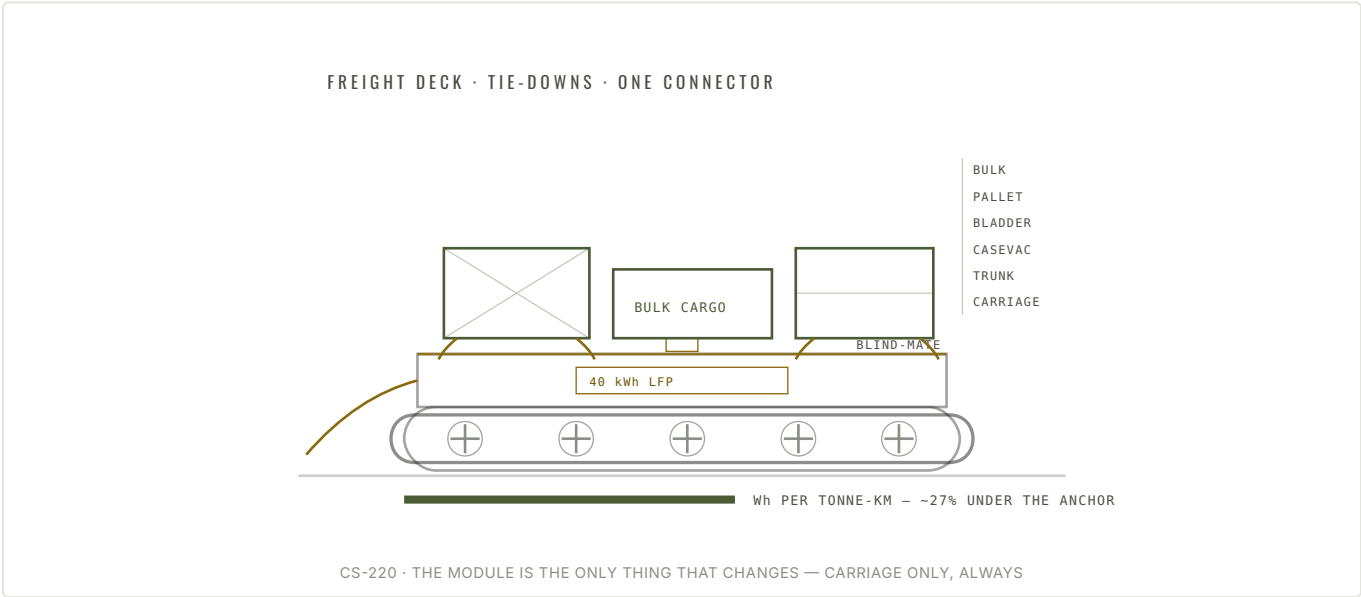
MECHANISM

ONE DECK STANDARD — THE MODULE IS THE ONLY THING THAT CHANGES

The Moose's deck is the ground family's freight standard: reinforced plate, tie-down rails, one blind-mate power-and-data connector and a drain-and-seal provision — the same interface grammar as the Grizzly, scaled to freight mass.

Six non-kinetic deck modules ride it: bulk cargo, pallet and container, fluid bladder, casualty evacuation, fibre trunk-layer — the unit that lays the fleet's no-radio trunk line — and launcher-and-magazine carriage, which is carriage only, always. Because the deck is defined once as a controlled family interface, a new module is a tooling change, not a vehicle redesign — and Grizzly-family modules are designed to interchange.

Under it, one electric drive per track run delivers torque from zero, and the safety chain runs the physics at freight mass: protective-stop distances computed at gross — not empty — weight, and the family loss-of-link rule held absolutely: stop, hold, wait.



SPECIFICATIONS

CAPABILITIES & SPECIFICATIONS

MOOSE CS-220	
DIMENSIONS & MASS	
Gross vehicle mass	1,600 kg
Freight allocation	600 kg
Track contact (per side)	2.0 m × 0.35 m
Configuration	Tracked hauler · one electric drive per track run
PERFORMANCE	
Ground pressure — loaded / empty	≈11.2 kPa / ≈7.0 kPa
Mixed-terrain cruise	2.5 m/s · 9 km/h
Drawbar — firm ground	~8.3 kN
Freight efficiency	~1,145 Wh/t-km mixed-ground · vs ~1,580 for the Grizzly
DRIVE & CONTROL	
Drive power (per side)	~3 kW cont · ~7 kW-class peak
Energy storage	40 kWh LFP, heated · ~267 kg
Range — firm ground, 20°C / -30°C	~118 km / ~71 km
Range — mixed soft soil, 20°C / -30°C	~52 km / ~31 km
Range — deep snow / muskeg, 20°C	~26 km
Guidance tiers	Preset waypoint · fibre-tethered · autonomous SLAM
PAYLOAD & EFFECT	
Deck modules	6 — bulk cargo, pallet & container, fluid bladder, casualty evacuation, fibre trunk-layer, launcher-and-magazine carriage
Launcher-and-magazine module	Carriage only, always — the launcher safety case stays with CS-110
Deployment	Surface always — self-deploy, road, rail, sling
MATERIALS & CONSTRUCTION	
Freight bed	Long, plain welded-steel bed between two track runs
Bodywork	Moulded GF-nylon, cut on the division's own tooling
Shared lineage	Freight-deck standard, operator console and safety chain shared with Grizzly CS-210
SIGNATURE & POWER	
Design environment	Muskeg · snow · freeze-thaw · cargo icing · to -40 °C
Emissions	No radio, no GPS in any guidance tier — the doctrine rules the link out
COMPLIANCE	
Patent status	Patent pending
Export control	Export-controlled — international transfer subject to Canadian government permits; export posture is counsel-first
Munitions classification	Freight carrier — never a strike platform; every deck module is non-kinetic

THE DEEP-WINTER MUSKEG CASE SHORTENS THE DELIVERY RADIUS SHARPLY AND WE SAY SO; A RANGE FIGURE WITHOUT ITS GROUND CLASS AND SEASON IS NOT ONE OF OURS.

THE TRADES, STATED

THE TRUNK LINE RIDES ON THE FREIGHTER'S BACK.

A no-radio fleet still has to move its nervous system — and the Moose is how it moves in bulk. The fibre trunk-layer module lays the optical line the whole ground family talks over, and the freight deck carries multi-line picket kits for long perimeters.

The freighter also proves the family's economics: a long, plain welded bed, moulded GF-nylon bodywork on the division's own tooling — by surface area the largest recycled- content carrier in the estate — and one deck standard shared down the roster. Sovereign manufacturing at freight scale, with the family rule intact: every deck module is a carrier payload; none is, or can become, a weapon. The Moose is never a strike platform.

FAMILY CONTEXT

THE SCOUT RUNS AHEAD. THE FREIGHTER FOLLOWS WITH THE LOAD.

In the family's working pattern the Lynx picks the route, the Grizzly proves it, and the Moose brings the tonnage — with the caveat printed beside it: the follower is heavier than the leader that proved the ground, so route discipline is doctrine, not decoration.

DEPLOYMENT

A BULK DELIVERY LEG, WALKED THROUGH.

One resupply leg, walked end to end — illustrative of how the Moose is used, not a mission record.

01 · ARRIVAL

BY SURFACE, ALWAYS

The Moose arrives by road, rail or sling, or self-deploys on its own tracks — the freighter is a surface machine by design and by arithmetic. At the depot the deck takes its load: strapped bulk, a pallet in the fork pockets, or a baffled fluid bladder, each latched to the same rails and connector.

02 · WORK

THE SURVEYED LEG, LOADED

It runs the proven route at a steady cruise — waypoints camp-to-camp, or a human on the fibre where the ground gets ambiguous. Loaded, it rides the muskeg limit; the route the scout and the mule proved is the route it keeps. Uncertain ground: stop, hold, wait.

03 · RECOVER

UNLOAD, RECHARGE, TURN AROUND

At the far end the deck empties and takes the backhaul — empties, spent packs, the return freight no one wants to carry. Home again: charge or exchange the pack, swap the module, respool the trunk line. The freighter's day is a loop, and the loop is the product.

THE FAMILY

RELATED SYSTEMS

CS-210 · ANCHOR

GRIZZLY

The family anchor — proves the route the Moose then hauls freight over.

CS-240 · SCOUT

LYNX

The wheeled route-picker — runs ahead so the heavier bodies don't have to guess.

Moose CS-220 · patent pending · export-controlled — international transfer requires Canadian government permits; export posture is counsel-first. A freight carrier — never a strike platform. Every deck module is non-kinetic; no warhead, fuze or energetic material in any variant; no radio and no GPS in any guidance tier.



A BRIDGE THAT DRIVES

MOOSE · GROUND · CS-220

The scout runs ahead. The freighter follows with the load.

01 REQUEST A TECHNICAL EXCHANGE

A working session with engineering, not sales — bring your engagement problem, we bring the mechanism.

02 REQUEST THE GROUND FAMILY DATA PACK

Drawings, tolerances and test basis for Moose and its siblings, gated behind export screening.

03 DISCUSS A TRIAL QUANTITY

Tell us end-user, jurisdiction, quantity band and timeline — we respond against your program, not a price list.

SALES
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WEB
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Direct lines, named points of contact and facility details are shared with qualified programs following screening — not withheld, sequenced.

Canadian Shield is a defence and industrial drone company, backed by SIG: four-domain uncrewed systems built for jammed, GPS-denied environments — no-radio by design, manufactured for cost and salvo depth.

Moose CS-220

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