

HALMAN EN CRETER



The Fast, Safe And
Cost Effective Way
to Apply Shotcrete

EN EQUIPMENT
NORTH INC.

THE HALMAN EN CRETER

Developed in 1988 the Halman EN Creter is the proven way to reduce the cost and improve the safety of shotcreting operations in hard-rock mining.

The Halman EN Creter is an extremely compact, reliable, and versatile-portable shotcreting manipulator designed to allow a single operator to efficiently apply shotcrete to vertical and overhead rock faces without the need for scissor trucks and manually operated hoses and nozzles.

PRODUCTIVE AND COST EFFECTIVE

Connected to your existing shotcrete pumps, the Halman EN Creter can drastically increase your total shotcrete throughput, reducing your manpower requirements, and saving your mine both time and money. The continuously oscillating spray head rotates the shotcrete stream throughout the application area, permitting an operator to easily produce an evenly distributed, uniform depth shotcrete layer with minimal blowback.

With additional time-saving features such as fully hydraulic, remote controlled stabilizers, and an optional utility/personnel carrier, the Halman EN Creter is designed to move quickly from work site to work site with a minimum of setup time.



Pictured above, The Halman EN Creter exits a 5 by 14 foot man-cage at INCO Limited's Copper Cliff South Mine.

SUPERIOR OPERATOR SAFETY

The Halman EN Creter virtually eliminates the health and safety hazards of manual shotcreting. The entire operation is controlled at a safe distance through a sophisticated and fail-safe electronic remote control system.

OUTSTANDING RELIABILITY

We recognize that in continuous shotcreting operations, machine up-time is absolutely critical. For this reason, the Halman EN Creter is an extremely rugged unit, designed to meet the strenuous demands of the mining industry.

COMPACT AND PORTABLE

When fully retracted, the Halman EN Creter has a footprint 56 inches wide by 14 feet long - small enough to drive directly into and out of the smallest mine cages, allowing you to lower the unit down your shaft without disassembly or slinging.

STANDARD FEATURES

- 40 HP Perkins Diesel Engine
- 23 Foot Telescopic Manipulator Boom
- 3-Axis Articulating Oscillator Spray Head
- Fail-Safe 24 Function Electronic Remote Control
- Rear Wheel Steering
- Four Wheel Drive
- Mine-Ramp Approved, Redundant Fail-Safe Braking System
- Low-Emission Catalytic Exhaust
- Extremely Compact Footprint
- Two Boom Mounted 500 Watt Working Lights
- Engineered Roll-Over Protection System
- Hydraulic Outrigger/Stabilizers
- Centralized System Lubrication



AVAILABLE OPTIONS

- Radio Remote Control
- Integrated 3-Man, Utility/Personnel Carrier
- 4800 Watt 120 VAC Auxiliary Power Generator
- Fire Suppression System



The Halman EN Creter remote unit controls all boom, stabilizer and spray head functions.

Halman EN Creter Specifications

Engine: Perkins model 104-19, 4 cylinder water cooled diesel rated 40HP at 2800 RPM

Transmission:

- Hydromatic A4V-DA/A6VM-DA
- Main pump A4V-40DA, variable capacity auto power control and direction changer
- Motor A6VM 80DA variable
- Operating pressure 420 BAR+10 Bar

Brakes: Mine approved triple redundant fail safe braking system

Exhaust: Mine approved catalytic system

Transport Dimensions:

Length: 174"
Width: 56"
Height: 72"
Weight: 4,100 kg.

Main Carrier: Manitou "Miner" 4 wheel hydrostatic drive rough terrain "Buggie" Model 4RM20HPM

Boom:

- 360 degree rotation
- 120 degree normal operating range
- 23' 0" maximum forward reach
- 23' 9" maximum vertical reach

Remote Controls: •24 function electronic, including 25 foot cable

Spray Head: •3-axis continuously oscillating

Tires: •Kat-trak super heavy duty 26 ply pneumatic mine tires

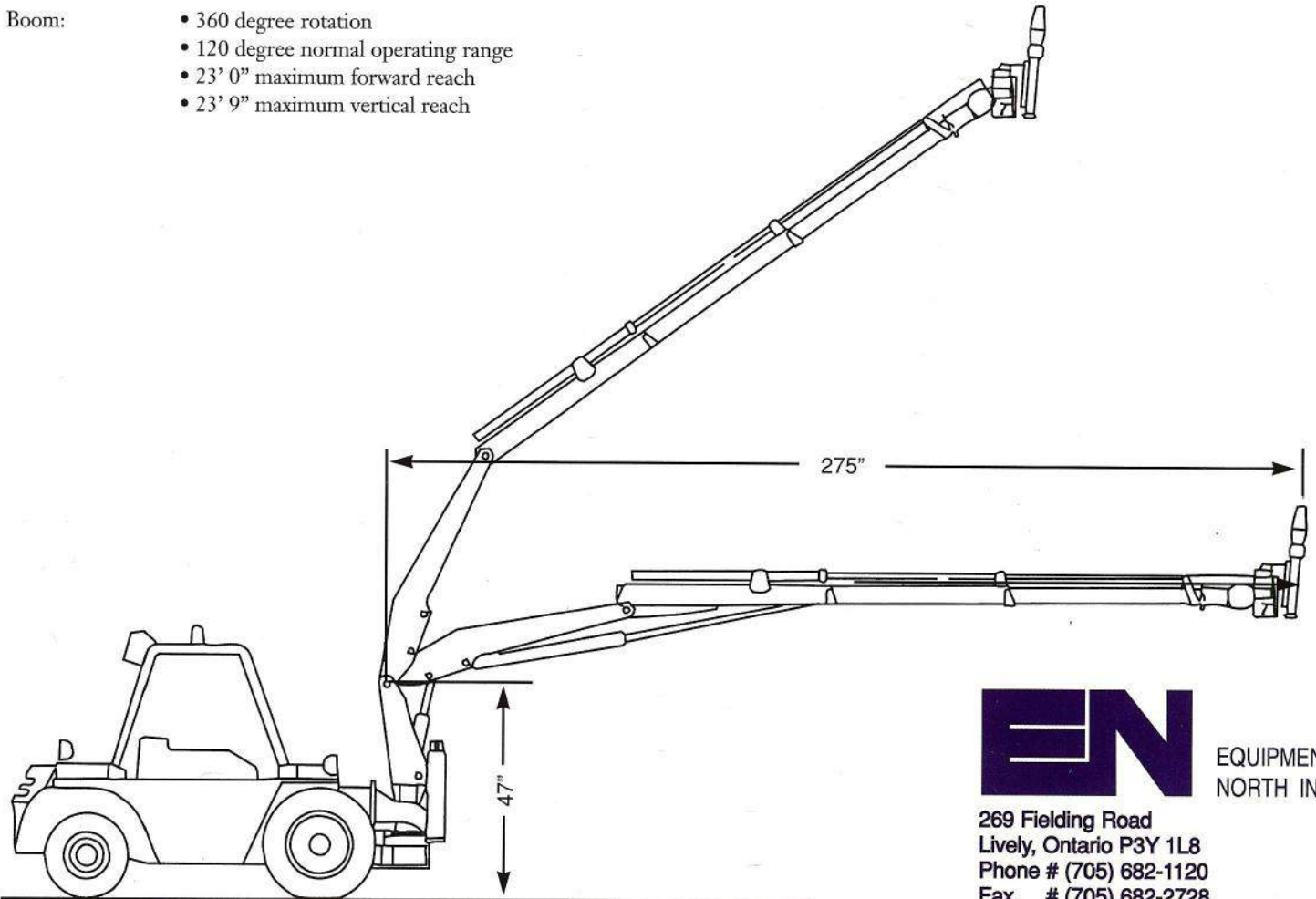
Stabilizers:

- Fully hydraulic independently controlled
- Lateral extension 25"
- Vertical Extension 18"

Driving Lights: •2 front, 2 rear

Additional Features:

- Audible Back-Up Alarm
- Flashing dome light
- 10 lb. ABC dry type fire extinguisher
- Ground Clearance: 9.5"



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Weights, dimensions and capacities are approximate. All specifications are subject to change without notice.