

**USH** VRT 11 103 1 1 103 03 ..... -HARE B No. 

## SALFORD HALO IS BUILT ON A LEGACY OF INNOVATION.

"HALO is Salford's new generation of tillage machines. A ground up redesign of frame technology that incorporates new combinations of ground engaging equipment, narrow transport, and quick set adjustments for faster, easier field setting.

HALO takes advantage of the latest in heavy equipment technology to advance Salford's legacy for durability and performance, employing maintenance free components and the latest in hydraulics and seal technology."

Geof Gray, President of Salford Group Inc.





## **TABLE OF CONTENTS**

THE NEW GEN OF TILLAGE	3
COMMON FEATURES	4
HALO VRT	5
HALO HSD	11
HALO AerWay	15
FINISHING TOOLS	19
AGRONOMY	21
RESEARCH & DEVELOPMENT	
MODEL SPECS	23

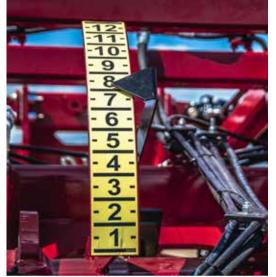
## WHAT IS THE NEW GENERATION OF TILLAGE?

For over 40 years Salford has been building durable, high-quality equipment with a performance advantage. Equipment designed and manufactured to help producers field their best. In keeping with that tradition, Salford is proud to announce the HALO VRT.

HALO is Salford's new generation of tillage implements combining agronomic performance with new equipment technology for fast operation, ease of use, lower maintenance and safer transport.

HALO VRT takes this revolutionary new tillage platform to the next level with hydraulically adjustable blades. This new machine allows producers to choose their tillage intensity on the fly, from the comfort of the tractor cab. Whether adjustments are needed in the field, from field to field or from season to season HALO VRT performs the work of multiple tillage machines on one simple to operate platform.

HALO VRT joins the HALO HSD and HALO AerWay in this new series of tillage implements from Salford Group.



EASY TO SET

Set your operating depth and finishing system pressure in seconds. HALO uses simple quick set hydraulic controls for fast, easy setup.



#### NARROW TRANSPORT

Provide maximum floatation in the field plus make for safe transport on the way to the field and between farms.



**REAR FINISHING OPTIONS** 

Salford is renowned for their tillage finishing tools. HALO finishing options vary by model.



#### HEAVY FRAME FOR MULTIPLE TILLAGE OPTIONS

HALO's rectangular main frame is 6" by 6" tubular steel. All frame members are capped for maximum durability and longevity.



#### QUICK SET HYDRAULIC CONTROLS

HALO's quick set depth control allows for fast and easy adjustments to the tillage action. The quick set hydraulic control on the rear finishing system regulates down pressure, enabling quick adaptation to field conditions.



#### WING DOWN PRESSURE

HALO's wings can be run with active down pressure. This keeps the machine operating level from side to side and ensures wings stay engaged in tough conditions.



#### HYDRAULIC FORE AND AFT ADJUSTMENTS

HALO's mainframe has a large pitch indicator easily seen from the cab that makes it easy to return to the same setting field to field.



#### FLOTATION TIRES

Flotation tires for maximum field flotation and safe transport, available in 600/50-22.5 or 800/40-22.5 sizes.



## COLOR CODED OPERATOR STATION

Salford's operator's convenience center features color-coded hydraulic hose grips and a weatherproof container for the operator's manual. It also protects the lighting connection.

Products and specifications subject to change without notice and without liability therefore. Images and video may include optional or preproduction equipment. Salford® is a registered trademark of Salford Group Inc. Copyright© 2020 Salford Group Inc.

## HALO VRT VARIABLE RATE TILLAGE

## HALO VRT PERFORMS THE JOB OF MULTIPLE TILLAGE MACHINES FASTER.

The HALO VRT is an unprecedented tillage design\*. This is the industry's first variable-rate tillage design on a forward folding, high-speed disk frame.

The HALO VRT's wide range of blade angle adjustments allows it to perform **Spring and Fall** operations with ease. HALO is Salford's newest generation of tillage implements combining agronomic performance with new equipment technology for fast operation, ease of use, lower maintenance, and safer transport.

HALO VRT takes this revolutionary new tillage platform to the next level with hydraulically adjustable blades. This new machine allows producers to choose their tillage intensity on the fly, from the comfort of the tractor cab. Whether adjustments are needed in the field, from field to field, or from season to season the HALO VRT performs the work of multiple tillage machines in one simple-to-operate platform.

HALO VRT joins the HALO HSD and HALO AerWay in this new tillage series of tillage implements from the Salford Group.



\*HALO Patent pending design



#### **FEATURES & BENEFITS**



#### COULTER ANGLE ADJUSTMENTS

Salford's engineering and product management teams have worked to perfect the blade angle of the HALO VRT allowing for customized adjustments from 2°-15°.

These adjustments transform the HALO VRT from vertical tillage, all the way to a full shear, seedbed prep machine.

### HYDRAULIC ON-THE-GO ADJUSTMENTS

Hydraulic adjustments are made easy with the HALO VRT. All adjustments can be made in seconds with most being a simple push of a button. All adjustments have been optimized for maximum accessibility and ease of use.



#### **EASY TO OPERATE**

The HALO VRT is simple to set! Single point depth control, hydraulic fore/aft leveling and active pressure control on the finishing tool. Anyone can operate this machine.

The operator convenience station keeps implement connections protected, organized and at the operator's finger tips. The color coded hose grips take out the guess work when connecting Salford implements to the tractor.

The HALO's narrow forward fold design makes the machine safe and easy to transport.



#### LOW MAINTENANCE DESIGN

Durable, sealed, maintenancefree hubs and finishing tool bearings mean reduced down time on the HALO VRT.

The HALO VRT has easily accessible grease points at the mainframe hinges, axles, wings, and roller frames.













## HIGH SPEED DISC + ADJUSTABLE





\*This image has been enhanced to demonstrate the variable effect of the machine. Actual results may vary

## JOYSTICK CONTROL

The HALO VRT offers optional hydraulic adjustments for blade angle, wing operation (down pressure, float and fold), fore-aft level and jack position. The electro-hydraulic option reduces the hydraulic remotes from 5+ to only requiring 3 for operation. All of these adjustments are made from the cab, **on-the-go**.







The HALO HSD is engineered for level operation at speed and with the clearance needed for tough conditions.

HALO HSD's individually mounted blades allow for maximum residue and soil flow, while the angled blade mounting arms are designed to keep the HALO HSD at depth in hard ground. HALO HSD has advanced hydraulic systems that are simple to operate. Fore/aft leveling, active down pressure, quick set depth control, and finishing systems all have hydraulic adjustment that are easy to use.

HALO

HSD

**HIGH SPEED DISC** 

In the summer of 2020 the mid-west US faced a devastating derecho storm. The high speed winds from the derecho spawned an outbreak of low-class tornadoes. In addition, certain areas reported torrential rain and large hail.

This corn in Iowa was downed by the storm and the producer was not able to harvest their crop. The HALO HSD was able to clear the high volume of corn in the field, size the residue, and level the field.



DERECHO STORM, IOWA HALO HSD CLEARING CORN FIELD

#### **FEATURES & BENEFITS**



#### **HIGH SPEED & DURABLE**

High clearance: independently mounted blades allow for excellent soil and residue flow through the machine.

Excellent obstacle protection: independently mounted blades with rubber torsion suspension are capable of 7.5" of travel for obstacle protection in rough and rocky conditions.

Each 22" blade is independently mounted which absorbs the shock load and provides an even finish.

#### SUPERIOR LEVELING

HALO HSD's superior leveling power starts with blades on a compound angle which helps the the soil and stay at depth.

Option to run the wings with active down pressure or in float helps the HALO handle adverse conditions.

Salford's industry leading finishing options for leveling and durability.



#### **EASY TO OPERATE**

The HALO HSD is simple to set! Durable, sealed blade hubs make Quick set depth control, hydraulic for reduced maintenance on the fore/aft leveling and a quick set high speed disc's blades bite into control for setting pressure on the finishing tool.

> The operator station keeps implement connections protected, organized and at the operator's finger tips. The color coded hose grips take out the guess work when connecting Salford implements to the tractor.

The HALO's narrow forward fold design makes the machine safe and easy to transport.



#### LOW MAINTENANCE

HALO.

The HALO HSD has easily accessible grease points at the mainframe hinges, axles, wings, and roller frames.







# HALO AerWay

HALO AerWay combines Salford's industry leading AerWay deep tine aerators with Salford's high clearance independent blade mounts, and finishing systems for the best in soil aeration and residue management.

This unique machine is designed to run up to 8 inches deep with AerWay's forged Shattertine. The Shattertine's are spaced 10" apart to cut through residue and fracture the soil vertically as well as horizontally, relieving compaction. The tine itself is shaped to bite into the soil and fracture the ground, improving air and water infiltration. The blade angle settings allow the operator to quickly increase or decrease how aggressive the operation is.



The HALO AerWay's wavy coulter blades run on either side of the tines, further sizing and mixing residue. The coulter and tine angles are also adjustable, allowing for straight residue cutting or more aggressive leveling power.

The HALO AerWay is followed by double 14 inch rollers controlled by a quick set hydraulic pressure system. The new level linkage follows ground contours and has a tighter design with fewer parts for easy maintenance and narrow transport.

#### **FEATURES & BENEFITS**



#### DURABLE

HALO AerWay's front row of Shattertines is protected by a C-Flex hanger.

Second row of individually mounted blades have rubber torsion suspension capable of up to 7.5 inches of vertical travel for obstacle protection.

Each blade faces obstacles independently which distribute the load evenly on the HALO AerWay frame.

#### EASY TO OPERATE

The HALO AerWay is simple to set! Quick set depth control, hydraulic fore/aft leveling and a quick set control for setting pressure on the finishing tool.

The operator station keeps implement connections protected, organized and at the operator's finger tips. Color coded hose grips take out the guess work when connecting Salford implements.

The HALO's narrow forward fold design makes the machine safe and easy to transport.

#### LOW MAINTENANCE

The heavy duty trunnion bearings on the Shattertine blade are maintenance-free. Durable, sealed blade hubs make for much less maintenance on the HALO. No grease needed.

The HALO AerWay has easily accessible grease points at the mainframe hinges, axles, wings, and roller frames.

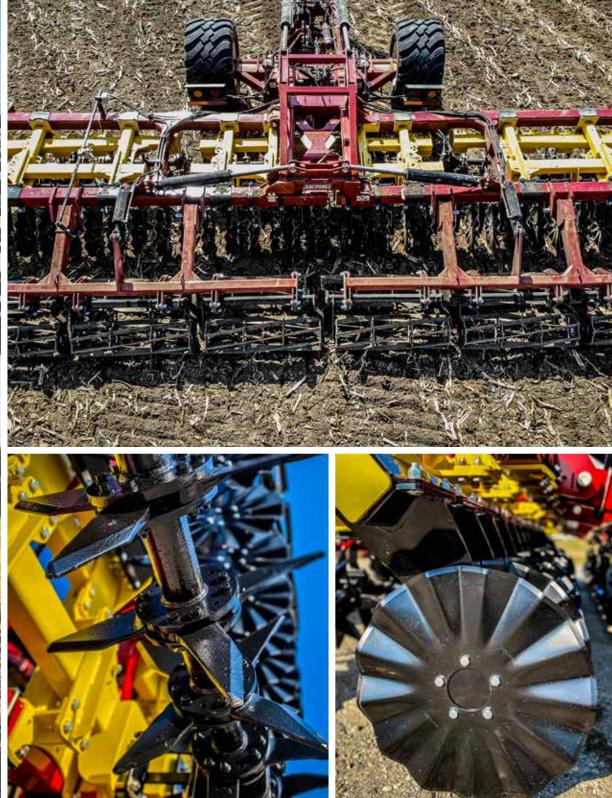
#### TRUE VERTICAL TILLAGE

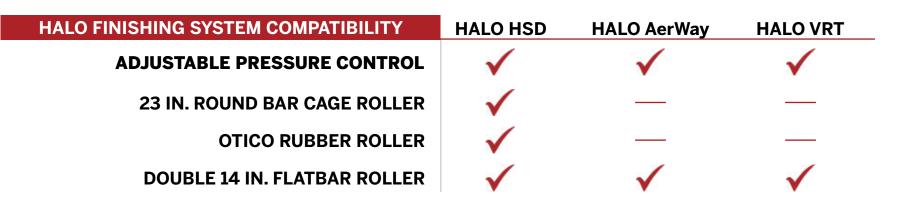
The perfect vertical tillage pairing of Shattertine soil aeration followed by independently mounted 13 or 8 wave blades.

Penetrating up to 8 inches deep, loosening the soil around and below the tines. The tines action increases soil's air and moisture storage, promoting deeper root development and allows fertilizer to disperse the root zone. The tines are followed by 13 or 8 wave blades, which size crop residue and mix with soil to accelerate decomposition.

The rolling baskets finish the job, pinning residue, sizing soil clods and leveling the surface to prepare a seedbed.







#### **ADJUSTABLE PRESSURE CONTROL**

Down pressure on the HALO's hydraulically adjustable finishing systems is controlled by a valve on the tongue of the machine.

Once the desired down pressure is set the operator is able to raise and lower the machine right from the tractor cab.

#### 23 IN. ROUND BAR CAGE ROLLER D

HALO HSD comes with a 23 inch cage roller finishing system. The heavy duty roller is designed to size soil clods, condition residue and level the field surface.

The 23 inch cage roller is carried by a heavy duty disc style bearing with a wide inner race for proper alignment and maximum durability.

#### R DOUBLE 14 IN. FLAT BAR ROLLER

The double 14 inch roller system was designed for multi season use and provides a finer surface finish and seedbed. The heavy duty rollers are designed to size soil clods, condition residue and level the field surface, ready for planting.

The double 14 inch rollers are carried by 1 ½ inch maintenance free bearings. The linkage is a simple, maintenance-free system with hardened bushings and pins.











#### **OTICO WAVE-PROFILE FARMFLEX® ROLLER**

The flexible roller's ability to shed sticky soil allows it to excel in a variety of soil types, such as heavy clay and gumbo soils. The flexible roller also helps to minimize damage from rocks and obstacles in the field.

#### FIRM SEEDBEDS & MANAGE MOISTURE

The rubber roller's unique wave design traps moisture and reduce crusting. The semi-pneumatic roller is engineered to break up soil clods and gently firm soil improving seed to soil contact when preparing seedbeds with the HALO HSD.

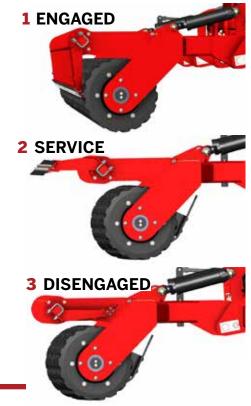
The divots created by the cleats on the roller help to trap some moisture, while excess water can flow away in the channel created by the waves.

#### ADJUSTABLE, REVERSIBLE SCRAPER

The rollers are equipped with scrapers to clear sticky soil and residue the roller cannot shed. The scrapers are made of long life, wear resistant, steel and are reversible to extend the lifetime of this service part.

The scrapers also have three quick adjustment positions – engaged for working; flipped up for easy service; or totally disengaged if the scrapers are not required.

#### THREE QUICK ADJUST SCRAPER POSITIONS



#### IMPROVE GERMINATION & EMERGENCE

HALO is engineered for level operation in tough conditions and the hydraulic system is engineered to prevent "hopping" in the field at high speeds, which is a common issue with similar frame designs. Keeping uniform depth helps planters and seed drills run smoothly at higher speeds and improves uniform germination and emergence.

SUPERIOR FINISH Salford tillage equipment is renowned for their finishing systems. HALO offers a variety of finishing options and simple hydraulic pressure adjustment to quickly create the ideal field finish in almost any soil and residue conditions.

#### UNIFORM RESIDUE MANAGEMENT

HALO's ground engaging equipment and finishing systems condition residue by sizing and evenly distributing it. The conditioned residue breaks down faster and helps planters and seed drills run quickly and efficiently.

HALO models uniformly mix the soil and residue uniformly to promote good seed to soil contact.





#### **RESEARCH & DEVELOPMENT**



HALO machines have undergone Salford's most rigorous product testing to date. The HALO family has been field-tested over several years across 12 US States and four Canadian provinces. Confirming these tillage machines can withstand the challenging North American terrains where our customers will use these machines.

Salford's product development team ensured each model was subjected to various conditions; dry-hard ground, wet soil and frozen fields.

All HALO models were extensively tested in various residue conditions from high yield corn and stringy, tough crops.

#### **HUB TESTS**

In order to ensure the quality and longevity of the hub, hubs were tested in many conditions including cyclical testing in wet and dry conditions.

#### **ADDITIONAL CYCLE TESTS**

Among many tests HALO components were cycle tested for:

- side load forces
- obstacle clearance
- · component fatigue
- · destructive testing

#### **TORTURE TESTS**

While units were being tested in the field Salford engineers improved individual HALO components through extensive "torture" testing at Salford's R&D facility.

#### **INDEPENDENT CYCLE TESTS**

Along with extensive field testing HALO's finishing systems were independently cycle tested for longevity and durability.

	MODEL SIZE	20 foot	25 foot	30 foot	35 foot	40 foot
	WEIGHT LBS.	18,800	21,500	28,350	31,200	34,100
	IVING INTERVAL	19 ft. 1 in.	24 ft. 1 in.	29 ft. 2 in.	34 ft. 1 in.	39 ft. 1 in.
т <sub>в</sub>	LADE QUANTITY	48	60	72	84	96
	HEIGHT					
	IDER EXTENDED DER RETRACTED	13 ft. 8 in. 14 ft. 9 in.	13 ft. 10 in. 15 ft. 2 in.	13 ft. 8 in. 15 ft.	13 ft. 9 in. 15 ft. 1 in.	13 ft. 9 in. 15 ft. 1 in.
	WIDTH					
	DER EXTENDED	12 ft. 11 in. 11 ft. 3 in.	12 ft. 11 in. 11 ft. 3 in.	13 ft. 9 in. 11 ft. 11 in.	13 ft. 9 in. 11 ft. 11 in.	13 ft. 9 in. 11 ft. 11 in.
FI	RAME SECTIONS	2			3	
MAINFRA		6 in. X 6 in. tubular steel		6 in. X 6 in. tubular steel		
нп	CH STRUCTURE	6 in. X 8 in. tu	ubular steel	6 in	. X 10 in. tubular	steel
TIR	ES, MAINFRAME	600/50	R-22.5	600/50R22.5	800/	′40R-22.5
	TIRES, WINGS	-	31x13.5-15		500/50R-22.5	
D	RAW BAR HITCH	CAT 3 or CAT 4 Star	ndard or Ball Hitch	CAT 4 or 0	CAT 5 Standard o	r Ball Hitch
	JACK	8,000 lbs. m	nanual jack	Hydraulic	jack with manua	al ball value
HYDRAULIC	REMOTE VALVES REQUIRED	5			5 + Hydraulic Jac	ck
Number of Hyd Electro-Hydra	draulics Required	3			3	
FINI	SHING OPTIONS	STANDARD		DOUBLE 14 IN. RO	LLERS	



## **STANDARD FEATURES**

HP requirements of 11-18 hp./ft. depending on working depth

Working depth up to 1 - 5 in.

Operating speed of 8 mph. (min) to 14 mph.

Net 5 in. spacing; 10 in. spacing per row

4 piece rubber torsion suspension on coulter mounts

Blade Hubs: Double tapered roller bearing, multi-lip sealed, maintenance free

Hydraulic quick set depth control

Active roller down pressure

Hydraulic fore/aft levelling with accumulator protection

Hydraulic wing down pressure

Hydraulic quick set finishing tool pressure

Minimal dealer set up required for finishing tool assembly. Must pin on finishing tools; hydraulics are pre-plumbed.

	MODEL SIZE	20 foot	25 foot	30 foot	35 foot	40 foot
	WEIGHT LBS.	15,440	19,300	26,100	27,800	29,100
	DRIVING INTERVAL	19 ft. 1 in.	24 ft. 1 in.	29 ft. 1 in.	34 ft. 1 in.	39 ft. 1 in.
	CONCAVE BLADES	48	60	72	84	96
	HEIGHT*					
-	CYLINDER EXTENDED	12 ft. 6 in. 13 ft. 9 in.	12 ft. 7 in. 13 ft. 10 in.	13 ft. 5 in. 14 ft. 5 in.	12 ft. 11 in. 14 ft. 0 in.	13 ft. 3 in. 14 ft. 4 in.
	WIDTH					
-	CYLINDER EXTENDED CYLINDER RETRACTED	12 ft. 11 in. 11 ft. 3 in.	12 ft. 11 in. 11 ft. 3 in.	13 ft. 9 in. 11 ft. 11 in.	13 ft. 9 in. 11 ft. 11 in.	13 ft. 9 in. 11 ft. 11 in.
	FRAME SECTIONS	2		3		
	MAINFRAME STRUCTURE	hin X hin fubular steel		6 in. X 6 in. tubular steel		
	HITCH STRUCTURE	6 in. X 8 in. tubular steel		6 in. X 10 in. tubular steel		
	TIRES, MAINFRAME	<b>ES, MAINFRAME</b> 600/50-22.5		600/50-22.5 800/		800/40-22.5
	TIRES, WINGS	-	31x13.5-15	500/50R-22.5	550/5	50-22.5
	DRAW BAR HITCH	CAT 3 or CAT 4 Standard or Ball Hitch CAT 4 or CAT 5 Standard or Ball		r Ball Hitch		
JACK		8,000 lbs. manual jack		Hydraulic jack with manual lockout ball value		
HYDRAULIC REMOTE VALVES REQUIRED		4		5 Includes hydraulic jack		
	FINISHING OPTIONS	STANDARD LARGE CAGE ROLLERS OPTIONAL - OTICO RUBBER ROLLER (800/50-22.5 tires for 35 ft.)* *OTICO rollers add 6 in. to transport height.				

HALO HSD



## **STANDARD FEATURES**

HP requirements of 12-18 hp/ft. depending on working depth

Working depth 2 - 5 in.

Operating speed of 8 mph. (min) to 14 mph.

Front row blades on compound 14° open angle & 22 in. smooth low concavity blades

Rear row blades on compound 17° open angle & 22 in. notches low concavity blades

Blade Hubs: Maintenance free, multi lip sealed, double tapered roller bearing

Net 5 in. spacing; 10 in. spacing per row

4 piece rubber torsion suspension on coulter mounts

Hydraulic wing down pressure

Hydraulic quick set depth control

Hydraulic quick set finishing tool pressure

Hydraulic fore/aft leveling with accumulator protection

MODEL SIZE	20 foot	25 foot	
WEIGHT LBS.	18,580	20,780	
DRIVING INTERVAL	20 ft.	25 ft.	
SHATTERTINE ROWS	24	30	
13 WAVE COULTERS	25	31	
HEIGHT			
ROLLER CYLINDER EXTENDED ROLLER CYLINDER RETRACTED	12 ft. 7 in. 13 ft. 10 in.	12 ft. 9 in. 13 ft. 11 in.	
WIDTH		······································	
ROLLER CYLINDER EXTENDED ROLLER CYLINDER RETRACTED	12 ft. 2 in. 11 ft. 3 in.	12 ft. 2 in. 11 ft. 3 in.	
FRAME SECTIONS	6 in. X 6 in. tubular steel 6 in. X 8 in. tubular steel		
MAINFRAME STRUCTURE			
HITCH STRUCTURE			
TIRES, MAINFRAME			
TIRES, WINGS	-		
DRAW BAR HITCH	CAT 4		
JACK	8,000 lbs. manual jack		
HYDRAULIC REMOTE VALVES REQUIRED	4		
FINISHING OPTIONS	STANDARD DOUB	E 14 IN. ROLLERS	

dī.

HALO AerWAy



## **STANDARD FEATURES**

HP requirements of 10-16 hp/ft. depending on working depth

Working depth up to 8 in. on tines & 5 in. on blades

Operating speed of 7 mph. (min) up to 9 mph.

Front row 8 in. AerWay Shattertine on manually adjustable angle 2.5°, 5° and 7.5°

Rear row 8 or 13 wave straight blades on manually adjustable angle 0°, 1.5° and 3°  $\,$ 

Net 5 in. spacing; 10 in. spacing per row; 10 in. spacing centre on tines, 10 in. spacing on blades (offset)

Blade Hubs: Maintenance free, multi lip sealed, double tapered roller bearing

C-Flex suspension on AerWay blades, 4 piece rubber torsion suspension on coulter mounts

Hydraulic quick set depth control

Hydraulic quick set finishing tool pressure

Hydraulic fore/aft leveling with accumulator protection

Sealed maintenance-free trunnion bearing on AerWay blades; multi-lip sealed









See our full line of products and find your local dealer at salfordgroup.com Osceola, Iowa • Cornelia, Georgia • Salford, Ontario • Elie, Manitoba • Norwich, Ontario 1-866-442-1293 O y □ in f d<sup>2</sup> @salfordgroup

Products and specifications subject to change without notice and without liability therefore. Images may include optional equipment. Salford® is a registered trademark of Salford Group Inc. Copyright© 2023 Salford Group Inc. 2023.09 # 10094522 - LITERATURE, SALFORD, HALO.

SALFORD FIELD YOUR BEST.