

# TH7.42 ELITE







## New TH range, as good as gold.

For over 20 years New Holland telehandlers have continued to deliver an unrivalled mix of performance, dependability and affordability. The new TH series machines benefit from a striking new yellow and grey livery, reflecting their importance to the hay and forage sector and association with those product lines.

The new TH models feature an all new and 6x3 PowerShift™ transmission, providing smoother shifting and shuttling performance resulting in a better driving experience. Compliant to Tier 4B emissions standards, enhanced performance and economy are matched to improved comfort and reduced operating costs. The very latest cab sets a benchmark for low noise and comfort.

Model	Max reach m	Capacity kg	Max Power hp	Transmission	Hydraulic Pump lpm
TH7.42 Elite	7.0	4200	146	6x3	140

### TH Elite models

The TH7.42 Elite models are aimed at the most demanding operators who require maximum productivity and comfort at all times. These machines produce a maximum power output of 146hp from a Tier 4B, 4.5 litre NEF engine and features the new 6F-3R PowerShift™ transmission. The Elite models feature three transmission modes, Manual, Semi-auto and Full-auto. The transmission modes makes the Elite model well suited to transport work and towing capacity with a braked trailer is a massive 20 tonnes.

### Elite model features include:

- 146hp Tier4B engine
- limited slip diffs front and rear
- reversible cooling fan
- 142° dump angle
- 140lpm variable pump
- hydraulic pressure release
- armrest mounted joystick
- full LED light pack
- heated air suspended seat
- automatic steering alignment
- 40kph max speed
- HVAC ventilation system
- hydraulic quick coupler
- rear hydraulic pickup hitch
- telescopic steering column

# More choice, more productivity.

The new TH7.42 Elite models feature 146hp engines, 3 mode 6x3 PowerShift™ transmissions, piston pump and a seat mounted joystick, reversible cooling fan, and limited slip front & rear diff. The new TH range is the product of years of development, investment and listening to customer feedback.

## Superior visibility and comfort

The new TH range features an advanced cab design that offers improved comfort, noise suppression and visibility for maximum productivity at any time. The new LED light option can produce up to 25,000 lumen of combined lighting power to turn night into day and increase safety and productivity.

## Enhanced quality

The TH telehandlers feature a twin U shaped robot welded boom, that is extremely rigid and durable. The H shaped ladder chassis has massive torsional strength and is engineered to operate in the most demanding applications. New Holland is committed to ongoing quality improvement and has invested in a new dedicated TH production line between 2012 and 2013.

## Ease of ownership

Downtime is the enemy of productivity, that is why all TH telehandlers are engineered to minimise the need for routine maintenance for optimised dependability. Daily checks and routine care has been simplified, making it easier to look after the handler between its extended 600-hour service intervals.

Automatic reversible  
cooling fan

Tier 4B ECOBlue™  
HI-eSCR engine, up to 146hp

3 mode steering with  
auto alignment option





4.2 tonne lift capacity

10 LED lights

Optional complete auto lubrication system

Hydraulic quick-coupler

360° vision, 71dB(A) noise levels

External Aux pressure relief switch

New 6x3 PowerShift™ transmission

Best in class service access

Industrial or Agricultural tyre options

## See more for better productivity.

New Holland has taken its established expertise in tractor cab design and applied it to the 360° Vision Cab. Offering class-leading space and comfort, the cab affords excellent all-round visibility with an unparalleled view of the front of the carriage / forks when fully lowered. In work, this extra visibility boosts productivity in duties to include loader work and speeds up attachment changeovers.

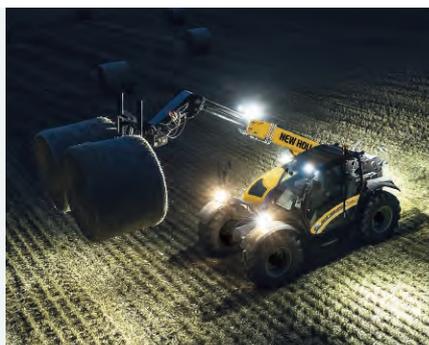
### More glass, brilliant visibility

Extensive research by New Holland has led to the development of the 360° Vision Cab. A key aim was to help reduce 'blind spots' over the front of the boom, particularly when fully raised and fully lowered. By combining a wide and deep front screen with slim 'A' pillars, the visibility from the operators seat is greatly enhanced.

### Engineered for low noise

The best way to reduce noise is to eliminate its sources. By combining a number of design developments, TH in-cab noise levels are just 71dB(A). A key to the low noise levels is the ECOBlue™ Hi-eSCR equipped engines, these clean running power units also offering exceptionally low bystander noise levels.





### New LED lights

- A powerful LED lighting package is fitted standard to the TH models
- Each LED light outputs 2500 lumen
- A total of 10 LED lights give all round visibility for enhanced safety and productivity - 5 front facing, 3 rear facing and 2 side facing

### Eight vents for comfort

- Powerful air-conditioning system ensures day long comfort
- Eight adjustable louvers direct warm or cool air to where its needed
- The cab also features opening rear and door windows for fresh air entry



### Cab and controls

- TH Elite models feature an electronic joystick mounted on the seat armrest
- Gear selection, neutral, forward/reverse shuttle, transmission de-clutch, boom and 3rd service functions can be operated from the joystick
- A steering column mounted shuttle lever is also optional on Elite models
- Steering wheel adjusts for both tilt and reach
- The heated air suspended seat is standard

# Clean performance. Responsive productivity.



TH telehandlers are powered by Tier 4B compliant, NEF 4.5litre, four-cylinder engines, manufactured in house by FPT Industrial. Proven in the New Holland T6 tractor models, these exceptionally clean running engines employ ECOBlue™ HI-eSCR technology, have a long 600 hour service interval and a proven economy and dependability record. The rated power output is 131hp. This figure climbs to 146hp as engine speed drops to 1,800rpm. To minimise power loss, the engine flywheel connects directly to the transmission via a heavy-duty 280mm torque convertor, a transfer box directing power to the front and rear axles. TH Elite models achieve a maximum 40km/hr transport speed, and feature a transport mode that, when manually activated, automatically locks the boom functions. Transport mode also prevents the operator from activating 4WS or crab steer modes, permitting front axle steering only.

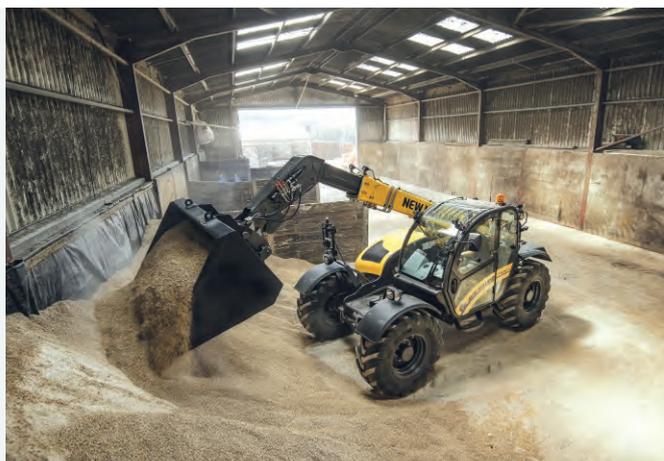


## Reversing fans keep everything cool

- Main engine radiator fan reverses every 6 minutes and runs for 15 seconds
- Dust and debris are blown from the engine cooling package, oil coolers and intercooler
- The same cycle is repeated by two electrical fans to clean air-con, fuel cooler and transmission radiators

## Bigger tyres, more choice

- TH telehandlers are fitted with 460/70R24 tyres
- Wider 500/70R24 option can be specified
- Ground clearance at the lowest point under the axles is a generous 415mm
- Industrial and Hybrid tyre option are now available in 460 and 500mm sizes



### TH Plus & Elite 6x3 transmission features auto modes

- Elite models feature the new 6x3 transmission with 3 modes, Manual, Semi-auto and Full-auto
- Full-auto mode is active between gears 2 - 6 for great roading performances; Semi-auto mode operates between gears 2 - 4 to maximise productivity in yards and tight spaces
- Memory shuttle on Elite models remembers the last used forward and reverse gears when changing direction



### Full time 4WD and auto traction control

- All TH models feature full time 4WD as standard
- Front and rear limited slip differential is also standard on all models
- The differential directs up to 45% of available torque across the axle to ensure the wheel with the greatest traction always gets power

### Hydraulic wet disc brakes

- Sealed wet disc brakes on both TH axles require minimal maintenance and can handle high transport speeds
- The hydraulic trailer brake circuit is linked to the TH's brakes to enhance safety
- The parking brake\* is automatically activated at any time the engine is switched off; it can be manually engaged by shuttle lever on steering column or via a dash mounted switch

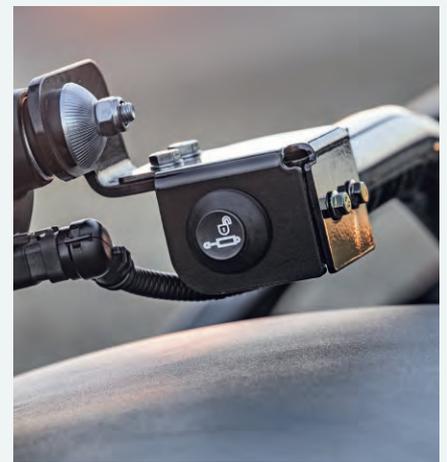
\* SAHR system (Spring Applied Hydraulic Release).

### Manoeuvrability and steering modes

- Turning radius when 4WS is engaged is just 3.9m
- Transport mode permits the selection of 2WS only
- TH Elite models offer auto wheel alignment when switching between, all-wheel, crab and front steering

# Powerful hydraulics deliver fast work cycles.

Efficient hydraulics are key to telehandler productivity. This goes beyond pump capacity; efficient use of available oil, optimised ram sizes and effective control valves all making a contribution to overall performance. The new TH models benefit from New Holland's 20 years of telehandler development, careful attention to the design of the hydraulic circuit not just improving cycle times but also in ensuring performance is maintained in demanding conditions to include extreme heat. Two front auxiliary hydraulic outlets, complete with valves and diverters, to control front mounted attachments are fitted. Additional rear auxiliary lines are also available.



## Variable pump delivers high output at low engine speeds

- TH7.42 Elite models are fitted with a high performance, variable displacement piston pump with a maximum output of 140 L/min
- Guaranteed to deliver high flow rates at all engine speeds but to also close down when there is no demand on the system
- This allows more engine power to be diverted to the transmission and is of particular value in duties to include transport and when climbing a silage clamp

## External pressure release switch

- Switch attachments over quickly and easily without returning to the cab by pressing the Aux pressure relief switch located above the front fender



Model		TH7.42
Hydraulic cycle times (unladen)		
Lift	(seconds)	6.7
Lower	(seconds)	5.2
Extend	(seconds)	6.2
Retract	(seconds)	4.5
Bucket Dump	(seconds)	2.8
Bucket Crowd	(seconds)	2.9



## Strength by design.

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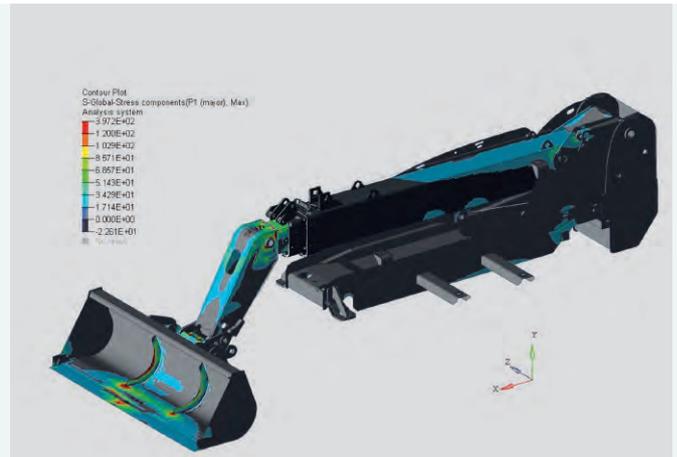
New Holland employs state-of-the-art manufacturing techniques and has invested millions in the production line for TH models. Robot welding is a key manufacturing process and ensures consistent quality during chassis and boom construction.

- Hydraulic end-stroke dampers ensure smooth boom retraction and extension
- Dampers also protect the boom and operator from regular shock loads
- Engineered 40/60 weight distribution eliminates the need for bolt-on counterweights
- Excellent stability and traction is achieved when loaded
- Chassis strength is boosted as a result of the in-built mass
- 45° low profile headstock design enables complete filling of roof cavities
- 142° tilt angle is standard on the Elite
- Hydraulic attachment lock is standard



### Boom construction

- Twin U-shaped sections, 10mm - 12mm thick form the boom
- Heavy duty pins ensure optimum durability
- Boom wear pads are easy to adjust
- Boom brushes prevent debris entering the sliding sections



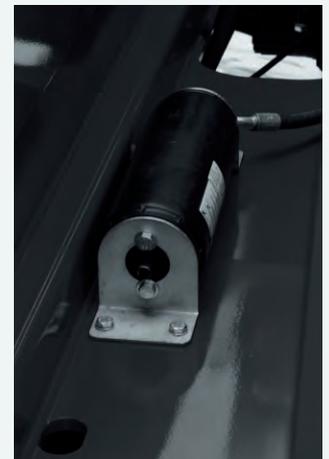
### Lifting geometry

- Main lift ram is positioned under the boom
- Boom compensation cylinder faces rearward near the hinge point
- Both cylinders extend in opposite directions as the boom is raised
- This "opposite working" design improves boom control



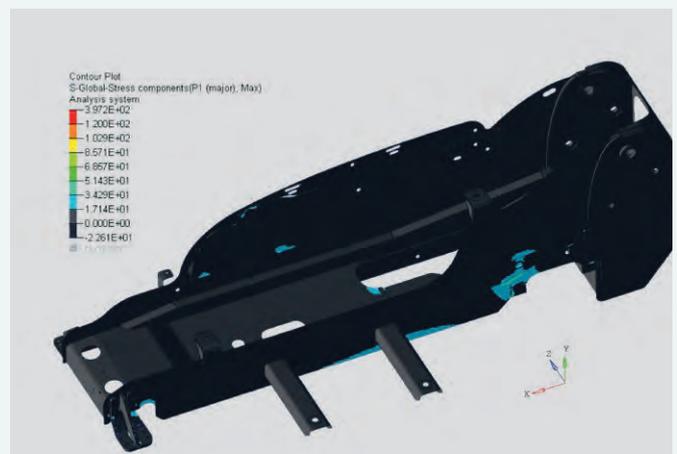
### Boom suspension

- Boom suspension reduces shock loads over rough terrain
- Automatic deactivation occurs when the boom exceeds a 35° lift angle



### Chassis construction

- H-shape ladder chassis is made from 25mm high tensile steel
- Robot welding ensures exceptional torsional rigidity
- Exceptionally strong boom support negates the need to add extra counterweights



# 360°: TH.

New Holland has worked hard to reduce the maintenance demands of its new TH telehandlers.



- Adjusting the telescopic boom pads has been simplified, a simple nut screw and lock nut system making adjustment quick and easy



- 140 litre fuel tank features a wide filler neck and is easy to access
- 27 litre capacity AdBlue tank is conveniently located next to the diesel tank for simultaneous refilling



- Elite models feature 12 daily grease points
- Grouped grease nipples are optional to grease the axles, lift and compensation cylinders



### Auto lubrication system (Optional)

- New auto-lube system ensures that all important lubrication points receive the right amount of grease at the right time
- Manual activation is possible from the cab
- Headstock grease points are serviced by a separate dispenser unit



- The engine air filter is easy to check, clean or replace, without the need for tools

The engine hood lifts on gas struts for full access.

The compact cooling package is mounted on a frame that enables the radiators to both swing out and tilt for easy cleaning.



# New Holland Services.



## Finance tailored to your business

CNH Industrial Capital, the financial services company of New Holland, is well established and respected within the agricultural sector. Advice and finance packages tailored to your specific needs are available. With CNH Industrial Capital, you have the peace of mind that comes from dealing with a financing company that specialises in agriculture.



## Trained to give you the best support

Your dedicated New Holland dealer technicians receive regular training updates. These are carried out both through on-line courses as well as intensive classroom sessions. This advanced approach ensures your dealer will always have the skills needed to look after the latest and most advanced New Holland products.



## Looking after your investment

New Holland Original Parts are the only parts that fully meet the quality requirements essential for the cost-effective operation of your New Holland machine. This is because the engineers who design those parts and supervise their production are the same people who are responsible for developing our products. So, they know exactly what's right for your machine.

# SPECIFICATIONS

## Model

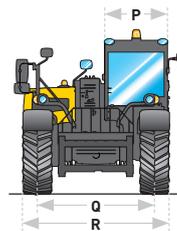
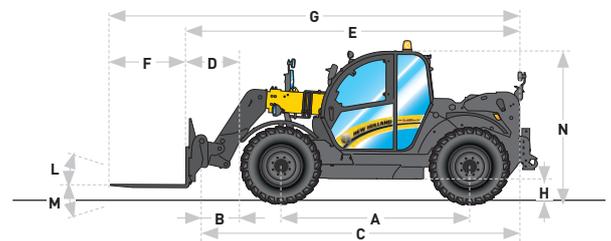
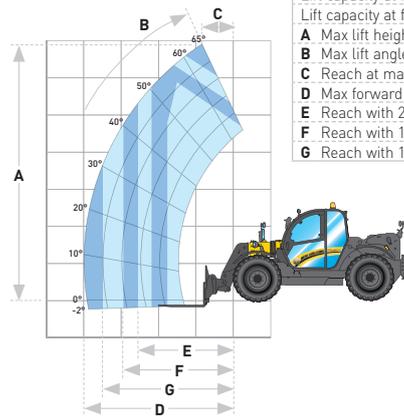
## TH7.42 Elite

<b>Engine*</b>	NEF N45	
Compliant with engine emissions regulations	Tier 4B / Stage 4	
Displacement / No. of cylinders / Valves	[cm³]	4500 / 4 / 4
Aspiration	Turbo Intercooler	
Fuel system	High Pressure Common Rail	
Exhaust system	ECObLue™ HI-eSCR (Selective Catalyst Reduction)	
Rated power - ISO 14396 - ECE R120	[kW/hp(CV)]	96/131@2200rpm
Max power - ISO 14396 - ECE R120	[kW/hp(CV)]	107/146@1800rpm
Max torque - ISO 14396 - ECE R120	(Nm)	591@1400rpm
<b>Transmission</b>		
Traction	4WD	
Type of transmission	PowerShift™	
Number of gears	[FxR]	6x3
Gear shifting modes	Manual, Semi-Auto, Full-Auto	
Gear shifting control	Incorporate on joystick	
Shutting control	Incorporate on joystick optional lever on steering column	
Max speed	[kph]	40
<b>Brakes</b>		
Service brake actuation	Hydraulic power assisted	
Service brake type	Oil immersed discs	
Discs per axle	[front / rear]	6 / 4
Parking brake	SAHR (Spring Applied Hydraulic Release) integrated in Front Axle	
<b>Axes and differentials</b>		
Front axle type	Limited Slip differential	
Rear axle type	Limited Slip differential	
<b>Steering</b>		
Actuation	Power steering	
Operating modes	2WS, 4WS, Crab	
Manual wheel alignment with visual indicators	-	
Automatic wheel alignment	●	
<b>Tyres</b>		
Size	460/70R24 - 500/70R24	
Pattern type	Agriculture, Hybrid	
<b>Hydraulics</b>		
Variable flow pump - 140lpm / 240bar	●	
Front auxiliary flow	[lpm]	130
Rear auxiliary flow	[lpm]	140
Boom/Tilt control	Electro-Proportional	
Boom extension control	Electro-Proportional	
Auxiliary circuits control	Electro-Proportional	
Cycle time - Lift / Lower	[seconds]	6.7 / 5.2
Cycle time - Extend / Retract	[seconds]	6.2 / 4.5
Cycle time - Dump / Crowd	[seconds]	2.8 / 2.9
<b>Electrical</b>		
Alternator	[Amps]	120
Battery	12V-180Ah-1000A	
<b>Cab</b>		
Vision	360°	
Structure	ROPS - ISO 3471 / FOPS - ISO 3449	
Cab noise level - LpA - ISO 6396:2008	[dB(A)]	71
Air conditioning	●	
Air suspension seat	●	
Heated Air suspension seat	●	
Joystick mount	Seat mounted	
Steering column	Tilting and telescopic	
<b>Capacities</b>		
Fuel tank / AdBlue tank	[Litres]	140 / 27
Engine oil	[Litres]	12
Hydraulic oil tank	[Litres]	105

● Standard - Not available \* Developed by FPT

### Main performance

Max lift capacity	[kg]	4200
Lift capacity at full height	[kg]	2500
Lift capacity at full reach	[kg]	1500
<b>A</b> Max lift height	[mm]	7000
<b>B</b> Max lift angle	[°]	65
<b>C</b> Reach at max lift height	[mm]	850
<b>D</b> Max forward reach	[mm]	4050
<b>E</b> Reach with 2000 kg load	[mm]	3500
<b>F</b> Reach with 1500 kg load	[mm]	4050
<b>G</b> Reach with 1000 kg load	[mm]	4050



### Dimensions

<b>A</b> Wheelbase	[mm]	3000
<b>B</b> Axle to carrier	[mm]	1280
<b>C</b> Carrier to rear of machine*	[mm]	5110
<b>D</b> Axle to fork heel	[mm]	1410
<b>E</b> Fork heel to rear of machine*	[mm]	5240
<b>F</b> Pallet forks length	[mm]	1200
<b>G</b> Overall length	[mm]	6440
<b>H</b> Ground clearance	[mm]	415 / 440
<b>L</b> Rollback angle	[°]	24
<b>M</b> Dump angle	[°]	118
Total angle	[°]	142
<b>N</b> Cab height**	[mm]	2445 / 2470
<b>P</b> Cab width	[mm]	1020
<b>Q</b> Wheel track**	[mm]	1870 / 1840
<b>R</b> Overall width [outside tyres]	[mm]	2340
Turning radius outside tyres - 4WS**	[mm]	3910 / 4090
Operating weight***	[kg]	8000

\* Without rear hitch \*\* with smaller / larger tyres \*\*\* Includes forks, full fuel tank and driver

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Safety begins with a thorough understanding of the equipment. Always make sure you and your operators read the Operator's Manual before using the equipment. Pay close attention to all safety and operating decals and never operate machinery without all shields, protective devices and structures in place.

The data indicated in this folder are approximate. The models described here can be subjected to modifications without any notice by the manufacturer. The drawings and photos may refer to equipment that is either optional or intended for other countries. Please apply to our Sales Network for any further information. Published by New Holland Brand Communications. - Printed in Australia - 20NH742V1