



The Merlo Group

2 | 3

N° 1 for technology and safety

The Merlo brand has always been synonymous with advanced technology in the telehandler field and our history, since 1964, is hallmarked by experience based on determination and passion. The development of complex products, from the idea to the result, from design to sales, means being able to propose orientations for the most competitive markets.

The outcome of our efforts are compact, easy to handle telehandlers ensuring incomparable operating performance, comfort, efficiency and safety.

At Agritechnica 2013, three important awards were received that clearly demonstrate the technological and innovative superiority of our products:

- Turbofarmer 42.7 Hybrid: Gold Medal for innovation at Agritechnica.
- Turbofarmer II: Machine of the year 2014 in the "handling and logistics" category.
- Multifarmer: Selected as a "milestone" in agriculture.
- Automated boom bending workstation

- > **1.100** employees
- Surface area of 300,000 m²
 of which 220,000 m²
 are indoors
- 90% exports
- 600 dealers all over the world
- 8% of turnover invested in R & D
- 54 robots





4|5 ADVANTAGES

New Merlo Compact range Maximum performance, minimum bulk

We were the first to launch a range of telehandlers dedicated to agriculture in 1996. Today, we proudly present the new Compact modular generation developed on the strength of experience acquired in 50 years of operations. The only telehandlers in the world that are 2 metres high and 2 metres wide.

40 km/h Standard on the entire range!

Approval Operating machine or agricultural tractor, available for standard versions as well as for the Low Profile

version with 2020 mm height

EPD Assime performance with reduced consumption (-18% diesel)

Engines 75 Hp and 122 HP

Fan Drive

Approval

FOPS-ROPS *also for the Low Profile version

Comfort The largest cab in the category, standard on the entire range (even on the Low Profile versions)

Available on the entire range. Radiators always clean!

Hydraulic Gear pump, with electro-hydraulic joystick
Load Sensing pump with electronic joystick



- •New cab: the largest in the category
- Lowered cab version without giving up anything. The same comfort!
- 40 km/h as standard
 on the entire range, unique in its category
- •EPD as standard -18% consumption
- Fan Drive for consistently efficient radiators

^{*} EN ISO 3449/2008, protection level II (highest protection level provided by the norm and equivalent to the fall of a 227 kg object from 5.22 metres)

New Merlo Compact family

Flagship technology and performance

Comfort

- Largest cab on the market 1010 mm
- Standard cab on silent-block
- Cab version lowered to 2020 mm
- Reverse shuttle on Joystick, duplicated on steering column

Hydraulic system options

- Gear pump and hydraulic command joystick
- Load-sensing pump with electronic joystick and automatic accelerator

Efficiency – Powertrain

- Tier 4 Interim engines with 75 HP and 122 HP and Merlo 2-speed hydrostatic transmission
- EPD Eco Power Drive as standard, optional EPD Top

Innovative Merlo systems

 Tac-Lock rapid coupling of the attachments

Lifting capacity

- Booms from 7 to 9 metres
- Capacities ranging from 3 to 3.3 tons

Safety

Cab compliant with FOPS/ROPS

Towing versatility

- Tow hook
- Hydraulic connections (2 opt.)
- Trailer braking (Pneu/Hydr.)



- Approved for use as an agricultural tractor on the entire range
- Low Profile versions
- 40 km/h approved for use as an agricultural tractor



6 | 7 THE NEW RANGE

The new Compact range A version for every requirement

	ENGINE		CAB		HYDRAULIC					EPD			DIMENSIONS		
MODEL	75 HP - Tier 4 Interim	122 HP - Tier 4 Interim	Steady	Low	Gears 95 I/min	Load Sensing 125 I/min	Transmission 2 speeds	Speed (km/h)	Approval for Agricultural use	ЕРО	EPD PLUS	EPD TOP	Height (mm)	Width (mm)	Length (mm)
TF 33.7 -75 G	Х		Х	OPT	Х		Х	40	OPT	Х	0PT		2120 2020*	2100	4245
TF 33.7 - 120 G		Х		OPT	Χ		Χ	40	OPT	Х	OPT		2120 2020*	2100	4245
TF 33.7 -120		Х	Х	OPT		Х	Χ	40	OPT			Х	2120 2020*	2100	4245
TF 30.9 -75 G	Х			OPT	Χ		Χ	40	0PT	Χ	0PT		2120 2020*	2100	4245
TF 30.9 -120 G		Х	Х	OPT	Х		Х	40	0PT	Х	OPT		2120 2020*	2100	4245
TF 30.9 -120		Х	Х	OPT		Х	Χ	40	0PT			Х	2120 2020*	2100	4245

(G) gear numn

Broad product offering:

 Available in 2 models and 6 different versions

Comfort:

- The largest cab on the market
- Version with low cab 2020 mm from the ground, available with agricultural machine approval

Technological Innovations:

- EPD as standard -18% consumption
- Reverse shuttle on joystick duplicated on the steering wheel
- Automatic accelerator
- Fan drive available

Versatility and productivity:

- 2 engines available with 75 HP or 122 HP
- 2 boom lengths 7 and 9 m
- 2 capacities of 3 and 3.3 tons

^{*}version with standard cab (2120 mm) and Low Profile (2020 mm)



8 | 9 ENGINES & TRANSMISSIONS

Higher performance and lower consumption 40 km/h, -18% consumption, fan drive

The TF Compact range comes with two different engines: 55kW/75HP with 2.9 litres and 90kW/122HP with 3.6 litres, both Tier 4 Interim. The two-speed hydrostatic transmission adds **40 km/h, unique in its category**. All the versions are also equipped with EPD (Eco Power Drive) for electronic management of the thermal engine, helping to reduce consumption by 18%.

The EPD Plus version offers "Speed Control" mode, which memorises the machine's movement speed and keeps it constant (ideal for yard handling operations), and the ECO function, which limits the rpm for further economic savings. In combination with the electronic joystick, the EPD Top system offers

automatic Diesel speed control in relation to joystick movements on order to increase telescopic boom movement speed, optimise machine performance and minimise consumption. The «Fan Drive» system is available, making it possible to change the direction of the fan's rotation from sucking to blowing, in order to keep the radiant pack at maximum efficiency.

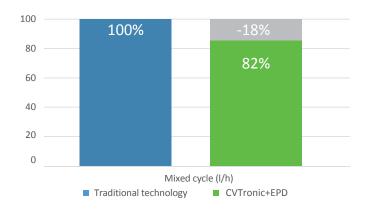




For temperatures less than 40° the fan comes on in an inverted condition for 30″ to later return to normal use

- A. Intercooler radiator
- **B.** Engine radiator liquid
- C. Radiator hydraulic oil
- D. Radiator hydrostatic oil

Reduction in consumption EPD technology



- 40 km/h. Unique in the category
- EPD as standard -18% consumption
- Fan Drive available to ensure the radiators are always clean
- Tier 4 Interim engines
 55 kW/75 HP
 or 90 kW/122 HP
- EPD TOP version with electronic joystick and Load Sensing pump





10 | 11 NEW CAB

New cab with record comfort One cab for two heights

The new evolved ergonomic cab with **unparalleled comfort with its 1010 mm in width** is standard on the Compact range.

The lowered version ("Low Profile"), 2020 mm, is available as an option.

No space will be too low!

Cab height with standard cab and with lowered cab (Low Profile)





Tyres 405/70-20

Tyres 405/70-20

All the models are FOPS and ROPS approved, even in the "Low Profile" version. New air-conditioning system. Warm-up and Cool-down times halved.

The new Merlo cab can now reach an internal temperature of 22°C with an external temperature of 43 °C and full sunlight and an internal temperature of 26°C with an external condition of -15 °C and no solar irradiation.

AIR-CONDITIONING SYSTEM



The air flow is distributed evenly inside the compartment and reaches all areas.

- The same cab for two versions:
 standard 2120 mm
 low profile 2020 mm
- Maximum space and comfort
- 1010 mm wide. The largest cab in its category
- Automotive type air conditioning system



12 | 13 AXLES & BRAKES

New generation of Merlo planetary axles Durability and reliability

Our Compact telehandlers are equipped with a **new generation of planetary axles**. conceived, designed and built entirely.

The result of experience acquired on the field, the axles consist of a central cast iron body, planetary reducers and differential locking. Braking is ensured by 4 dry disc brakes keyed onto the axle shafts, allowing a remarkable reduction in friction and, consequently, consumption. To complete the specifications offered, the Medium Duty telehandlers are equipped with a parking disc brake which is automatically engaged when the diesel engine is switched off, or engaged directly by the operator in the event of work on sloping surfaces. The new axles ensure an excellent ground clearance of ±350 mm (405/70-20 tyres), making it possible to pass obstacles with agility.



THREE STEERING MODES:







COORDINATED STEERING





Manual parking brake selector. automatically engaged when the engine is switched off.

- Axles conceived, designed and produced in-house by Merlo
- Compact solution to maintain a reduced height in all the versions
- 350 mm ground clearance
- Three steering modes
- Dry brakes to reduce friction and consumption and ensure 40 km/h on the entire range
- Automatic engaging
 of the parking brake when the
 engine is switched off

Merlo precision and technology An effective and cutting-edge boom

Merlo produces the booms mounted on its telehandlers in-house and has developed unique technologies to make them strong yet lightweight, protect handling mechanisms against accidental blows and allow users to position the load in the most precise manner possible.

- ✓ Boom sheet metal welded on the boom's neutral bending axis
- ✓ Cartridge protected handling system inside the boom, thanks to a patented solution that is easy to access if maintenance is needed
- ✓ Tac-Lock: hydraulic attachment clamping system from the cab



Tac-Lock: hydraulic attachment clamping system from the cab

Pipes, power cables and auxiliary hydraulic are all located inside the boom



- Lighter but stronger booms: robotised welding on the neutral axis, area with less strain.
- Extension mechanism, protected inside the boom
- Carriage equipped with Tac-Lock hydraulic locking
- Available both with gear pump and Load Sensing pump

From the idea to development of multi-applicability

More efficiency and productivity thanks to Merlo

Merlo adopts simple and effective guidelines in the evolution of the product.

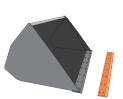
From conception to development, everything is studied, designed and created in the Group's plants. This simple "rule" also applies to attachments.

Backed by years of experience, Merlo's technicians have developed a wide range of attachments, divided by type and load capacity.

This standard makes it possible to adapt tested and interchangeable production equipment to allow for targeted uses, with the intention of facilitating work and reducing its execution times.















GRIPPERS FOR BALES



GRIPPERS FOR WRAPPED BALES



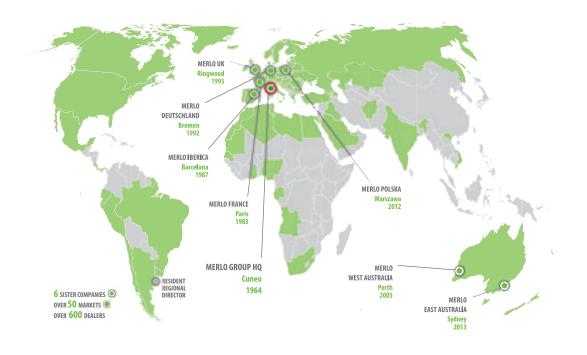
MULTI-PURPOSE LOADER WITH CLAW



PLATFORMS







TRAINING CENTRE

The Merlo Training and Research Centre (CFRM) has made safety training and instruction in the use of the machine its mission. The CFRM provides training courses for operators of personcarrying overhead platfor ms, forklift trucks, telehandlers, cranes, earthmoving machinery, agricultural and forestry tractors, snow ploughs and urban cleaning vehicles.



Countries where Merlo is a market leader



MOVIMATICA MERLO INFOMOBILITY

Is the new system, conceived and built within the Merlo Group, for managing vehicles: it enables GPS radiolocalisation in real time, monitoring operation and use, receive and manage malfunction or burglar alarms and also send commands for handling events via the internet.



16 | 17 A WORLD OF ITS OWN

THE MERLO WORLD

In a globalised world, the customer always comes first!

From excellent products to excellent service. In 2008, Merlo has adapted its production process to meet the needs of the ISO 9001 quality control system. The process is perfected and improved continuously.

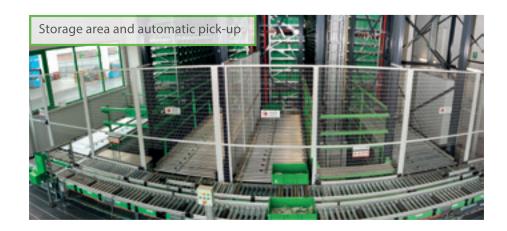
At the same time, the foundations have been laid to put the Customer first, implementing investments aimed at Services such as Financing, Training Assistance, Spare parts and Telematic Means such as remote diagnostics, thanks to the Merlo Mobility project.

Automatic spare parts warehouse	2011	2014
Storage volume	1000 m ³	10.000 m ³
Filling	100%	85%
Percentage of codes managed	50%	86%
Percentage of Lines managed	65%	94%
Pick-up time	90"	30"
Number of codes	8.000	17.000

NEW PARTS CENTRE

The new spare parts warehouse covers an area of 7,000 m², with storage capacity for of 10,000 m³ for a total of 20,000 different codes. Furthermore, it can automatically manage 94% of the order lines that are processed daily, with an average withdrawal time of 30" per line.

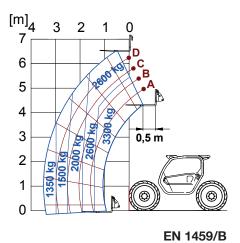
The first fill per order line is over 99% with delivery times for urgent orders within 24 hours.



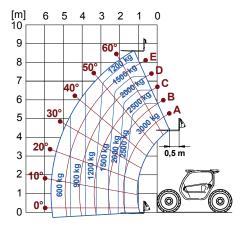


TECHNICAL INFORMATION	TF 33.7 - 75 G	TF 33.7 - 120 G	TF 33.7 - 120	TF 30.9 - 75 G	TF 30.9 - 120 G	TF 30.9 - 120
Total unladen mass, without forks (kg)	6500	6500	6500	6700	6700	6700
Maximum capacity (kg)	3300	3300	3300	3000	3000	3000
Lifting height (m)	6,7	6,7	6,7	8,6	8,6	8,6
Maximum reach (m)	3,5	3,5	3,5	6,7	6,7	6,7
Maximum operating height (m)	5,3	5,3	5,3	5,8	5,8	5,8
Maximum operating reach (m)	1,4	1,4	1,4	1,7	1,7	1,7
Capacity at maximum height (kg)	2600	2600	2600	1200	1200	1200
Capacity at maximum reach (kg)	1350	1350	1350	600	600	600
Turbo motor (displacement/cylinders)	3,6/4	3,6/4	3,6/4	3,6/4	3,6/4	3,6/4
Tier 4 Interim motor power (kW/CV)	90/120	90/120	90/120	90/120	90/120	90/120
Maximum speed (km/h)	40	40	40	40	40	40
BSS hydro-pneumatic boom suspension	0	0	0	0	0	0
Fuel tank (I)	80	80	80	80	80	80
Hydraulic gear pump (bar-l/min)(bar-l/min)(1)	210/90	210/90	-	210/90	210/90	
Hydraulic Load-Sensing pump (bar-l/min)(1)	-	-	210/125	- /-	-	210/125
Fan Drive Pump (I/min)	46	46	46	46	46	46
Flow Sharing Distributor	_		•	-	-	•
Hydraulic oil tank (I)	75	75	75	75	75	75
FOPS (ISO 3449) and ROPS (ISO 3471) cab	•	•	•	•	•	•
Electromechanical joystick	•	•	-	•	•	-
Electronic joystick	-		•	-	-	•
Hydrostatic transmission	•	•	•	•	•	•
Differential lock (A-P)	0	0	0	0	0	0
Dual Control Reverse Shuttle (joystick/steering wheel)	•	•	•	•	•	•
Inching Control progress control from pedal	•	•	•	•	•	•
Permanent four-wheel drive	•	•	•	•	•	•
Four-wheel steering	•	•	•	•	•	•
Automatic parking brake (when the engine switches off)	•	•	•	•	•	•
Work headlights on cab (2 A + 2 P)	•	•	•	•	•	•
LED work headlights on cab	0	0	0	0	0	0
Change of speed	2 speeds	2 speeds	2 speeds	2 speeds	2 speeds	2 speeds
Chassis levelling + side shift		-	-	-	-	-
EPD Eco Power Drive	Standard	Standard	TOP	Standard	Standard	TOP
Mechanical PTO (540/1000)	2 //-	r 11 1/1 -	-	-111-1-2	-	-
Standard tyres	405/70 20	405/70 20	405/70 20	405/70 20	405/70 20	405/70 20
Type approval as an agricultural tractor	0	(A)	0	0	0	0
				(1) Oil flow dedicated to g	ear pump arm 90 l/min; en	gine 122 HP 125 I/min.
					As stand	dard. On request.

TF 33.7 WITH FORKS

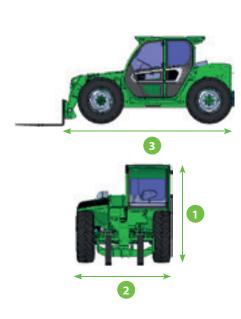


TF 30.9 WITH FORKS



EN 1459/B

TECHNICAL INFORMATION



DIMENSIONS TURBOFARMER COMPACTS				
1. Height (mm)	2120/2020*			
2. Width (mm)	2100			
3. Length (mm)	4245			

*version with standard cab and Low Profile

New Compact modular models The advantages that make the difference

- ✓ 6 models with low cab. A complete offer for poultry farming and more!
- ✓ All models have the "Low Profile" version available
- Pressurised cab as standard*
- ✓ Fan reverse shuttle as standard, for radiators that are always clean to ensure maximum efficiency

From now on, you don't have to give up anything

- 40 km/h approval for agricultural tractor use, also on "Low Profile" versions
- ✓ The same comfort ("standard" and "Low Profile" versions)
- Even greater accessibility to the "Low Profile" cab

^{*} Cab not approved for pesticides

50 YEARS OF CONSTANT COMMITMENT TO WORKING TOGETHER WITH YOU

- 1964 Establishment of the Merlo Group
- 1966 DM and DBM: the first dumper and the first self-loading concrete mixer
- 1981 SM: the world's first telescopic handler
- 1987 Panoramic: the world's first telehandler with side engine
- 1991 Roto: the world's first telehandler with rotating turret
- 1996 Turbofarmer: the first telehandler in Europe type-approved as an agricultural tractor
- 1998 P26: the ultra-compact telehandlers
- 2000 Multifarmer: the first agricultural tractor with telescopic boom
- 2001 MM: the first forestry attachment-carrier
- 2010 Hybrid: the first diesel/electric hybrid telehandler
- 2012 Modular: a new concept of telescopic handler
- 2013 Three important awards at the Agritiechnica in Hanover:
 Hybrid 42.7: gold medal for technological innovation
 Turbofarmer II range: machine of the year 2014
 Multifarmer 40.9: a milestone in agricultural machinery













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