

HD1000



General description

The **HD 1000**, a **semiautomatic** tyre changer, is suitable for mounting and demounting truck, agricultural, industrial and construction equipment wheels up to a maximum width of 980mm. Operation is **electrohydraulic** and the controls are all located on a low-voltage portable unit.

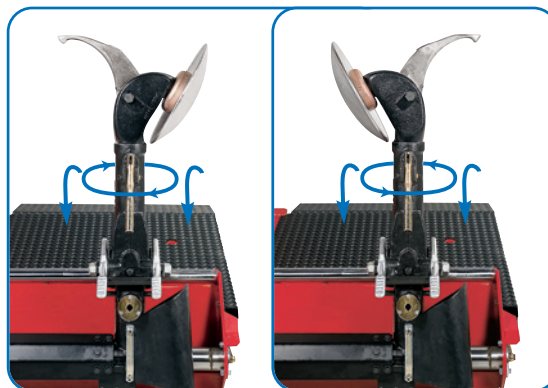
The **hydraulic power** unit is installed on the machine to reduce floor-space requirements.

The hydraulic turntable, with **two rotation speeds** in both directions, has top-range design features and uses choice materials. It assures **excellent clamping** during the delicate wheel clamping, bead breaking and tyre demounting functions.

The new-design **clamps** allow operation on all types of rim, and above all allow a diameter of 110 mm to be clamped without any need for special adapters. The tool arm moves along the base for easier tool positioning during work.

The **new design tool arm** has an overhanging bead breaker disc mounted on **self-lubricating bushings** to ensure durability and smooth travel. The disc's unusual shape has been specifically developed to allow the best possible penetration between the rim

edge and tyre bead; what's more, its rounded external profile prevents damage to or jamming against the tyre wall. The tool used is of tried and tested shape, and has an effective protective coating.

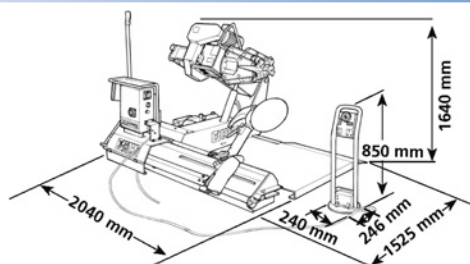


➤ Sequence of tool arm movements

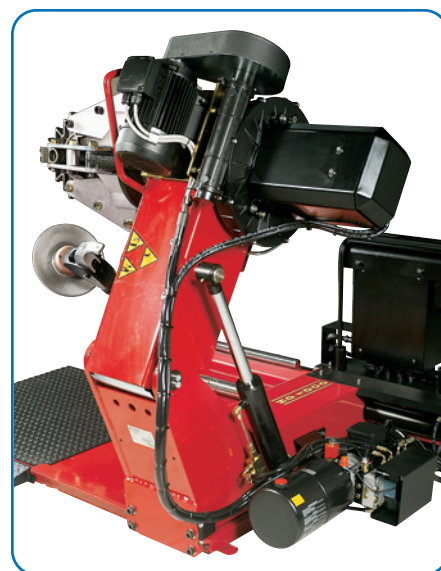
Main characteristics

- **Semiautomatic tyre changer** for truck and agricultural, industrial and construction equipment wheels
- **Electrohydraulic** operation
- Portable control unit separate from the machine
- Wheel clamping by means of **hydraulic turntable**
- **Two-speed turntable rotation** in both directions with **electric brake motor**
- Steel tool arm
- Manual tool rotation
- **Overhanging bead breaker disc mounted on self-lubricating bushings**
- Pressure gauge for monitoring hydraulic pressure

tool arm	demount mode	with lever
	lengthways stroke	893 mm
	lengthways speed	150 mm/s
	working lengthways speed	150 mm/s
	bead breaking maximum lengthways force on inside	24000 N
	bead breaking maximum lengthways force on outside	28000 N
	radial stroke	130 mm
	rotation	manual
	clamping	manual
	clamping positions	1
spindle carriage	hydraulic lengthways stroke	495 mm
	lengthways speed	50 mm/s
	working lengthways speed	50 mm/s
spindle	clamping system	hydraulic turntable
	rotation motor	1,3/1,85 kw
	First rotation speed	4 rpm
	Second rotation speed	8 rpm
	first speed rotation torque	4120 Nm
	second speed rotation torque	2943 Nm
	clamping element	4 (clamps)
	clamping capacity	from 11" to 56"
	clamping positions	4
	maximum clamping force	42000 N
	maximum hydraulic pressure	100 bar
	maximum tyre diameter	2200 mm
	maximum tyre width	980 mm
	maximum wheel weight	1000 kg
	wheel central hole minimum Ø	110 mm
	spindle shaft minimum working height	385 mm
power unit	Stand-by function	NO
	operation	electrohydraulic
	motor	1,5 kw
	adjustable hydraulic pressure	from 60 to 100 bar
	oil tank	7,6 l
control module	command transmission	by cable
	electrical voltage	24 V
	weight	8 kg
power supply	electrical 3ph	230/400 V - 3,6 kW
noise	level in operating conditions	≤ 70 dB (A)
weight		855 kg



Technical Data



➤ New machine structure



➤ Pneumatic bead breaking



➤ Demounting the tyre

Technical data

tool arm	HD1400 MASTERONE		HD1400E	
	demount mode	"Leva la Leva"	with lever	with lever
	lengthways stroke	1045 mm	1045 mm	1045 mm
	lengthways speed	140 mm/s	140 mm/s	130 mm/s
	working lengthways speed	50 mm/s	50 mm/s	60 mm/s
	bead breaking maximum lengthways force on inside	27100 N	27100 N	27100 N
	bead breaking maximum lengthways force on outside	30800 N	30100 N	30800 N
	radial stroke	130 mm	130 mm	130 mm
	rotation	automatic	automatic	manual
	clamping	automatic	automatic	manual
	clamping positions	1	1	1
spindle carriage	hydraulic lengthways stroke	1045 mm	1045 mm	1045 mm
	lengthways speed	140 mm/s	140 mm/s	130 mm/s
	working lengthways speed	50 mm/s	50 mm/s	60 mm/s
spindle	clamping system	hydraulic turntable	hydraulic turntable	hydraulic turntable
	rotation motor	hydraulic	hydraulic	1.5/2.2 kW
	rotation speed	3 speeds (3,5 - 4,5 - 7,5 rpm)	3 speeds (3,5 - 4,5 - 7,5 rpm)	2 speeds (3,5 - 7 rpm)
	rotation torque	4414 Nm	4414 Nm	4900 - 4120 Nm
	clamping element	4 (clamps)	4 (clamps)	4 (clamps)
	clamping capacity	from 15" to 56"	from 11" to 56"	from 11" to 56"
	clamping position	4	4	4
	maximum clamping force	59200 N	59200 N	59200 N
	maximum hydraulic pressure	140 bar	140 bar	140 bar
	maximum tyre diameter	2500 mm	2500 mm	2500 mm
	maximum tyre width	1470 mm	1470 mm	1470 mm
	maximum wheel weight	1200 kg	1200 kg	1200 kg
	wheel central hole minimum Ø	110 mm	110 mm	110 mm
	spindle shaft minimum working height	335 mm	335 mm	335 mm
power unit	Standby function	YES	YES	YES
	operation	electrohydraulic	electrohydraulic	electrohydraulic
	motor	4,8 kW	4,8 kW	3,3/4 kW
	adjustable hydraulic pressure	from 90 to 140 bar	from 90 to 140 bar	from 90 to 140 bar
	oil tank	35 l	35 l	12 l
control module	command transmission	by cable/by radio (on request)	by cable/by radio (on request)	by cable/by radio (on request)
	electrical voltage	24 V	24 V	24 V
	weight	8 kg	8 kg	8 kg
power supply	electrical 3ph	230/400 V -5 kW	230/400 V -5 kW	230/400 V -6.5 kW
noise	level in operating conditions	≤ 70 db (A)	≤ 70 db (A)	≤ 70 db (A)
weight		1160 kg	1160 kg	1100 kg

Technical data

tool arm	demount mode	AG DOUBLE T.T.L.	
		HD1000	HD600
	lengthways stroke	with lever 893 mm	with lever 545 mm
	lengthways speed	150 mm/s	500 mm manual
	working lengthways speed	150 mm/s	65 mm/s manual
	bead breaking maximum lengthways force on inside	24000 N	21600 N 15100 N
	bead breaking maximum lengthways force on outside	28000 N	20100 N 21000 N
	radial stroke	130 mm	190 mm NO/Fix
	rotation	manual	automatic manual
	clamping	manual	automatic manual
	clamping positions	1	1 3
spindle carriage	hydraulic lengthways stroke	495 mm	540 mm 670 mm
	lengthways speed	50 mm/s	65 mm/s 52 mm/s
	working lengthways speed	50 mm/s	65 mm/s 52 mm/s
spindle	clamping system	hydraulic turntable	hydraulic turntable manual turntable
	rotation motor	1.3/1.85 kW	1.5 kW 1.1 kW
	rotation speed	2 speeds (4 - 8 rpm)	7 rpm 6 rpm
	rotation torque	4120/2943 Nm	2943 Nm 1700 Nm
	clamping element	4 (clamps)	4 (clamps) 4 (clamps)
	clamping capacity	from 11 " to 56 "	from 14 " to 25 " from 13 " to 26 "
	clamping positions	3	1 1
	maximum clamping force	42000 N	40000 N -
	maximum hydraulic pressure	100 bar	125 bar -
	maximum tyre diameter	2200 mm	1280 mm 1300 mm
	maximum tyre width	980 mm	700 mm 600 mm
	maximum wheel weight	800 kg	350 kg 1000 kg
	wheel central hole minimum Ø	100 mm	120 mm 140 mm
	spindle shaft minimum working height	385 mm	370 mm 350 mm
power unit	Standby function	NO	NO NO
	operation	electrohydraulic	electrohydraulic electrohydraulic
	motor	1.5 kW	2.2 kW 1.1 kW
	adjustable hydraulic pressure	from 60 to 100 bar	from 80 to 120 bar 110 bar
	oil tank	7.6 l	8.5 l 6 l
control module	command transmission	by cable	by cable by cable
	electrical voltage	24 V	24 V 24 V
	weight	8 kg	8 kg 8 kg
power supply	electrical 3ph	230/400 V -3.6 kW	230/400 V -4 kW 230/400 V -2.2 kW
noise	level in operating conditions	≤ 70 db (A)	≤ 70 db (A) ≤ 70 db (A)
weight		855 kg	568 kg 390 kg