electric winches. When lifting, an electric winch or installation, must include: limit switch and load limiter from 1,000 kg.

NEW IN 2013

Lifting or pulling

- · Multifunctional electric winch offering many rope attachments, rope outlets and options.
- · Industry, Building and public works.

Technical properties

· The direct control is used only with weather protection.

► FROM 250 TO 500 KG

> ref. TRBoxter

- · Welded steel drum with aluminium casing.
- · Fixation points identical to the TRB model allowing old TRB250/350 to be replaced.
- · Asynchronous, single phase (230 V 50 Hz P=0.75 or 1.1 kW depending on the models) or three-phase (230/400 V - 50 Hz P=0.75 or 1.1 or 2.2 kW depending on the models) motors.
- · Reducer sealed in oil bath with helical gears.
- · Conical brake incorporated into the motor (except on TRBoxter 253CD43, TRBoxter 353CD26 and TRBoxter 503CD21: 24V direct current electromagnetic brake).
- · 230 V single/380 V three-phase remote control, protection IP 65.
- The optional limit switch is only available on single phase models. For three-phase models, it has to be incorporated into the installation otherwise choice will go to a low voltage model.

▶ FROM 500 TO 960 KG > ref. TRB

- · Welded steel drum with aluminium casing.
- · Reducer in oil bath with helical gears.
- · Pendant control cable: 3 m.
- · Single-phase 230 V-50 Hz or three-phase 230/400 V-50 Hz P=1.1 kW brake motor. Capacitor single.
- · 230 V single-phase or 230/400 V three-phase control box. Protection IP 65 double insulation.
- · The optional limit switch is only available on single phase models. For three-phase models, it has to be incorporated into the installation otherwise choice will go to a low voltage model.



► TRBoxter from 250 to 500 kg



■ TRB from 500 to 960 kg

Strong points







- A. Drum protected by perforated plate, adjustable according to the outlet of the rope. Large flanges for a large rope capacity.
- B. Reliable and very safe cable clamp. Caged nut for winch multi-position fixing.
- C.Lengthened drum models: standard length of drum (T) and rope capacity x 1.5.

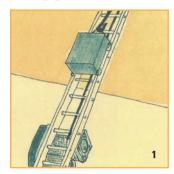


Rope outlets See p. 22

Dimensions

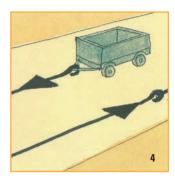
· See p. 22-23.

▲ Applications









1. Material lifts.

2. Pool roofs (moving).

3. Lifting hatches.

4. 2-way system with double rope.

Technical characteristics

References	TRBOXTER 251				TRBOX	TER 253		TRBOX	TER 351	TRBOXTER 353			
References	CD9	CD14	CD21	CD9	CD14	CD21	CD43	CD9	CD14	CD9	CD14	CD26	
Capacity 1st layer kg		290			29	90		40	00		400		
Capacity top layer kg		250			2!	50		35	50		350		
Nb of layers		3			3	3		3	3		3		
Wire rope cap. 1st layer m*		16			1	6		1	6		16		
Wire rope cap. top layer m*		56			5	6		5	i6		56		
Wire rope Ø mm		5			í	5		í	5		5		
Speed 1st layer m/mn	8.1	13.3	19.8	8.1	13.3	19.8	40.3	8.1	13.3	8.1	13.3	25.7	
Speed top layer. m/mn	9.4	15.4	23	9.4	15.4	23	46.6	9.4	15.4	9.4	15.4	29.8	
FEM		1Am			1.4	۸m		1E	3m		1Bm		
Motor Kw	0.75	0.75	1.1	0.75	0.75	1.1	2.2	0.75	1.1	0.75	1.1	2.2	
Power		1 Ph-230\	/		3 Ph-23	80/400V		1 Ph-	230V	3	Ph-230/40	VOV	
Weight (without wire rope) kg		50			5	0		5	0		50		

References	TRBOXTER 501		TRE	OXTER	503	TRB 501	TRB	503	TRB 803	TRB 963	
References	CD4	CD11	CD4	CD11	CD21	CD9	CD5	CD9	CD5	CD5	
Capacity 1st layer kg	60	600		600		635	63	35	950	960	
Capacity top layer kg	50	500		500		500	50	00	800	960	
Nb of layers	3	3		3		4	4	1	3	1	
Wire rope cap. 1st layer m*	1	12		12		17	17		17	17	
Wire rope cap. top layer m*	4	2		42		85	85		60	17	
Wire rope Ø mm	6.	.8		6.8		7	-	7	8	8	
Speed 1st layer m/mn	4	10	4	10	20	8.5	4.5	8.5	5.3	5.3	
Speed top layer. m/mn	4.9	12.2	4.9	12.2	24.2	10.9	5.8 10.9		6.3	5.3	
FEM	1 E	3m		1Bm		1 Bm	1 E	3m	1 Bm	1 Bm	
Motor Kw	0.75	1.1	0.75	1.1	2.2	1.1	1.1		1.1	1.1	
Power	1 Ph-	230V	3 Ph-230/400V		00V	1 Ph - 230 V	3 Ph-230/400V		3 Ph-230/400V	3 Ph-230/400V	
Weight (without wire rope) kg	5	0	50		81	81		81		81	81

The indicated rope diameter corresponds to the capacity on the top layer. * Rope and hook extra (see p. 54-57).

NEW IN 2013

Lifting or pulling

- · Multifunctional electric winch offering many rope attachments, rope outlets and options.
- · Robust, it benefits of a high operating factor.
- · Industry, Building and public works, theatre applications.
- Integration into many types of devices, cranes, etc.
- · Pulling carriages or wagons with a two-way system.
- · Installation and extraction of parts in ovens.
- Hanging chandeliers.
- · Boat haulage.
- · Doors lifting, traps opening.
- · Material lifts.
- Swimming pool roofs...

Technical properties

• The low voltage control protects the user from electrical risks. It makes it possible to operate a wide range of options: from limit switch to radio control, including a load limiter and a rope slack switch...

▲ MODELS WITH 1 SPEED FROM 250 TO 500 KG > ref. TRBoxter

- · Welded steel drum with aluminium casing.
- · Fixation points identical to the TRB model allowing old TRB250/350 to be replaced.
- · Asynchronous, single phase (230 V 50 Hz P=0.75 or 1.1 kW depending on the models) or three-phase (230/400 V - 50 Hz P=0.75 or 1.1, 2.2 or 3 kW depending on the models) motors.
- · Reducer sealed in oil bath with helical gears.
- · 24 V direct current electromagnetic brake.
- · Electrical equipment under sealed cover.
- · Very low voltage, 24 V remote control with socket -IP 65.

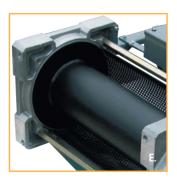


► TRBoxter from 250 to 500 kg (models with 1 speed)

Strong points









- A. Electromagnetic no-current disk brake.
- B.Drum protected by perforated plate, adjustable according to the outlet of the rope. Large flanges for a large rope capacity.
- C. Reliable and very safe cable clamp. Caged nut for winch multi-position fixing.
- D Reliable electric components.
- E.Lengthened drum models: standard length of drum (T) and rope capacity x 1.5.

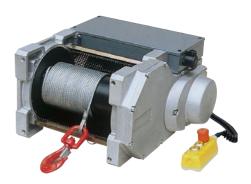


► MODELS WITH 1 SPEED FROM 500 TO 960 KG > ref. TRB

- · Welded steel drum with aluminium casing.
- · Reducer in oil bath with helical gears.
- · 230 V, 50 Hz single-phase lifting-type motor. Capacitor start. Class F. Protection IP 54.
- · 230/400 V, 50 Hz three-phase lifting-type motor. Protection IP 54.
- · 24 V DC electromagnetic brake. P = 24 W.
- · Disconnectable pendant control.
- · Control cable: 3 m long.

► MODELS WITH SPEED VARIATOR

- In addition to the low voltage advantages, the not disconnectable pendant control offers a variation of the winding speed, with gradual starting and stopping.
- · Highly advisable for:
- Industry
- Building and public works
- Theatre applications



► TRB 500 kg



▶ TRBoxter 500 kg (model with speed variator, included these options: rotating beacon, horn radio control, roll-press roller, rope slack switch...)

Applications











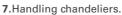
1.Material lift.

2. Fitted for lateral moving use.

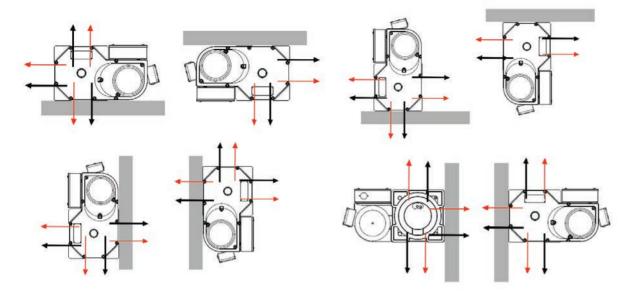
- 3.Ceiling fixation.
- 4.Freight elevators



6. Lifting display panels.

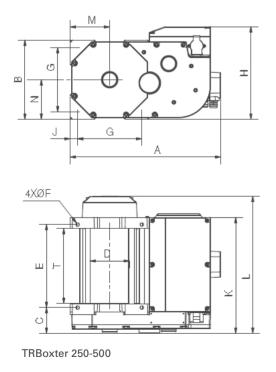


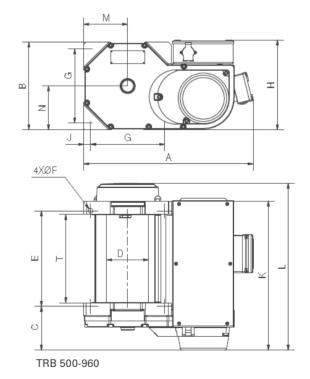
► Rope outlets



Standard outlet, right hand lay rope. Non standard outlet, left hand lay rope.

Dimensions





> DIRECT CONTROL

Models	TRBoxter	250-500	TRB 50	0-960
	Standard	Long	Standard	Long
A mm	431	431	540	540
B mm	243	243	292	292
C mm	79	79	146	146
Ø D mm	121	121	(1)	(1)
E mm	255	370	318	463
Ø F mm	10.5	10.5	15	15
G mm	197	197	246	246
H mm	243	243	292	292
J mm	23	23	23	23
K mm	356	471	498	498
L mm	419.5	534.5	556	701
M mm	121.5	121.5	146	146
N mm	121.5	121.5	146	146
T mm	230	345	290	435

⁽¹⁾ Drum diameter is 140 mm for the 500 kg model and 160 mm for the 800 and 960 kg models.

> DC LOW VOLTAGE CONTROL

Models	TRBoxter	250-500	TRB 50	0-960
	Standard	Long	Standard	Long
A mm	462	462	540	540
B mm	243	243	292	292
C mm	79	79	146	146
Ø D mm	121	121	(1)	(1)
E mm	255	370	318	463
Ø F mm	10.5	10.5	15	15
G mm	197	197	246	246
H mm	284.5	284.5	292	292
J mm	23	23	23	23
K mm	356	471	498	498
L mm	419.5	534.5	556	701
M mm	121.5	121.5	146	146
N mm	121.5	121.5	146	146
T mm	230	345	290	435

⁽¹⁾ Drum diameter is 140 mm for the 500 kg model and 160 mm for the 800 and 960 kg models.

>FREQUENCY VARIATOR

Models	TRBoxter	250-500	TRB 50	0-960
Ī	Standard	Long	Standard	Long
A mm	475.25	475.25	540	540
B mm	243	243	292	292
C mm	79	79	146	146
Ø D mm	121	121	(1)	(1)
E mm	255	370	318	463
Ø F mm	10.5	10.5	15	15
G mm	197	197	246	246
H mm	343	343	400	400
J mm	23	23	23	23
K mm	356	471	498	498
L mm	419.5	534.5	556	701
M mm	121.5	121.5	146	146
N mm	121.5	121.5	146	146
T mm	230	345	290	435

⁽¹⁾ Drum diameter is 140 mm for the 500 kg model and 160 mm for the 800 and 960 kg models.

COMPACT WINCHES 250 TO 960 KG DC LOW VOLTAGE CONTROL

► Technical characteristics –1 speed

References	T	RBOXTER 2	51		TRBOX	TER 253		TRBOXTER 351		
neierences	ВТ9	BT14	BT21	ВТ9	BT14	BT21	BT43	ВТ9	BT14	
Capacity 1st layer kg		290			29	90		4	00	
Capacity top layer kg		250			2!	50		350		
Nb of layers		3			(3			3	
Wire rope cap. 1st layer m*		16			1	6		16		
Wire rope cap. top layer m*		56			5	56				
Wire rope Ø mm		5			í	5				
Speed 1st layer m/mn	8.1	13.3	19.8	8.1	13.3	19.8	40.3	8.1	13.3	
Speed top layer. m/mn	9.4	15.4	23	9.4	15.4	23	46.6	9.4	15.4	
FEM		1Am			1 <i>A</i>	m		18	3m	
Motor Kw	0.75	0.75	1.1	0.75	0.75	2.2	0.75 1.1			
Power		1 Ph-230V			3 Ph-23		1 Ph-230V			
Weight (without wire rope) kg		50			5		5	50		

References	TI	RBOXTER 3	53	TRBOX	TER 501	TI	RBOXTER 5	03	TRB 501	
References	ВТ9	BT14	BT26	BT4	BT11	BT4	BT11	BT21	BT12	
Capacity 1st layer kg		400		6	00		600		635	
Capacity top layer kg		350		5	00		500		500	
Nb of layers		3			3		3		4	
Wire rope cap. 1st layer m*		16		1	12		17			
Wire rope cap. top layer m*		56		۷	12		42		85	
Wire rope Ø mm		5			5.8			7		
Speed 1st layer m/mn	8.1	13.3	25.7	4	10	4	10	20	10.7	
Speed top layer. m/mn	9.4	15.4	29.8	4.9	12.2	4.9	12.2	24.2	13.8	
FEM		1Bm		1	Bm		1Bm		1 Bm	
Motor Kw	0.75 1.1 2.2			0.75	1.1	0.75	2.2	1.5		
Power	3 Ph-230/400 V			1 Ph	-230V	3	V	1 Ph-230 V		
Weight (without wire rope) kg	50			5	50		50			

References			TRB 503				TRE	803			TRB 963					
neterences	BT5	ВТ9	BT12	BT18	BT23	BT5	BT10	BT13	BT17	BT5	BT10	BT13	BT17			
Capacity 1st layer kg			635				9	50		960						
Capacity top layer kg			500				8	00		960						
Nb of layers			4					3	1							
Wire rope cap. 1st layer m*			17				1	17		17						
Wire rope cap. top layer m*			85				6	60			17					
Wire rope Ø mm			7					8	8							
Speed 1st layer m/mn	4.5	8.5	10.7	17	21.5	5.3	10	12.7	16	5.3	10	12.7	16			
Speed top layer. m/mn	5.8	10.9	13.8	21.8	27.6	6.3	11.9	15	19	5.3	10	12.7	16			
FEM			1 Bm				1	Bm			1	Bm				
Motor Kw	0.75	1.1	1.5	2.2	3	1.1	2.2	2.2	3	1.1 2.2 2.2 3						
Power		3 F	h-230/40	0 V		3 Ph-230/400 V					3 Ph-230/400 V					
Weight (without wire rope) kg			85				9	90	90							

The indicated rope diameter corresponds to the capacity on the top layer.

* Rope and hook extra (see p. 54-57).

▶ Technical characteristics – Frequency variator

Références		TRBOXT	TER 25	1		TRB	OXTER	253		TRB	OXTER	351	TRBOXTER 353				
neierences	VV9	VV14	VV21	VV43	VV9	VV14	VV21	VV43	VV60	VV9	VV14	VV26	VV9 VV14 VV26 V\			VV42	
Capacity 1st layer kg		29	0		290						400			4	00		
Capacity top layer kg		25	0				250				350			3	50		
Nb of layers		3	3		3	3	3	3	2		3						
Wire rope cap. 1st layer m*		16	6		16						16			16			
Wire rope cap. top layer m*	56				56						56			į	56		
Wire rope Ø mm		5	5		5						5			5			
Adjustable speed 1st layer m/mn	9	14	21	43	9	9 14 21 43 60			60	9	14	26	9	14	26	42	
Adjustable speed top layer m/mn	9	14	21	43	9	14	21	43	60	9	14	26	9	14	26	42	
FEM		1A	.m				1Am				1Bm			1	Bm		
Motor Kw	0.75 0.75 1.1 2.2				0.75	0.75	1.1	2.2	3	0.75	1.1	2.2	0.75	1.1	2.2	3	
Power	1 Ph-230 V				3 Ph-230/400 V					1	Ph-230	V	3 Ph-230/400 V			/	
Weight (without wire rope) kg	50				50						50		50				

TRB	OXTER	501	1	TRBO	(TER 50:	3	TRB 501						TRB 503				
VV4	VV11	VV21	VV4	VV11	VV21	VV32	VV5	VV9	VV12	VV18	VV23	VV5	VV9	VV12	VV18	VV23	
	600			(600				635					635			
	500			į	500				500					500			
	3				3				4					4			
	12				12				17					17			
	42				42				85					85			
	6.8				6.8				7					7			
4	11	21	4	11	21	32	5	9	12	18	23	5	9	12	18	23	
4	11	21	4	11	21	32	5	9	12	18	23	5	9	12	18	23	
	1Bm			1	Bm				1Bm					1Bm			
0.75	1.1	2.2	0.75	1.1	2.2	3	1.5	1.1	1.5	2.2	3	1.5	1.1	1.5	2.2	3	
1	Ph-230	V		3 Ph-2	30/400 \	/		1	Ph-230	V			3 Pł	า-230/40	00 V		
	50				50		85							85			
	4 4 0.75	VV4 VV11 600 500 3 12 42 6.8 4 11 4 11 1Bm 0.75 1.1 1 Ph-230	600 500 3 12 42 6.8 4 11 21 4 11 21 1Bm 0.75 1.1 2.2 1 Ph-230 V	VV4 VV11 VV21 VV4 600	VV4 VV11 VV21 VV4 VV11 600 6 7 6 7 6 7	VV4 VV11 VV21 VV4 VV11 VV21 600 600 500<	VV4 VV1 VV21 VV3 VV3 VV3 VV3 600 600 500 500 500 500 500 500 500 500 600 <td>VV4 VV11 VV21 VV32 VV5 600 600 500<!--</td--><td>VV4 VV11 VV21 VV32 VV5 VV9 600 600 500<!--</td--><td>VV4 VV11 VV21 VV32 VV5 VV9 VV12 600 600 600 635 500 500 500 500 4 12 12 12 12 17 42 42 42</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>VV4 VV11 VV21 VV32 VV32 VV9 VV12 VV18 VV23 600 600 600 600 635 900 9</td><td>VV4 VV11 VV21 VV21 VV32 VV3 VV9 VV12 VV18 VV23 VV5 600 500 </td></td></td>	VV4 VV11 VV21 VV32 VV5 600 600 500 </td <td>VV4 VV11 VV21 VV32 VV5 VV9 600 600 500<!--</td--><td>VV4 VV11 VV21 VV32 VV5 VV9 VV12 600 600 600 635 500 500 500 500 4 12 12 12 12 17 42 42 42</td><td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td><td>VV4 VV11 VV21 VV32 VV32 VV9 VV12 VV18 VV23 600 600 600 600 635 900 9</td><td>VV4 VV11 VV21 VV21 VV32 VV3 VV9 VV12 VV18 VV23 VV5 600 500 </td></td>	VV4 VV11 VV21 VV32 VV5 VV9 600 600 500 </td <td>VV4 VV11 VV21 VV32 VV5 VV9 VV12 600 600 600 635 500 500 500 500 4 12 12 12 12 17 42 42 42</td> <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td> <td>VV4 VV11 VV21 VV32 VV32 VV9 VV12 VV18 VV23 600 600 600 600 635 900 9</td> <td>VV4 VV11 VV21 VV21 VV32 VV3 VV9 VV12 VV18 VV23 VV5 600 500 </td>	VV4 VV11 VV21 VV32 VV5 VV9 VV12 600 600 600 635 500 500 500 500 4 12 12 12 12 17 42	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	VV4 VV11 VV21 VV32 VV32 VV9 VV12 VV18 VV23 600 600 600 600 635 900 9	VV4 VV11 VV21 VV21 VV32 VV3 VV9 VV12 VV18 VV23 VV5 600 500				

Références	VV5		801 VV13	VV17	VV5		803 VV13	VV17	VV5	TRB VV10		VV17	VV5	VV17			
Capacity 1st layer kg		9!	50			9!	50			96	60			960			
Capacity top layer kg		80	00			80	00			96	60			960			
Nb of layers		(3			3	3			•	l						
Wire rope cap. 1st layer m*		1	7			1	7			1	7						
Wire rope cap. top layer m*		6	0			6	0			1	7			17			
Wire rope Ø mm		8	3		8				8				8				
Adjustable speed 1st layer m/mn	5	10	13	17	5	10	13	17	5	10	13	17	5	10	13	17	
Adjustable speed top layer m/mn	5	10	13	17	5	10	13	17	5	10	13	17	5	10	13	17	
FEM		1E	3m			1E	3m			1 E	3m			1 E	3m		
Motor Kw	1.1 2.2 2.2 3				1.1	2.2	2.2	3	1.1	2.2	2.2	3	1.1	2.2	2.2	3	
Power		1 Ph-	230 V		3 Ph-230/400 V					1 Ph-	230 V		3 Ph-230/400 V				
Weight (without wire rope) kg	90				90				90				90				

The indicated rope diameter corresponds to the capacity on the top layer. \ast Rope and hook extra (see p. 54-57).

. These options are to be defined when ordering. Our sales advisers are here to help you.



Electronic load limiter

This device stops the winch in the event of an overload without the breakage of the kinematic chain



Limit switch

Clock type: 2 positions. Easy to adjust, this system guarantees safety by preventing upper and lower overruns.

Cam type: 2 or 4 positions. IP 65.



Emergency trouble shooting hand wheel

An emergency trouble shooting hand wheel combined with a brake release lever allows the load to be lowered or positioned manually.



Brake release

The brake release allows the load to be lowered. The declutchable drum is required to unwind the rope manually.



Grooved drum

Facilitates correct winding of the first rope layer. Essential for a two-way system.



Rope-press roller

This is the essential complement to the grooved drum used for a single winding layer and if the rope is not constantly taut (empty winding in traction). This equipment is not advisable if the rope is wound on several layers.



Rope slack switch

This device stops the winch automatically when the rope is no longer under tension, for instance, during lowering when the load hits an obstacle.



Releasable drums (500 - 960 kg)

Particularly useful for no load paying out of rope over long distances.

For pulling use only.



Radio control class 3

Lifting and pulling, long distance: 230 m. Emergency stop active on separate circuit. Available in VV version.

OPTIONAL EQUIPMENTS FOR TRB AND TRBOXTER WINCHES



Radio control class B Pulling only. Distance: 50 m. Active emergency stop. Available in VV version.



Additional rope fastenerFor lifting a load with several ropes or for obtaining a two-way system.



Multirope grooved drum
For lifting or pulling a load with different fixing positions.
Widely used for theatre applications.



Chassis

The use of a tubular frame is specially designed for construction sites and public works. In this case, the 250 to 500 kg TRBoxter and the 500 to 800 kg TRB are fitted with a reliable adjustable limit switch (upper and lower) as standard. Fastening and weighting by means of sleeves in lower section.

Also:

- · Drum with additional flange (central or not)
- · Timer
- · Marine paint
- · Protective cover
- · Cable length over 3 m for the control box
- · Motors: other control power voltages and frequencies on request.

PROFESSIONAL GENERAL TERMS AND CONDITIONS

These PROFESSIONAL GENERAL TERMS AND CONDITIONS are available for the supply of CATALOGUED HANDLING EQUIPMENT. For SPECIFIC EQUIPMENTS you have to refer to the corresponding PROFESSIONAL TERMS AND CONDITIONS.

A > EQUIPMENT AND THEIR FITTINGS

1 > GENERAL PROVISIONS

1.1 > Contract formation

Every order requires the purchaser's acceptance of these general terms and conditions. Therefore, any provisions that are contrary hereto and, particularly all general conditions that were previously transmitted by periodic circulars, shall not be enforceable against the seller unless the latter agrees thereto in writing.

A contract of sale is complete only after the seller's written acceptance of the purchaser's order. An accepted order shall not be cancelled without the seller's consent.

1.2 > Specifications regarding the supply

Characteristics mentioned in catalogues, prospectuses and all other advertising materials and documents are given purely as an indication. The seller reserves the right to make any changes in its designs that it deems appropriate, even after acceptance of the orders, without, however, affecting the essential characteristics and performance.

1.3 > Tests and acceptance

The costs of tests and acceptance requested by the purchaser are borne exclusively thereby.

1.4 > Estimate (for repair)

The costs necessary for the issue of a repair estimate, such as the time of assembly or re-assembly, and travel expenses, are invoiced when the estimate is not followed by an order.

2 > DELIVERY

The times for delivery commence to run after the sending of the acknowledgement of receipt and receipt of the instalment specified in paragraph 5. They are given purely as an indication and in total good faith.

Whatever the purpose of the equipment and terms of sale, delivery is deemed to be made in the seller's plants and stores.

Delivery is advised by a simple notice of availability. Such a notice signifies either the direct remittance of the equipment to the purchaser, delivery of the equipment in the seller's plants or stores to a shipper or carrier designated by the purchaser or, in the absence thereof, by the seller.

The purchaser must take possession of the equipment within ten days of the notice of availability. If the purchaser does not take the equipment at the location and on the date that are agreed, and provided that its delay is not due to an act or omission of the seller, the purchaser must make the payments as contractually specified, with delivery deemed to have been made. In such event, the seller handles the storage at the purchaser's risk and peril. Insofar as the equipment has not been individualized.

In no event shall an exceeding of the specified time result in cancellation of the order, in the payment of damages and interest or in the application of any penalties, unless expressly confirmed in the acknowledgement of receipt of the order.

«The equipment is delivered, along with its instruction manual », which the user shall consult before putting the equipment into service.

3 > RESERVATION OF OWNERSHIP AND TRANSFER OF RISKS

- 3.1 > The seller retains full ownership of the subject equipment until full payment of the principal price and ancillary items.
- 3.2 > As of the date of delivery, the purchaser assumes liability for damage that this equipment might incur or cause for any reason whatsoever.
- 3.3 > The equipment shall not be resold or transformed until full payment thereof without the seller's prior consent. However, in the case of a resale, the seller may exercise a right to follow the property and claim the amounts due directly from the end customer.

4 > TRANSPORT AND INSURANCE

Any measures that the seller might take in the interest or for the account of the purchaser regarding insurance, transport, etc... do not contravene the principle of delivery in its plants or stores.

The fact of possibly including the carriage cost in the price is not regarded as departure from the principle of delivery in the seller's plants or stores.

Any transport handled by the seller itself, whether or not the costs are charged to the purchaser, is deemed to be made under a carriage contract separate from the contract of sale.

In the absence of instructions, the seller undertakes the shipment in the purchaser's best interests. The equipment is insured only at the purchaser's express request.

In all circumstances, it is up to the purchaser to effectuate all verifications, express any reservations upon the arrival of the equipment, and, if necessary, initiate against the carrier the actions specified by article 103 and those that follow of the Commercial Code, within the times set by article 105.

5 > PRICES, TERMS AND DELAY OF PAYMENT

Unless otherwise stipulated, the payments are made at the domicile of the seller's business, net and without discount, and are due under the following terms:

- > 1/3 by cheque upon placement of the order (instalment)
- > 1/3 by cheque upon delivery
- > the balance by accepted draft, payable from the date of delivery within the customary time of 30 days, whether for products and/or services.

Any provision or request meant to specify or obtain a time of payment that exceeds 30 days, which time limit is customary in the mechanical engineering industries, may be deemed to be abusive pursuant to article L. 442 6 7° of the Commercial Code, unless the customer provides a sound reason.

The invoice indicates the date on which the payment must be made. All amounts that are paid prior to delivery are deemed to be installments, and thus do not give the purchaser any right to cancel the contract of sale.

Any non-payment of an installment on the agreed date and any refusal to accept a bill of

exchange when presented will lead to:

> on the one hand, ipso jure and without prior notification, in accordance with article L441-6 of the Commercial Code, from the very first day overdue:

- the application of late payment interest equal to the most recent refinancing rate defined by the European Central Bank increased by ten points (modernisation of the economy law - LME - No.2008-776 of 4 August 2008), without prejudice to any damages and interest which may be claimed;

- the application of a flat-rate compensation for cost recovery fees totalling 40 euros (European directive 2011/7 of 16 February 2011, law 2012-387 of 22 March 2012 and decree 2012-1115 of 2 October 2012),

- additional compensation, based on documentary proof, if the cost recovery fees indicated are greater than this flat-rate compensation rate. Furthermore, any outstanding payments would become payable immediately.

> on the other hand, if the vendor deems fit:

- the suspension or cancellation of all orders in progress,

- the cancellation, ipso jure, of the sales contract one month after the official demand, sent to the purchaser by registered letter with acknowledgement of receipt, to comply with their legal obligations. In this case, and without prejudice to any damages and interest which may be claimed, the purchaser must, in addition to their obligation to return the goods, pay the vendor a termination fee set at 20% of the price as evaluated at the date of termination. This fee will be charged to the payments already received.

6 > WARRANTY

6.1 > Scope of warranty

The seller commits that it will remedy any operating deficiencies due to a defect in the design, materials or performance (including assembly if it is responsible for this operation), within the limits of the provisions set forth hereinafter.

The warranty does not cover normal wear and tear, breakdowns due to a lack of maintenance and surveillance or, generally, to any manipulation in non-compliance with the manufacturer's written instructions (with the recommendations for normal use specified in the notice thereof), or to an event of force majeure.

The warranty immediately ceases if the validity of the declaration of conformity expires because the purchaser used spare parts other than the original ones, or performed repair or modification work without the seller's written agreement.

In the event of use of the equipment outside of metropolitan France, the seller may change the scope and terms of warranty defined in these general terms and conditions. Unless otherwise stipulated, no warranty applies to used equipment; alienation of the equipment by the first user terminates the warranty.

6.2 > The purchaser's obligations

In order to have the benefit of this warranty, the purchaser must immediately advise the seller in writing of any defects that it observes in the equipment and provide all proofs regarding the reality of said defects; it must facilitate the observation and correction of these defects.

6.3 > Effective date and duration

The standard warranty is for a period of one year, which period can be converted into hours of use according to the type of equipment or its category of operation. It commences on the date of delivery as specified in paragraph 2, and terminates either at the period of one year or at the end of the specified duration of use, whichever occurs first.

If the conditions for using the equipment specify a labour regime that requires more than one work station of 8 hours, the duration of warranty may be reduced.

If the effective date of warranty is deferred, the warranty period may be extended for a period equal to the period of delay. However, if such delay is beyond the seller's control, the extenstion shall not exceed 3 months.

6.4 > Modes of exercising the warranty

During the period of warranty, the seller has the duty to replace the parts that are deemed to be defective after examination by its technical service or, if it so prefers, to repair them free of charge. The warranty excludes any other services or indemnification.

Repairs under the warranty are generally made in the seller's workshops, with the purchaser responsible for sending the equipment to be repaired and the defective parts thereto at the purchaser's expense.

When work on the equipment is performed outside of its workshops, the travel and accommodation expenses incurred by the seller for its agents are billed to the purchaser. However, the labour costs related to the disassembly or re-assembly of these parts are incurred by the seller when these operations are carried out by its employees or agents. The replaced parts become the seller's property and must be returned thereto at the

Replacement parts are supplied free of charge ex-factory of the seller. Reshipment of repaired equipment is at the purchaser's expense.

Replacement parts and repaired parts are warranted under the same terms and conditions as those for new parts and for the same length of time. For the other components, servicing under warranty has the effect of extending the warranty by the length of time during which the equipment is tied up.

For items of a particular relative importance that are not manufactured by the seller itself and which carry the brand of specialized manufacturers, the warranty that may vary according to the manufacturer is that which is provided thereby.

7 > DISPUTES

purchaser's expense

In the event of dispute regarding a supply or its payment, the Commercial Court of Beauvais has sole jurisdiction whatever the terms and conditions of sale and the term of payment, even in the event of an action against a guarantor or a multiplicity of defendants. However, prior to or concomitantly with the initiation of any legal, administrative or arbitration proceeding, the parties shall have recourse to an expert's opinion pursuant to the regulation of the Codified Amicable Expert's Opinion (E.A.C.) available at :

CNIDECA - 15 rue Péclet - F 75015 PARIS -Tel: 01 48 28 75 75 - Fax: 01 48 28 74 34

Jälleenmyyjä:



Oy Machine Tool Co

Teerikukonkuja 4 00700 Helsinki

p. 09-351 951 myynti@machinetool.fi www.machinetool.fi



Place de l'Église - 60420 Ferrières (Oise) - France Tel. + 33 (0)3 44 51 11 33 - Fax +33 (0)3 44 51 13 13

www.huchez.fr