# The Tirak™ principle

ONLY SETTLE FOR THE BEST
THE TIRAK™ SERIES IS THE MOST VERSATILE WIRE ROPE HOIST SERIES IN THE WORLD.

#### **INFINITE POSSIBILITIES**

- For transporting both materials and passengers
- Unlimited lifting height or pulling length
- Unlimited wire rope length
- WLL varying from 300 to 3,000 kg
- No standard version: customized assembly and production
- The working load can be increased by reeving the wire rope

#### **RELIABLE**

- Constant speed
- Constant lifting and pulling capacity
- Fixed position of ingoing and outgoing cables
- Integrated mechanical overload protection (≥1000 kg)
- Long service life

#### **QUALITY**

- Robust, durable and silent
- Areas of application: maritime, building, industry and utility
- Low-maintenance
- Spare parts available

#### **FLEXIBLE**

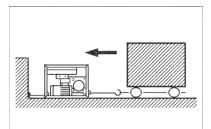
- Different versions for each application
- Various suspension adapters available
- Optionally available with transport reel and frame
- Lifting cable available in any required length
- Non-rotating lifting cable for non-guided loads



# The Tirak™ principle

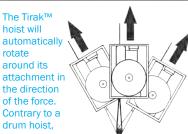
## THE UNIQUE APPLICATIONS! LIFTING AND PULLING

#### **ANCHORED TO THE FRAME**



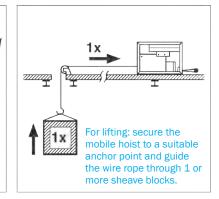
Secure the mobile hoist to a suitable anchor point by using a sling, chain or other securing method and you will be ready to start working.

#### **ORIENTATION**

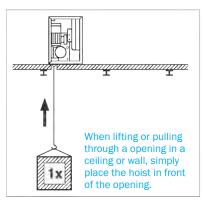


the direction of pull is always the same because of the steady wire rope output. In addition, the speed and force are constant.

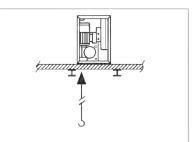
#### **LIFTING LOADS**



#### **DIRECT LIFTING OR PULLING**

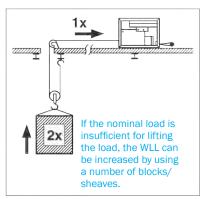






If the opening is not large enough for the hook, first position the hoist and guide the wire rope with the tip through the opening and into the Tirak™.

#### LIFTING AND REEVING



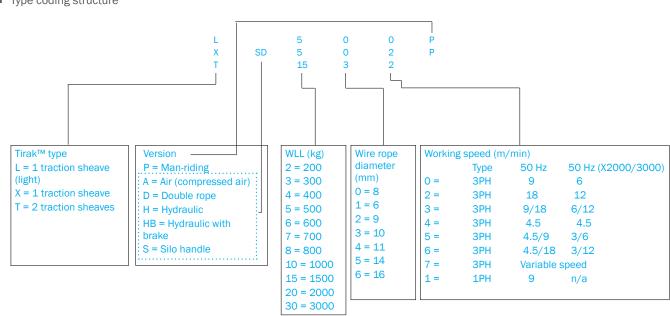
## TYPE CODING STRUCTURE, INFINITE POSSIBILITIES

#### **PROVEN TECHNOLOGY**

■ The Tirak<sup>™</sup> combines proven technology with modern techniques and sophisticated production methods in order to obtain the highest possible quality standards.

#### **CUSTOMIZATION**

- Each Tirak<sup>™</sup> is assembled and produced in accordance with customer requirements. We will be happy to advice and support you while assembling the optimal Tirak for your application.
- Type coding structure



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## TIRAK™ HOIST FOR MATERIAL HANDLING

The models mentioned below are only a few examples. For more information about customized solutions, please contact TRACTEL® Customer Service and Technical Support.

- WLL varying from 300 to 3,000 kg
- Unlimited wire rope length
- Compact size
- Equipped with a standard emergency descent system
- Overload protection (≥1,000 kg)



model	WLL (kg)	lifting speed (m/min)	power (f / VAC / Hz)	power (kW)	wire rope Ø (mm)	weight (kg)	code
X300		9	3 / 400 / 50	0.5	8.3	27	188639
X302	300	18	3 / 400 / 50	0.9	8.3	27	188649
X301		9	1/230/50	0.5	8.3	29	188659
X400		9	3 / 400 / 50	0.9	8.3	29	188669
X402	400	18	3 / 400 / 50	1.8	8.3	31	188679
X403	400	9-18	3 / 400 / 50	0.9-1.8	8.3	35	188689
X401		9	1/230/50	0.9	8.3	32	188699
X500		9	3 / 400 / 50	0.9	8.3	40	188709
X501	500	18	3 / 400 / 50	1.8	8.3	43	188719
X502	500	9-18	3 / 400 / 50	0.9-1.8	8.3	47	188729
X503		9	1/230/50	0.9	8.3	49	188739
X800		9	3 / 400 / 50	1.6	8.3	45	188749
X802	800	18	3 / 400 / 50	3.2	8.3	49	188759
X803	000	9-18	3 / 400 / 50	1.75-3.5	8.3	49	188779
X805		4.5-9	3 / 400 / 50	0.8-1.6	8.3	50	188769
X1020		9	3 / 400 / 50	1.9	9.5	45	188789
X1023	980	9-18	3 / 400 / 50	1.9-3.8	9.5	56	188819
X1025	980	4.5-9	3 / 400 / 50	0.9-1.9	9.5	55	188799
X1026		4.5-18	3 / 400 / 50	0.9-3.8	9.5	71	188809
T1020		9	3 / 400 / 50	1.9	9.5	71	188829
T1023	980	9-18	3 / 400 / 50	1.9-3.8	9.5	85	188859
T1025	900	4.5-9	3 / 400 / 50	0.9-1.8	9.5	84	188839
T1026		4.5-18	3 / 400 / 50	1.9-3.8	9.5	94	188849
X1530	1,500	9	3/400/50	2.8	10.2	49	188879
X3050	3,000	6	3/400/50	3.8	14.3	105	188889
X3052	3,000	12	3 / 400 / 50	7.5	14.3	117	188899

The above-mentioned  $Tirak^{TM}$  models have a standard integrated control box and control pendant (Up-Down-Emergency Stop) with a 1.5 m cable.

Excluding Maxiflex wire rope. See page 28 and 29 for wire ropes and other accessories.

The Maxiflex wire rope has been developed especially for optimal use guaranteed by Tractel®, in combination with the Tirak™ hoists.

## TIRAK™ MAN-RIDING HOIST

The models mentioned below are only a few examples. For more information about customized solutions, please contact TRACTEL® Customer Service and Technical Support.

- WLL varying from 300 to 2000 kg
- Unlimited wire rope length
- Compact size
- Equipped with a standard emergency descent system
- Integrated mechanical overload protection in conformity with EN1808

Man-riding transport: Tirak™ for central control



Man-riding transport: Tirak™ with control pendant



model	WLL (kg)	lifting speed (m/min)	power (f / VAC / Hz)	power (kW)	wire rope Ø (mm)	weight (kg)	code <sup>1)</sup>	code <sup>2)</sup>
X300P		9	3 / 400 / 50	0.5	8.3	28	188189	188209
X301P	300	9	1/230/50	0.5	8.3	29	188229	188239
X302P		18	3 / 400 / 50	0.9	8.3	28	188199	113059
X400P		9	3 / 400 / 50	0.9	8.3	29	188259	188269
X401P	400	9	1/230/50	0.9	8.3	32	188329	188339
X402P	400	18	3 / 400 / 50	1.8	8.3	31	188279	188289
X403P		9-18	3 / 400 / 50	0.9-1.8	8.3	35	188299	188319
L500P		9	3 / 400 / 50	0.9	8.3	29	188349	188359
X500P		9	3 / 400 / 50	0.9	8.3	41	188379	188399
X501P	500	9	1/230/50	0.9	8.3	49	188439	188449
X502P		18	3 / 400 / 50	1.8	8.3	44	188389	188409
X503P		9-18	3 / 400 / 50	0.9-1.8	8.3	51	188419	188429
X820P	000	9	3 / 400 / 50	1.6	9.5	47	188509	188459
X823P	- 800 -	9-18	3 / 400 / 50	1.75-3.5	9.5	53	188519	188469
X1030P	1.000	9	3 / 400 / 50	1.8	10.2	47	188549	188589
X1033P	1,000 -	9-18	3 / 400 / 50	1.9-3.6	10.2	58	188559	188599
X2050P		6	3 / 400 / 50	2.2	14.3	100	188569	188609
X2052P	2,000	9-12	3 / 400 / 50	5.5	14.3	117	188579	188619
X2058P		18	3 / 400 / 50	7.5	14.3	117	-	212509

<sup>1)</sup> code for connection to central control

Excluding Maxiflex wire rope. See page 28 and 29 for wire ropes and other accessories.

The Maxiflex wire rope has been developed especially for optimal use guaranteed by Tractel®, in combination with the Tirak $^{\text{TM}}$  hoists. If the hoist is used for man-riding, a lifting and safety rope with secondary safety device must be present at all times, in accordance with the Machinery Directive.

The extremely reliable Tractel® Blocstop™ can be deployed as a secondary safety device on the safety cable.

The CE certificate supplied with a  $Tirak^T man$ -riding hoist shall apply to the product as a whole. After any modification or addition, the entire product must be certified again.

<sup>&</sup>lt;sup>2)</sup> code with control pendant (UP/DOWN/ EMERGENCY STOP)

## TIRAK™ with cable reel

Because of its unique design, the  $Tirak^{TM}$  can be used without a cable reel. The end of the cable will hang freely.

If this situation is undesirable, a cable reel can be used to safely wind and store the wire rope.

Three different cable reels are available:

- Free-running cable reel
- Driven cable reel (directly by Tirak<sup>™</sup> drive shaft)
- Cable reel driven by a separate electric motor (very long lengths)

The models mentioned below are only a few examples. For more information about customized solutions, please contact TRACTEL® Customer Service and Technical Support.

- WLL varying from 300 to 3,000 kg
- Storage capacity up to 520 m

list

- Choice between material handling or man-riding application
- Compact size

free-running cable reel cable reel with electric motor





driven cable reel

GM = driven by a separate electric motor
optional GM = optional electric motor
others = directly driven by Tirak™ drive shaft

(xxx m) = max. usable length

Γ	IIST	٦	Γ	tree-runnin	g cable reel	٦	Γ ()	(xx m) = max.	usable lengti	ן ד
model	WLL (kg)	wire rope Ø (mm)	ø 350 mm (m)	ø 400 mm (m)	ø 450 mm (m)	ø 600 mm (m)	90 m (plastic) (m)	120 m (opt. GM) (m)	220 m (opt. GM) (m)	320 m (opt. GM) (m)
X300	300	8.3	40	60	-	-	90 (75)	-	-	-
X400	400	8.3	40	60	-	-	90 (75)	-	-	-
X310	300	6	60	80	-	-	160 (140)	-	-	-
X510	350	6	60	80	-	-	160 (140)	200 (189)	360 (341)	520 (492)
X500	500	8.3	40	60	80	-	90 (75)	120 (110)	220 (205)	320 (300)
L500	500	8.3	40	60	-	-	-	-	-	-
X600	600	8.3	40	60	80	-	90 (75)	120 (110)	220 (205)	320 (300)
X800	800	8.3	40	60	80	-	90 (75)	120 (110)	220 (205)	320 (300)
X520	500	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X620	600	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X820	800	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X1020	980	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X1220	1,250	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X1030	1,000	10.2	27	40	55	-	-	80 (70)	150 (135)	220 (200)
X1530	1,500	10.2	27	40	55	-	-	80 (70)	150 (135)	220 (200)
X2050	2,000	14.3	-	-	40	110	-	55 (G)	65 (G)	-
X3050	3,000	14.3	-	-	40	110	-	55 (G)	65 (G)	-
X300P	300	8.3	40	60	-	-	90 (75)	-	-	-
X400P	400	8.3	40	60	-	-	90 (75)	-	-	-
X500P	500	8.3	40	60	80	-	90 (75)	120 (110)	220 (205)	320 (300)
X520P	500	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X620P	600	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X820P	800	9.5	33	50	65	-	70 (55)	95 (85)	170 (155)	250 (230)
X1030P	1,000	10.2	27	40	55	-	-	80 (70)	150 (135)	220 (200)
X2050P	2,000	14.3	-	-	40	110	-	55 (G)	65 (G)	-

free-running cable reel

Excluding Maxiflex wire rope. See page 28 and 29 for wire ropes and other accessories.

The Maxiflex wire rope has been developed especially for optimal use guaranteed by  $Tractel^{\circ}$ , in combination with the  $Tirak^{TM}$  hoists. If the hoist is used for man-riding, a lifting and safety rope with secondary safety device must be present at all times, in accordance with the Machinery Directive.

The extremely reliable Tractel® Blocstop™ can be deployed as a secondary safety device on the safety cable.

# TIRAK™ MOBILE WINCH in frame with cable reel

The Tirak™ Mobile Winch has a very robust frame for optimal protection of the Tirak™ and the cable reel.

The frame can be easily transported by using the lifting eyes. The device is supplied with a control pendant and a lifting eye to anchor the  $Tirak^{TM}$  to an anchor point.

cable reel on drive shaft

The models mentioned below are only a few examples.

For more information about customized solutions, please contact TRACTEL® Customer Service and Technical Support.

- WLL varying from 350 to 2,000 kg
- Storage capacity up to 1,000 m
- Also available in a double reel version (2 wire ropes)
- Choice between material handling or man-riding application
- Very robust
- Equipped with lifting eyes

list

free-running cable reel



cable reel with electric motor



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freerunning cable reel driven cable reel
GM = driven by a separate electric motor
others = directly driven by Tirak™ drive shaft
(xxx m) = max. usable length

model	WLL (kg)	wire rope Ø (mm)	MW (m)	MW 120 m (m)	MW 220 m (m)	MW 300 m GM (m)	MW 500 m (m)	MW 800 m GM (m)	MW 1000 m GM (m)
X510	350	6	80	200 (189)	360 (341)	-	820 (793)	-	-
X500	500	8.3	60	120 (110)	220 (205)	-	500 (480)	-	1000 (987)
X600	600	8.3	60	120 (110)	220 (205)	-	500 (480)	-	1000 (987)
X800	800	8.3	60	120 (110)	220 (205)	-	500 (480)	-	1000 (987)
X520	500	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X620	600	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X820	800	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X1020	980	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X1220	1,250	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X1030	1,000	10.2	40	80 (70)	150 (135)	-	350 (333)	-	700 (686)
X <b>1</b> 530	1,500	10.2	40	80 (70)	150 (135)	-	350 (333)	-	700 (686)
X2050	2,000	14.3	40 / 110	-	-	300 (287)	-	-	-
X3050	3,000	14.3	40 / 110	-	-	300 (287)	-	-	-
X500P	500	8.3	60	120 (110)	220 (205)	-	500 (480)	-	1,000 (987)
X520P	500	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X620P	600	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X820P	800	9.5	50	95 (85)	170 (155)	-	400 (380)	-	800 (780)
X1030P	1,000	10.2	40	95 (85)	170 (155)	-	350 (333)	-	700 (686)
X2050P	2,000	14.3	40 / 110	-	-	300 (287)	-	800 (765)	-

Excluding Maxiflex wire rope. See page 28 and 29 for wire ropes and other accessories. The Maxiflex wire rope has been developed especially for optimal use guaranteed by  $Tractel^{\circ}$ , in combination with  $Tirak^{\mathsf{TM}}$  hoists, and can be used under the most extreme circumstances.

If the hoist is used for man-riding, a lifting and safety rope with secondary safety device must be present at all times, in accordance with the Machinery Directive. The extremely reliable  $Tractel^{\otimes}$  Blocstop<sup>TM</sup> can be deployed as a secondary safety device on the safety cable.

# TIRAK™ wire rope

### MAXIFLEX WIRE ROPE, STANDARD

The Maxiflex wire rope has been developed especially for optimal use guaranteed by Tractel®, in combination with Tirak™ hoists, and can be used under the most extreme circumstances. Upon request also available on a drum reel and in any required length.

- Developed especially for Tirak<sup>™</sup>
- Supplied on a transport reel.
- Including certificate
- Standard version with tip and hook
- Hook with safety catch
- Available in any required length



length (m)	code ø 8.3	price	code ø 9.5	price	code ø 10.2	price	code ø 14.3
20	490540	139.33	491520	150.56	493590	183.15	496050
30	490600	188.76	491540	203.37	493620	246.07	496060
40	490680	237.08	491560	257.30	493650	308.99	496070
50	490730	283.08	491590	310.11	493670	371.99	496080
60	490760	333.71	491600	361.80	493680	433.71	496090
70	490810	383.15	491610	415.73	493700	497.75	496100
80	490840	431.46	491640	468.54	493720	559.55	496120
90	490880	480.90	491650	519.10	493730	623.60	496130
100	490890	528.09	491670	573.04	493750	684.27	496140

#### MAXIFLEX NON-ROTATING WIRE ROPE

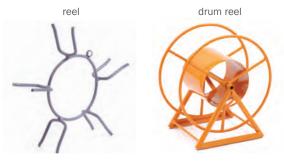
The Maxiflex non-rotating wire rope has been developed especially to prevent non-guided loads from rotating if they are suspended freely in the air. Upon request the non-rotating wire rope will be produced and manufactured especially for you. The Maxiflex wire rope is guaranteed by Tractel<sup>®</sup>, in combination with Tirak<sup>™</sup> hoists, and can be used under the most extreme circumstances.

- Non-rotating rope for non-guided loads
- Developed especially for Tirak<sup>™</sup>
- Including certificate
- Available in any required length
- Standard version with tip and hook
- Hook with safety catch

length (m)	code ø 8.3	price	code ø 9.5	price	code ø 10.2	price	code ø 14.3
50	492630	538.20	498010	656.18	499070	875.28	

## TIRAK™ accessories

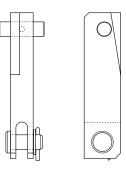
### MAXIFLEX WIRE ROPE REELS



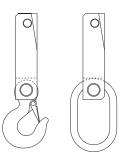
		max. wire rope length (m	)		
model	C8 ø 8.3 (m)	C12 ø 11.5 (m)	C16 ø 16.3 (m)	code	
reel No. 0	max. 25			463110	
reel No. 1	26 - 50	max. 25		463120	
reel No. 2	51 - 75	26 - 50	max. 25	463140	
reel No. 3	75 - 100	51 - 75	26 - 50	463130	
drum reel 200	76 - 150	51 - 75	26 - 50	000878	
drum reel 300	151 - 200	76 - 150	51 - 75	000868	
drum reel 400	201 - 300	max. 200	max. 100	000858	

### SUSPENSION ADAPTERS FOR TIRAK™ HOISTS

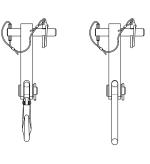
type A suspension adapter



type B suspension adapter



type C suspension adapter



model	description	for	code
A	suspension adapter	X300-X1530	048657
В	suspension adapter with hook	X300-X1530	048727
В	suspension adapter with eye	X300-X1530	048717
С	suspension adapter with removable hook	X300	180157
С	suspension adapter with removable eye	X300	180167
С	suspension adapter with removable hook	X500-X1530	058527
С	suspension adapter with removable eye	X500-X1530	058537

### AIR PREPARATION UNIT FOR TIRAK™ XA HOISTS



description	code
air preparation unit for 1 XA series hoist	008368
air preparation unit for 2 XA series hoist	008378

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