MANUAL TROLLEY

From 250 to 10.000 kg



OWNER'S MANUAL

1) « CE » certificate

VERNOUILLET France As defined by the EC directive relating to machinery 98/37/EEC.

Annex II B

Herewith, we declare that the product:

•	•	•	•	L	•	•	•	•	•	•	•	•		•	•		End carriage
•	•		•			•	•	•	•	•	•	•			•		Manual trolley
•	•		•	•		•	•	•	•	•	•	•	•	•	•	ш	Electrical cubicle
				•		•	•		•	•					•	O	Seared motor
			•			•	•		•	•	•	•		•	•		Light crane system
							•		•	•					•	V	Janual winch

- $\ \square$ is to be used fro incorporation in an other machine
- □ being assembled with other machines to produce a single machine. It can not be put into use until the machine in which it is incorporated has been declared as conforming with the provisions of Directive 98/37 EEC

Complies with the following provisions applying to it:

- Machinery directive 98/37/EEC.
- Directive 73/23/CEE.
- "EMC" Directive 89/336/EEC

Applied harmonized standards, in particular:

- EN 60204-1,
- EN 292, parts 1 and 2 (safety of the machines).

National regulations, standards and specifications:

- order of June 9, 1993 / circular of September 22, 1993.
- decree no. 92-765, 92-766, 92-767, of July 29, 1992.
- DIN 15400; DIN 15401,

Quality system applied:

- EN29001/ISO9001

Technical standards and specifications complied with, in particular:

- FEM 9.511 "classification of the mechanisms".
- FEM 9.661 "dimensions and quality of the drive and cable lifting block elements for mass-produced lifting devices".
- EN 818 "chain quality, choice criteria and technical requirements".
- FEM 9.683 "choice of motors".
- FEM 9.755 "steps to be taken to determine the operating periods for mass-produced motorized lifting mechanisms (S.W.P.)".
- FEM 9.751 "Motorized lifting mechanism: safety"
- FEM 9.901 "bases of design for the mass-produced lifting devices for travelling cranes equipped with mass-produced lifting devices".

Bernard DELEFOSSE

WARNING

The company reserves the right to modify or improve the material described below and, in this case, to supply it different to the illustrations or specifications in this manual.

GUARANTEE OF MANUAL TROLLEYS

Our equipment is guaranteed for a period of 1 year from the date of delivery for manually-operated equipment.

If delivery is delayed for a reason beyond the control of the seller, the difference in date cannot be in excess of 3 months.

If the utilization (installation) of the equipment is delayed, the extension of the guarantee is limited to 3 months, non-cumulative, to be requested with written agreement.

The seller undertakes to remedy any operating vice resulting from a fault in the design, or implementation, or the components or the materials themselves.

The guarantee does not cover wear and tear*, nor accidents resulting from a lack of regular and periodical upkeep, it does not cover deterioration due to a lack of surveillance, incorrect manipulations or poor operation of the equipment, in particular overloading, pulling sideways.

The guarantee does not apply each time dismantling, modification or changing of parts is carried out without our agreement or by a non-authorized agent.

The guarantee only applies to original spare parts from the constructor including lifting chains.

During the guarantee period, the seller must, free of charge, replace or repair parts recognized as defective after examination by his qualified and authorized engineering department.

The guarantee excludes all other payment or compensation. Under the guarantee, the repairs are in principle carried out int the workshops of the seller or his agent authorized by the constructor. When work is carried out on the material outside these workshops, the manpower costs related to the dismantling or reassembly of these parts are borne by the seller when these operations are carried out solely by his staff or an agent authorized by the constructor. The replaced parts become the property of the seller and must be returned to him at his charge.

For components of special relative importance and not manufactured by the seller himself, and which carry the trademark of specialized constructors, the guarantee, which can vary depending on the constructor, is that which is issued by the latter.

- * The guarantee does not apply to wearing parts defined by the constructor, see the following list:
 - Travelling chain,
 - Travelling hand wheel,
 - Coupling part or traversing parts,
 - Travelling wheels,

2) What not to do

Never move or lift the machine by the electric cables.

Do not set down the machine without having an adapted support, to avoid damaging the sensitive sides.

Do not let the machine drop.

Never modify the machine unless the constructor has studied and authorized the modification.

Never modify the values and adjustments of the safety components, outside the limits provided for in the manual, or without the approval of the constructor.

Never try to repair or intervene on the machine (welding...) without the authorization of the constructor or a trained maintenance agent.

Never shunt the disconnect switches, electric switches, prevention or limitation equipment.

Do not let an unqualified person use the machine.

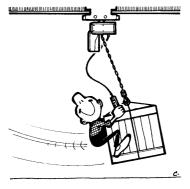


Do not let an unqualified person use the machine.

Never lift more than the maximum working load indicated on the machine. Shocks or accidental collision of the load with objects can cause excess loads.

Never remove the hook safety catches.

Never block, adjust or remove the limit switches or stops to go further to the left or right than these allow.



Never swing the load intentionally.

Never use the machine to extract, loosen, or pull sideways.

Never use the machine to transport people.

Do not touch the moving components.

Do not operate the machine if your physical condition does not allow it.

Never use the machine when in bad repair (wear, deformation...).

Never use suspect spare parts or parts whose origin is not known.

Never swing the load intentionally.

Do not subject the machine to brutal shocks.

Do not use the mechanical stops as a repetitive means of stopping.

Never distract the operator while the machine is being operated.

Never leave a suspended load hanging, if it is not necessary

Never use the machine as an earth reference for welding.

Do not use the machine for a purpose or in an area for which it is not intended.

Do not expose the machine to an aggressive atmosphere (temperature, acidity... Refer to 6.2: Environmental data).

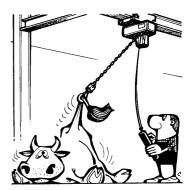
Do not use the safety components as operation components.

Do not use the controls needlessly (avoid inching - stop-start operation of the buttons). This can cause overheating and even damage to the machine.

Never pull the load slantwise. Make sure that the machine is vertical to the load before lifting it.

Do not use the machine with a power supply that is different to the one recommended (undervoltage or overvoltage, absence of phase...).

Never transport a load with people nearby. Do not pass the machine, with or without a load, above a person.



Never pull the load slantwise

3) What to do

Handle the machine by its structure, or by the devices provided for this purpose, or in its original packing.

Store the machine in its normal operating position (without load) away from aggressive atmospheres (dust, humidity...).

Make sure that the machine is always clean and protected from corrosion (*lubrication...*).

The machine should be installed by a technician with the necessary competence.

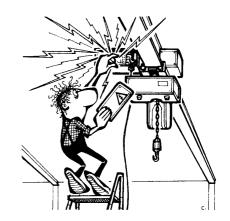
Make sure that the machine attaching structure is rigid.

Make sure that the safety rules are followed (harness, clearance of work areas, posting up of instructions to be followed in the area...).

Neutralize the power sources.

Comply with the distance between the trolley and the raceway.

Connect the feed cable directly to the supply terminal board in the electric box.



Make sure that the machine is always clean.

Set up an inspection program and record all of the maintenance operation for the machines, in particular: *the brake, limit switches, fastening beam...*

Replace any element that is worn or may be defective.

The machine should be maintained regularly, following the instructions in this manual.

Check the operation and adjustment of the safety components (brake, travel limit...) in conformity with the user manual.

Regularly check the machine.

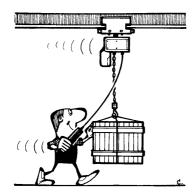
If a deformation or unusual wear is noted, the parts must be changed.

Check that the assembly elements are correctly tightened.

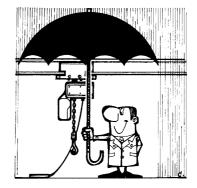
Check that the strands of the steel cable supporting the control box fulfill their functions correctly. The electric cable of the box is not a handling cable.

The components should only be replaced by original parts that are compatible with the type of machine.

Before operation, check that the load is correctly fastened and installed. Make sure that the load is correctly balanced before moving it. Pay attention to the center of gravity of the load to be moved.



If manually moving the machine, push the load.



Material used outdoors should be protected as well as possible against bad weather conditions

When moving the load, make sure that it is sufficiently raised and distant from the surrounding machines and other objects so as to avoid all obstacles during operation.

If manually moving the machine, push the load.

The prevention instructions to be carried out during the different operations should be well known.

Use the material under normal working conditions (ambient temperature, atmosphere...).

Material used outdoors should be protected as well as possible against bad weather conditions.

Notify the necessary people after a dangerous operation or if the machine seems problematic (*abnormal noise*, *abnormal behavior*...).

CHDNI#[GB]07/05/03

4) Guarantee

Our trolleys are guaranteed for one year from the date of delivery.

If for a reason outside the control of the vendor, the delivery is delayed, the time lag cannot exceed three months.

If the use *(installation)* of the machine is delayed, the corresponding extension of the guarantee (a single extension limited to three months) must be requested, and written confirmation obtained.

The vendor undertakes to eliminate all operating errors originating from the concept, the execution, the components or the materials themselves.

The guarantee does not cover normal wear*, nor the failures resulting from lack of regular and periodic maintenance. It does not cover damage due to a lack of supervision to a bad utilization of the machines, particularly due to overload conditions, slantwise drawing.

The guarantee does not apply when there is disassembly, modification or replacement of parts *(mechanical)* by an unauthorized party or without our prior agreement.

The guarantee only applies for original, factory-installed spare parts.

For the duration of the guarantee, the vendor undertakes to replace or repair, free of charge, the parts that are acknowledged to be damaged following examination by a qualified and authorized technical service.

The guarantee excludes any other services or indemnities.

The repairs covered by the guarantee are carried out, as a rule, in the workshops of the vendor or authorized agent. When servicing of the equipment is done outside these workshops, the labor costs for disassembly or assembly of these parts are borne by the vendor when these are done exclusively by his staff or by an authorized agent. The replaced parts become the property of the vendor and must be returned to the vendor at his expense.

For components of a relative particular importance that are not manufactured by the vendor and which carry the brand name of specialized manufacturers, the manufacturer's guarantee (which can vary according to the manufacturer) is applicable.

- * The guarantee does not apply for expendable parts defined by the manufacturer:
 - Rubber Buffer
 - Wheels
 - Driven shaft

<u>5) General</u>

5-1 Acceptance of the material

Carry out a visual inspection of the packing to ensure that it is intact.

If it is not, issue the appropriate notifications.

Check that the trolley corresponds to your order.

5-2 Installation

The service life of a trolley depends on the way in which it is installed.

It is essential that the instructions in this manual are followed carefully for the installation, use, and maintenance of your machine.

Any use contrary to our instructions may be dangerous. In this case, the manufacturer will not accept any liability.

Do not use the machine without having read and understood the whole of the instruction manual.

Always keep the manual close to the machine, available to the operator and to the person responsible for maintenance.

Make sure that the safety rules are followed (harness, clearance of work area, posting of instructions to be followed in the work area, etc.).

The trolley can be adapted to all runaway profiles. Couple or hook on the hoist after installation of the trolley.



Check the width of the runaway rail and adapt the spacing of the flanges of the trolley as indicated in the tables

Make sure:

- * That the profile is secured.
- * That the profile is suitable to the loads to be supported.
- * That the dimensions are compatible with the trolley which is to be installed.

Carry out:

- 1 Disassembly of the trolley
 - Remove the side plate on the counterweight side
 - Position the trolley on the beam
 - Refit the side plate.

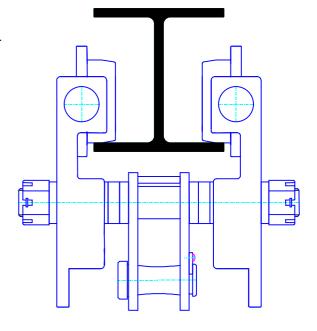
Check that all the nuts are correctly tightened.

- 2 Without disassembly of the trolley
 - Install the trolley on the profile, by the end
 - Fit the travel limit stops (not provided) at the end of the runway.

Check that all the nuts are correctly tightened.

On the curved profiles, the driving wheels should for preference be positioned on the outside of the curve.

Curve radius = 2 meters



VERY IMPORTANT!See side plate setting table (3)

Note:

Coupling part center must be located in the center of the beam .

6) Introduction / Presentation

The manual granty crabs make it possible to suspend any type of lifting equipment provided with a hook, lifting loads of 250 to 10,000 kg.

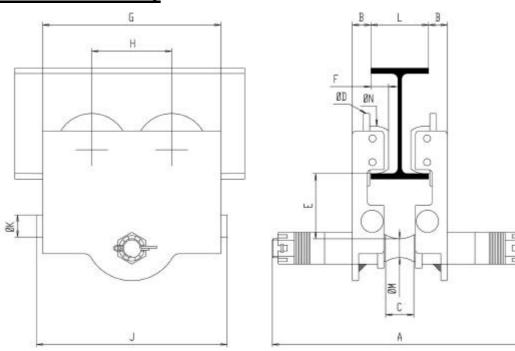
7) - Brief description of manual gantry crab

The crab is comprised of:

- 2 flanges, in sheet steel,
- 4 rollers mounted on ball bearings with detachable axles and rolling rims profiled to roll on any type of iron monorail,
- 1 cross-bar for hook or coupling, in steel, ensure the bracing of the assembly.

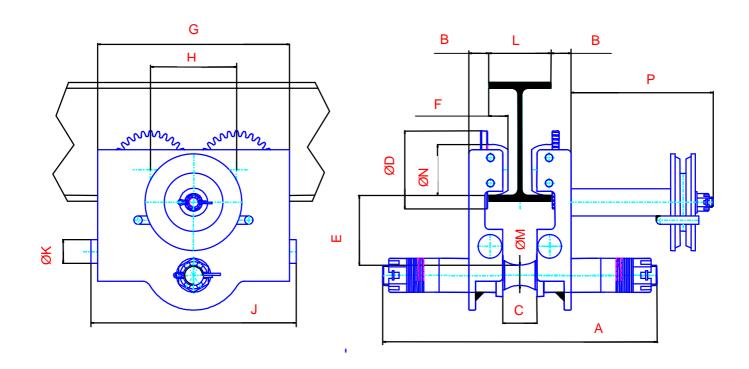
8) - Characteristics - Dimensions

Push travel trolley



Capacity	Beam width	Α	В	С	ØD	E	F	G	Н	J	ØK	ØМ	ØN
(Kg)	(mm)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
250	50 - 202	284	19	33	74	60	10	170	80	190	24	15	50
500	50 - 200	304	19	32	79	62	18	185	84	202	24	20	55
500	188 - 310	410	19	32	79	62	18	185	84	202	24	20	55
1000	65 - 200	336	25.5	40	92	82	23	225	101	241	28	24	60
1000	200 - 310	4.36	25.5	40	92	82	23	225	101	241	28	24	60
2000	88 - 200	340	27	42	104	97	20	272	116	288	35	30	76
2000	188 - 310	448	27	42	104	97	20	272	116	288	35	30	76
3000	100 - 202	362	32	48	131	140	23	338	144	358	45	28	96
3000	188 - 310	470	32	48	131	140	23	338	144	358	45	28	96
5000	144 - 202	384	48	55	144	161	28	355	158	375	45	35	108
5000	188 - 310	490	48	55	144	161	28	355	158	375	45	35	108
6300	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132
6300	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132
7500	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132
7500	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132
10000	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132
10000	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132

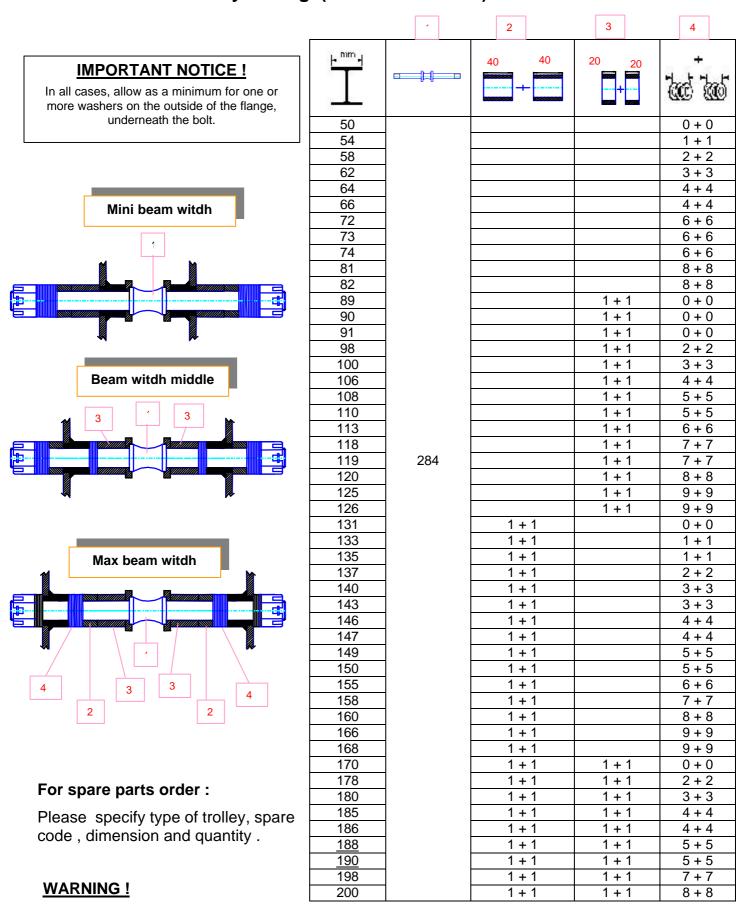
Chain travel trolley



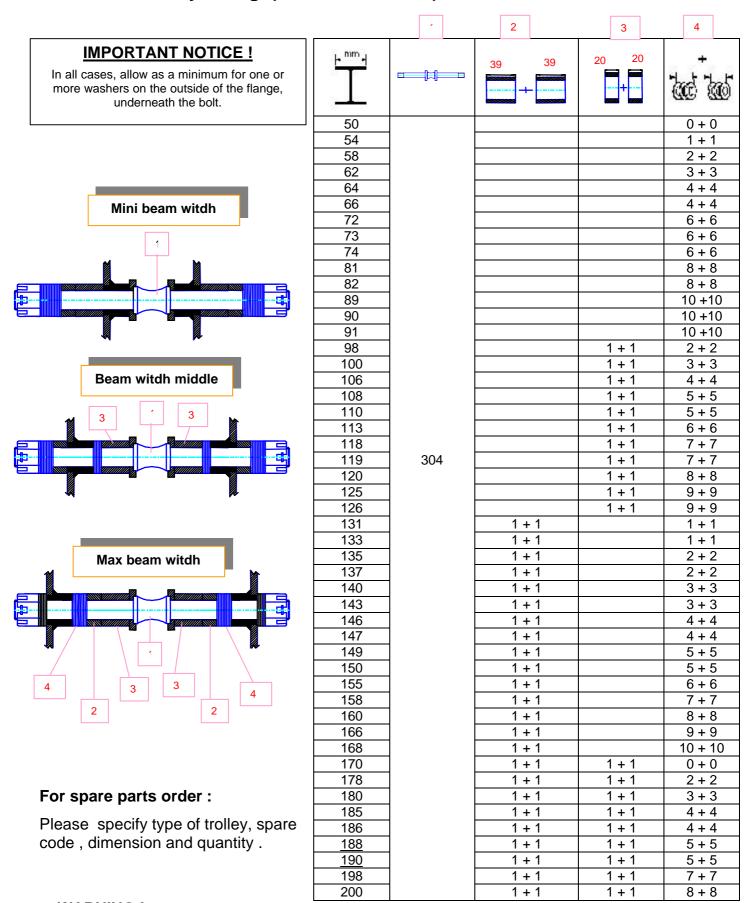
Capacity	Beam width	Α	В	С	ØD	Е	F	G	Н	J	ØK	ØM	ØN	Р
(Kg)	(mm)	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
1000	65 - 200	336	25.5	40	92	82	23	225	101	241	28	24	60	146
1000	200 - 310	4.36	25.5	40	92	82	23	225	101	241	28	24	60	146
2000	88 - 200	340	27	42	104	97	20	272	116	288	35	30	76	146
2000	188 - 310	448	27	42	104	97	20	272	116	288	35	30	76	146
3000	100 - 202	362	32	48	131	140	23	338	144	358	45	28	96	37.5
3000	188 - 310	470	32	48	131	140	23	338	144	358	45	28	96	37.5
5000	144 - 202	384	48	55	144	161	28	355	158	375	45	35	108	37.5
5000	188 - 310	490	48	55	144	161	28	355	158	375	45	35	108	37.5
6300	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132	80
6300	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132	80
7500	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132	80
7500	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132	80
10000	124 - 200	408	49	70	176	209	39,5	434	200	454	46	50	132	80
10000	200 - 310	514	49	70	176	209	39,5	434	200	454	46	50	132	80

9) Adjustment of the flanges

Push travel trolley 250 kg (Beam: 50 to 200)



Push travel trolley 500 kg (Beam: 50 to 200)

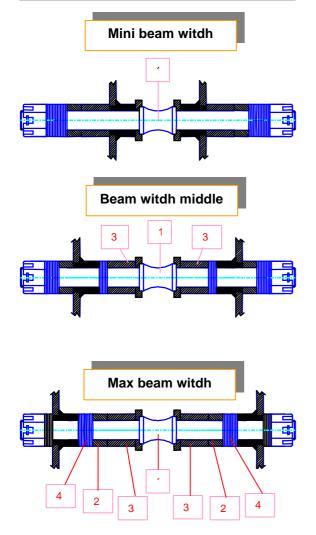


WARNING!

Push travel trolley 500 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



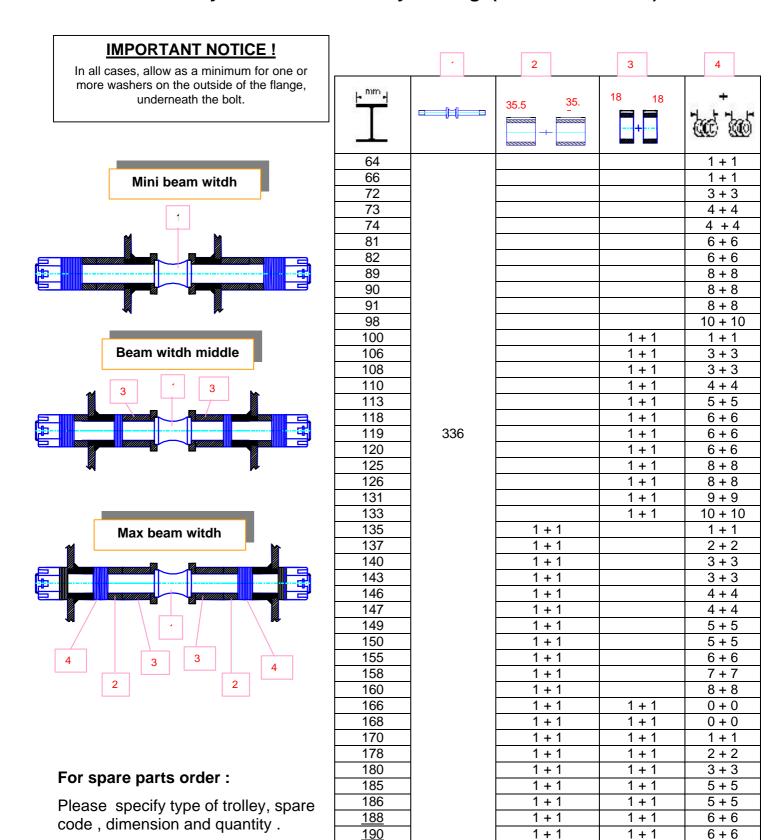
	1	2	3	4
H-mm-H		24 24	20 20	* ************************************
188				0 + 0
190				0 + 0
198				2 + 2
200				3 + 3
205				4 + 4
210				5 + 5
215				7 + 7
218				7 + 7
220				8 + 8
226				9 + 9
240		1 + 1		1 + 1
248	410	1 + 1		3 + 3
260		1 + 1		6+6
268		1 + 1		8 + 8
280		1 + 1	1 + 1	1 + 1
288		1 + 1	1 + 1	3 + 3
300		1 + 1	1 + 1	6+6
302		1 + 1	1 + 1	6+6
303		1 + 1	1 + 1	7 + 7
304		1 + 1	1 + 1	7 + 7
305		1 + 1	1 + 1	7 + 7
306		1 + 1	1 + 1	7 + 7
304		1 + 1	1 + 1	8 + 8
308		1 + 1	1 + 1	8 + 8
309		1 + 1	1 + 1	8 + 8
310		1 + 1	1 + 1	9 + 9

For spare parts order:

Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley & Chain travel trolley 1000 kg (Beam: 64 to 200)



WARNING!

The above settings are given as information, still it should be checked that the gap between the beam and the wheel flange is less than 3 mm.

1 + 1

1 + 1

1 + 1

1 + 1

8 + 8

9 + 9

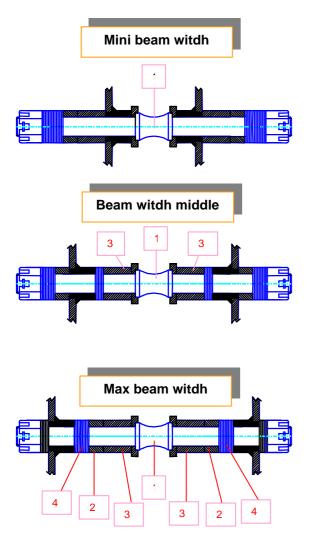
198

200

Push travel trolley & Chain travel trolley 1000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3	4
I I		24. 24.5	18 18	# # # # # # # # # # # # # # # # # # #
188				2 + 2
190]			2 + 2
198				5 + 5
200				5 + 5
205				6+6
210				8 + 8
215			1 + 1	0 + 0
218			1 + 1	0 + 0
220			1 + 1	1 + 1
226			1 + 1	2 + 2
240		1 + 1		3 + 3
248	436	1 + 1		5 + 5
260		1 + 1		8 + 8
268		1 + 1	1 + 1	1 + 1
280		1 + 1	1 + 1	4 + 4
288		1 + 1	1 + 1	6 + 6
300		1 + 1	1 + 1	9 + 9
302		1 + 1	1 + 1	10 + 10
303		1 + 1	1 + 1	10 + 10
304		1 + 1	1 + 1	10 + 10
305		1 + 1	1 + 1	10 + 10
306		1 + 1	1 + 1	10 + 10
304		1 + 1	1 + 1	11 + 11
308		1 + 1	1 + 1	11 + 11
309		1 + 1	1 + 1	11 + 11
310		1 + 1	1 + 1	12 + 12

For spare parts order:

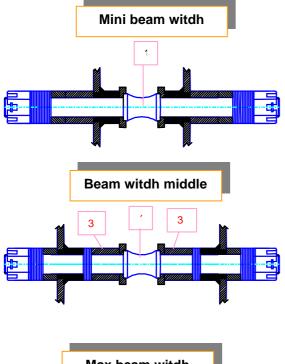
Please specify type of trolley, spare code, dimension and quantity.

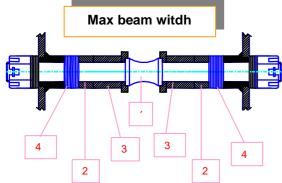
WARNING!

Push travel trolley & Chain travel trolley 2000 kg (Beam: 89 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.





For spare parts order:

Please specify type of trolley, spare code, dimension and quantity.

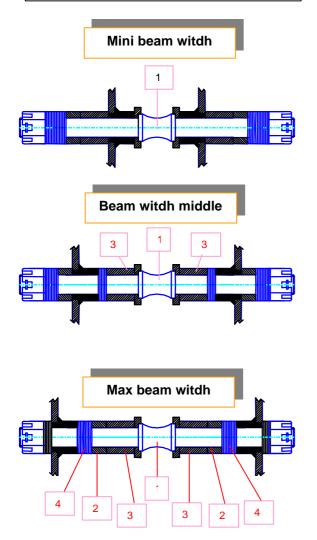
		2	3	4
ŀ ^{mm} Ⅎ	n. a	29 29	15 15	+
1		+		W W
89				0 + 0
90				0 + 0
91				1 + 1
98				2 + 2
100				3 + 3
106				4 + 4
108				5 + 5
110				5 + 5
113				6+6
118				7 + 7
119				8 + 8
120			1 + 1	0 + 0
125			1 + 1	2 + 2
126			1+1	2 + 2
131			1+1	3 + 3
133			1+1	3 + 3
135			1+1	4 + 4
137	0.40		1+1	5 + 5
140	340		1+1	6+6
143			1+1	6+6
146			1+1	7 + 7
147		4 . 4	1 + 1	7 + 7
149		1 + 1		1+1
150 155		1 + 1		1+1
158		1 + 1 1 + 1		2 + 2 3 + 3
160		1 + 1		3+3
166		1 + 1		5+5
168		1 + 1		5+5
170		1 + 1		6+6
178		1 + 1	1 + 1	0+0
180		1 + 1	1 + 1	1 + 1
185		1 + 1	1 + 1	2 + 2
186		1 + 1	1 + 1	2 + 2
188		1 + 1	1+1	3+3
<u>190</u>		1 + 1	1+1	3+3
198		1 + 1	1+1	5 + 5
200		1 + 1	1 + 1	6+6

WARNING!

Push travel trolley & Chain travel trolley 2000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3	4
<u> </u>		33 33	15 15	+ Table Table
188				0+0
190	-			0+0
198	-			2+2
200	-			3+3
205	-			4 + 4
210	-			5+5
215	-			7+7
218	-			8 + 8
220	-		1 + 1	0+0
226	-		1 + 1	2+2
240	-		1 + 1	5 + 5
248	448		1 + 1	7 + 7
260	1 10	1 + 1		1+1
268	-	1 + 1		3+3
280	-	1 + 1		6+6
288	-	1 + 1	1 + 1	1 + 1
300		1+1	1+1	4 + 4
302	-	1+1	1+1	4 + 4
303	1	1 + 1	1 + 1	5 + 5
304	1	1 + 1	1 + 1	5 + 5
305	1	1+1	1 + 1	5 + 5
306	1	1 + 1	1 + 1	5 + 5
304	1	1 + 1	1 + 1	6+6
308	1	1 + 1	1 + 1	6+6
309	1	1 + 1	1 + 1	6+6
310	1	1 + 1	1 + 1	7 + 7

For spare parts order:

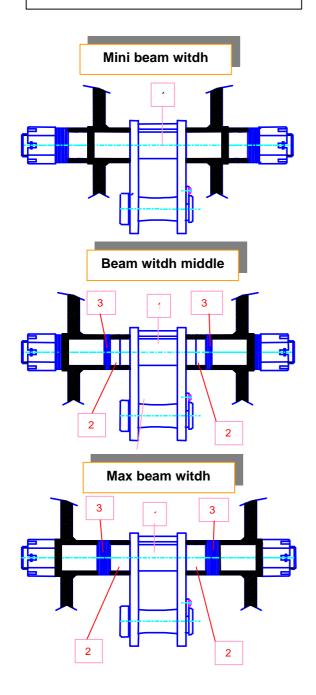
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 3000 kg (Beam: 100 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u>+ mm</u> +		15 15	+ 100 100
100			0 + 0
106			1 + 1
108			2 + 2
110			2 + 2
113			3 + 3
118			4 + 4
119			4 + 4
120			5 + 5
125			6+6
126			6+6
131			7 + 7
133		1 + 1	0 + 0
135		1 + 1	1 + 1
137		1 + 1	2 + 2
140	340	1 + 1	2 + 2
143		1 + 1	3 + 3
146		1 + 1	4 + 4
147		1 + 1	4 + 4
149		1 + 1	4 + 4
150		1 + 1	5 + 5
155		1 + 1	6+6
158		1 + 1	7 + 7
160		2 + 2	0 + 0
166		2 + 2	1 + 1
168		2 + 2	2 + 2
170		2 + 2	2 + 2
178		2 + 2	4 + 4
180		2 + 2	5 + 5
185		2 + 2	6+6
186		2 + 2	6+6
<u>188</u>		2 + 2	7 + 7
<u>190</u>		2 + 2	7 + 7
198		2 + 2	9+ 9
200		2 + 2	10 + 10

For spare parts order:

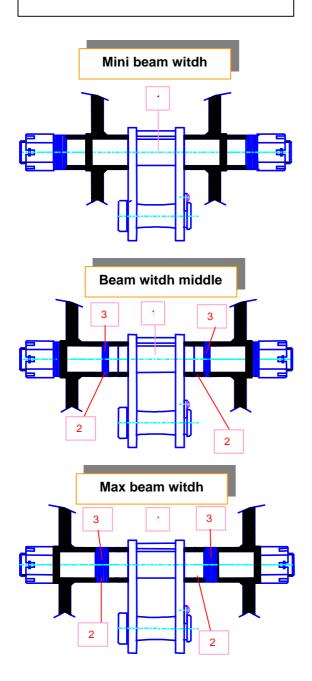
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 3000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> </u>		15 15	## ### ###############################
188			0+0
190			0+0
198			2 + 2
200			3 + 3
205			4 + 4
210			5 + 5
215			7 + 7
218			7 + 7
220			8 + 8
226			9+ 9
240		1 + 1	3 + 3
248	448	1 + 1	5 + 5
260		1 + 1	8 + 8
268		2 + 2	0+0
280		2 + 2	3 + 3
288		2 + 2	5 + 5
300		2 + 2	8 + 8
302		2 + 2	8 + 8
303		2 + 2 2 + 2 2 + 2	9+9
304		2 + 2	9+9
305		2 + 2	9+9
306		2 + 2	9+9
304		2 + 2	10 + 10
308		2 + 2	10 + 10
309		2 + 2	10 + 10
310		2 + 2	10 + 10

For spare parts order:

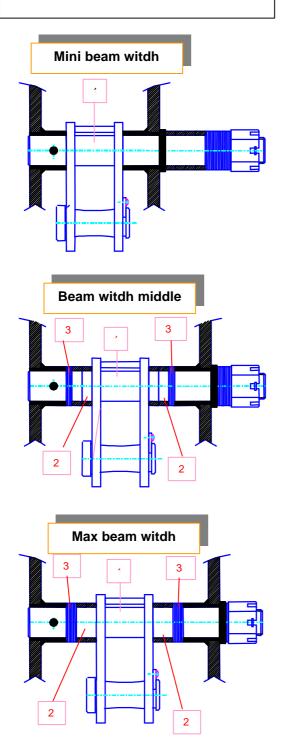
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 3000 kg (Beam: 100 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u>+ mm</u> +		15 15	+ ************************************
100			0+0
106			1 + 1
108			2 + 2
110			2 + 2
113			3 + 3
118			4 + 4
119			4 + 4
120			5 + 5
125			6+6
126			6+6
131			7 + 7
133		1 + 1	0 + 0
135		1 + 1	1 + 1
137		1 + 1	2 + 2
140	340	1 + 1	2 + 2
143		1 + 1	3 + 3
146		1 + 1	4 + 4
147		1 + 1	4 + 4
149		1 + 1	4 + 4
150		1 + 1	5 + 5
155		1 + 1	6+6
158		1 + 1	7 + 7
160		2 + 2	0+0
166		2 + 2	1 + 1
168		2 + 2	2 + 2
170		2 + 2	2 + 2
178		2 + 2	4 + 4
180		2 + 2	5 + 5
185		2 + 2	6+6
186		2 + 2	6+6
<u>188</u>		2 + 2	7 + 7
<u>190</u>		2 + 2	7 + 7
198		2 + 2	9+9
200		2 + 2	10 + 10

For spare parts order:

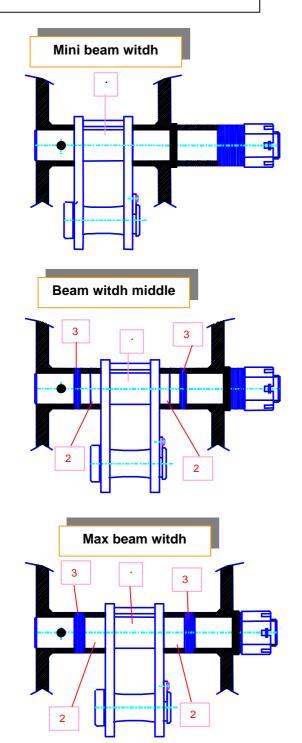
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 3000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u>I mm d</u>		15 15	* ************************************
188			0 + 0
190			0+0
198			2 + 2
200			3 + 3
205			4 + 4
210			5 + 5
215			7 + 7
218			7 + 7
220			8 + 8
226			9+9
240		1 + 1	3 + 3
248	448	1 + 1	5 + 5
260		1 + 1	8 + 8
268		2 + 2	0 + 0
280		2 + 2 2 + 2 2 + 2	3 + 3
288		2 + 2	5 + 5
300		2 + 2	8 + 8
302		2 + 2	8 + 8
303		2 + 2	9 + 9
304		2 + 2 2 + 2	9 + 9
305		2 + 2	9 + 9
306		2 + 2	9 + 9
304		2 + 2 2 + 2	10 + 10
308		2 + 2	10 + 10
309		2 + 2	10 + 10
310		2 + 2	10 + 10

For spare parts order:

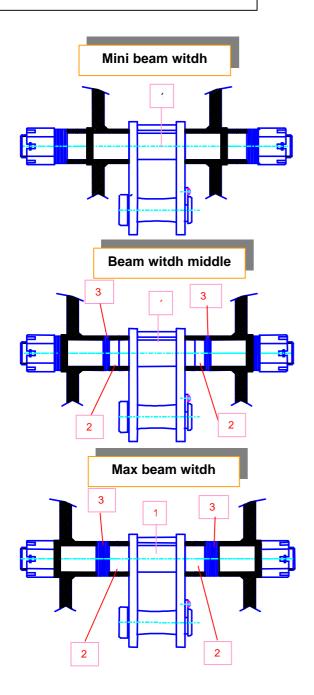
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 5000 kg (Beam: 113 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u>i nim</u> i		14 14	+ ************************************
113			0+0
118			0 + 0
119			1 + 1
120			1 + 1
125			2 + 2
126			3 + 3
131			4 + 4
133			4 + 4
135			5 + 5
137			5 + 5
140	384		6+6
143		1 + 1	0 + 0
146		1 + 1	0 + 0
147		1 + 1	1 + 1
149		1 + 1	1 + 1
150		1 + 1	1 + 1
155		1 + 1	3 + 3
158		1 + 1	4 + 4
160		1 + 1	4 + 4
166		1 + 1	6+6
168		1 + 1	6+6
170		1 + 1	7 + 7
178		2 + 2	1 + 1
180		2 + 2	2 + 2
185		2 + 2	3 + 3
186		2 + 2	4 + 4
<u>188</u>		2 + 2	4 + 4
<u>190</u>		2 + 2	5 + 5
198		2 + 2 2 + 2 2 + 2	7 + 7
200		2 + 2	7 + 7

For spare parts order:

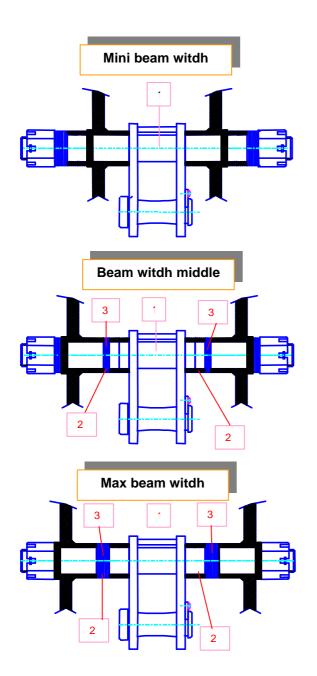
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 5000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> </u>		22 22	**************************************
188			0 + 0
190			0 + 0
198			3 + 3
200			3 + 3 3 + 3
205			4 + 4
210			5 + 5
215			6+6
218			7 + 7
220			8 + 8
226			9 + 9
240		1 + 1	2 + 2
248	490	1 + 1	4 + 4
260		1 + 1	7 + 7
268		1 + 1	9 + 9
280		2 + 2	1 + 1
288		2 + 2	3 + 3
300		2 + 2	6+6
302		2 + 2	6+6
303		2 + 2 2 + 2	6+6
304		2 + 2	7 + 7
305		2 + 2	7 + 7
306		2 + 2	7 + 7
304		2 + 2	7 + 7
308		2 + 2	8 + 8
309		2 + 2	8 + 8
310		2 + 2	8 + 8

For spare parts order:

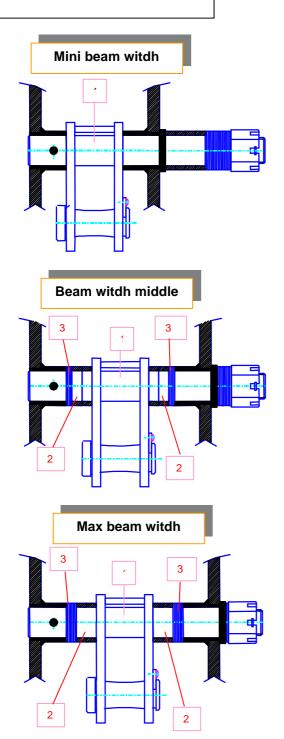
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 5000 kg (Beam: 113 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
i- nim -		14 14	* ************************************
113			0 + 0
118			0 + 0
119			1 + 1
120			1 + 1
125			2 + 2
126			3 + 3
131			4 + 4
133			4 + 4
135			5 + 5
137			5 + 5
140	384		6+6
143		1 + 1	0 + 0
146		1 + 1	0 + 0
147		1 + 1	1 + 1
149		1 + 1	1 + 1
150		1 + 1	1 + 1
155		1 + 1	3 + 3
158		1 + 1	4 + 4
160		1 + 1	4 + 4
166		1 + 1	6+6
168		1 + 1	6+6
170		1 + 1	7 + 7
178		2 + 2	1 + 1
180		2 + 2	2 + 2
185		2 + 2	3 + 3
186		2 + 2	4 + 4
<u>188</u>		2 + 2	4 + 4
<u>190</u>		2 + 2	5 + 5
198		2 + 2	7 + 7
200		2 + 2	7 + 7

For spare parts order:

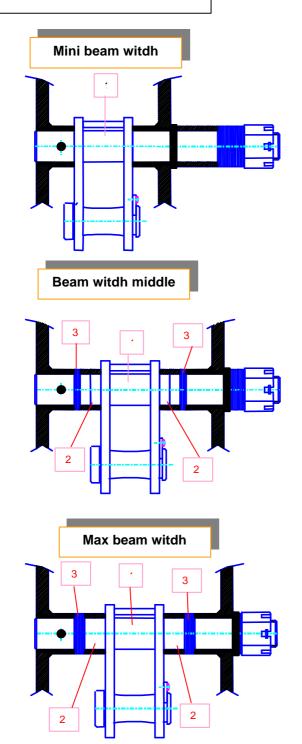
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 5000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
I num d		22 22	** **********************************
188			0+0
190			0+0
198			3 + 3
200			3 + 3
205			4 + 4
210			5 + 5
215			6+6
218			7 + 7
220			8 + 8
226			9 + 9
240		1 + 1	2 + 2
248	490	1 + 1	4 + 4
260		1 + 1	7 + 7
268		1 + 1	9 + 9
280		2 + 2	1 + 1
288		2 + 2 2 + 2	3 + 3
300		2 + 2	6+6
302		2 + 2	6+6
303		2 + 2 2 + 2	6+6
304		2 + 2	7 + 7
305		2 + 2	7 + 7
306		2 + 2	7 + 7
304		2 + 2 2 + 2	7 + 7
308		2 + 2	8 + 8
309		2 + 2	8 + 8
310		2 + 2	8 + 8

For spare parts order:

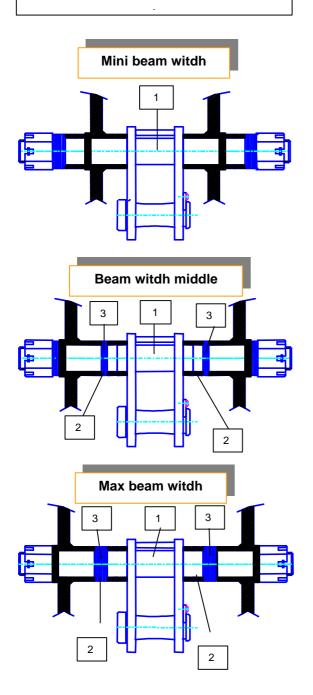
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 6300, 7500 et 10000 kg (Beam: 124 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> - mm - </u>		11,5	8. 8. +
124			0+0
125			0+0
126			0+0
129			1 + 1
133			2 + 2
135			2 + 2
137			3 + 3
140			4 + 4
143			4 + 4
146			5 + 5
147		1 + 1	0+0
149	402	1 + 1	0+0
151		1 + 1	1 + 1
155		1 + 1	2 + 2
158		1 + 1	2 + 2
160		1 + 1	3 + 3
166		1 + 1	4 + 4
168		1 + 1	5 + 5
170		2 + 2	0 + 0
178		2 + 2	2 + 2
180		2 + 2	2 + 2
185		2 + 2	3 + 3
186		2 + 2	4 + 4
188		2 + 2	4 + 4
190		2 + 2	5 + 5
198		2 + 2	7 + 7
200		2 + 2	7 + 7

For spare parts order:

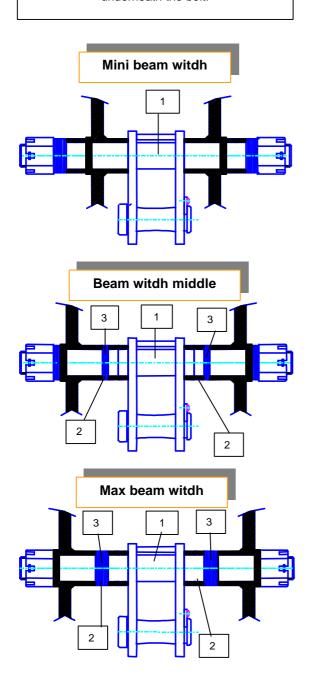
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Push travel trolley 6300, 7500 et 10000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> </u>		22 22	# # #
188			0+0
190			0 + 0
198			2 + 2
200			3 + 3
205			4 + 4
210			5 + 5
215			6+6
218			7+7
220			8 + 8
226		4 4	9+9
240	500	1+1	2 + 2
248	508	1 + 1	4 + 4
260		1 + 1	7 + 7
268		1 + 1	9+9
280		2 + 2	1+1
288		2 + 2	3 + 3
300		2+2	6+6
302		2 + 2 2 + 2 2 + 2	6+6
303		2+2	6+6
304		2 + 2	7+7
305		2 + 2	7+7
306		2 + 2	7+7
304		2 + 2	7+7
308		2 + 2	8 + 8
309		2 + 2	8 + 8
310		2 + 2	8 + 8

For spare parts order:

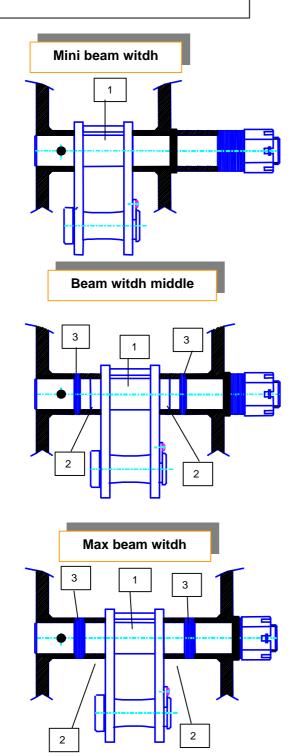
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 6300, 7500 et 10000 kg (Beam: 124 to 200)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> - mm - </u>		11,5 11,5	8. 8. t
124			0+0
125			0+0
126			0+0
129			1+1
133			2 + 2 2 + 2
135			2 + 2
137			3 + 3
140			4 + 4
143			4 + 4
146			5 + 5
147		1 + 1	0 + 0
149	351	1 + 1	0+0
151		1 + 1	1 + 1
155		1 + 1	2 + 2
158		1 + 1	2 + 2
160		1 + 1	2+2 2+2 3+3
166		1 + 1	4 + 4
168		1 + 1	5 + 5
170		2 + 2	0 + 0
178		2 + 2	2 + 2
180		2 + 2 2 + 2	2 + 2
185		2 + 2	3 + 3
186		2 + 2	4 + 4
188		2 + 2	4 + 4
190		2 + 2	5 + 5
198		2 + 2	7 + 7
200		2 + 2	7 + 7

For spare parts order:

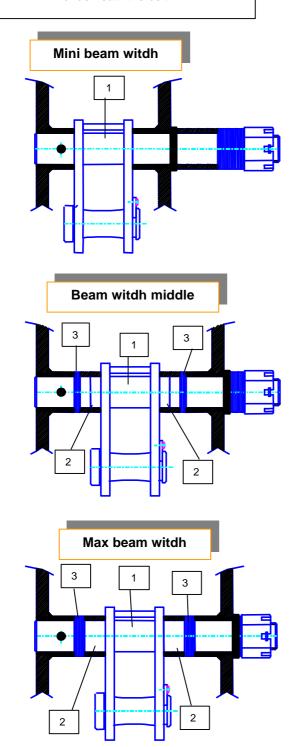
Please specify type of trolley, spare code, dimension and quantity.

WARNING!

Chain travel trolley 6300, 7500 et 10000 kg (Beam: 188 to 310)

IMPORTANT NOTICE!

In all cases, allow as a minimum for one or more washers on the outside of the flange, underneath the bolt.



	1	2	3
<u> </u>		22 22	8. 8. t
188			0+0
190			0 + 0
198			2 + 2
200			3 + 3
205			4 + 4
210			5 + 5
215			6+6
218			7 + 7
220			8 + 8
226			9 + 9
240		1 + 1	2 + 2
248	457	1 + 1	4 + 4
260		1 + 1	7 + 7
268		1 + 1	9 + 9
280		2 + 2	1 + 1
288		2 + 2	3 + 3
300		2 + 2 2 + 2	6+6
302		2 + 2	6+6
303		2 + 2	6+6
304		2 + 2	7 + 7
305		2 + 2	7 + 7
306		2 + 2	7 + 7
307		2 + 2 2 + 2 2 + 2	7 + 7
308		2 + 2	8 + 8
309		2 + 2	8 + 8
310		2 + 2	8 + 8

For spare parts order:

Please specify type of trolley, spare code, dimension and quantity.

WARNING!