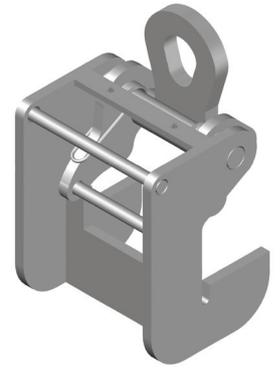


**Operator manual
Crane hook GP-10**





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OPERATOR MANUAL

CRANE HOOK GP-10

Ce manuel décrit les opérations pour un assemblage correct du crochet de levage GP-10.
La GPrandina vous invite à respecter toutes les dispositions et dispositions énumérées.
En cas d'utilisation et d'installation incorrectes des produits GPrandina, aucune responsabilité n'est acceptée en cas d'accident et / ou de casse.

Le montage doit être effectué par du personnel qualifié sous la supervision du chef de chantier et / ou d'un technicien GPrandina.

Les opérations répertoriées dans ce manuel doivent être effectuées de manière professionnelle et dans le respect des règles de sécurité concernant les chantiers de construction.

GPrandina srl Building System vous souhaite

Bon travail

CRANE HOOK GP-10 - ITEM 291002 - KG. 7,00

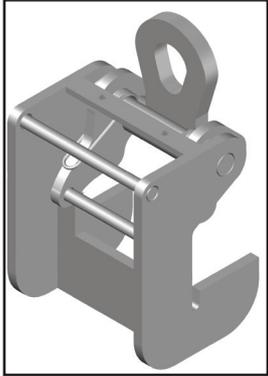


Figure 1
Crane hook 7417

NORMAL USE CONDITIONS

The lifting hook P.n. 291002, is used to lift the building formworks. The Lifting hook can be used only with the Formworks produced by Gprandina building systems S.R.L. The Lifting hook catch the patented profile "T2096" (see Picture 1) and it's constituted by a Steel profile with a special form in order to allow the Lifting hook hardware to catch safely the profile. The lifting hook has a special design with a spring loaded system to assure the good fitting (see picture 2). operation is done with forceps, the combined load to a system of levers that is created while lifting, it guarantees a perfect grip and safety on the profile board. the increase of the load, the higher the pressure exerted on the profile itself. the spring function is to call the hook to rest.

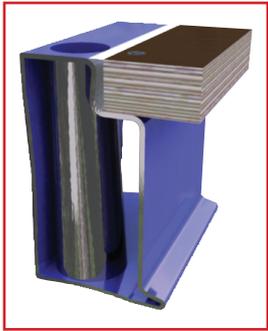


Figure 2
Gprandina srl profile "T2096"



GPRANDINA
CAPACITY KG. 1140
SERIAL 7417/04
GUARANTEE OF CYCLES OF USE 50.000
COLD GALVANIZED



ASSEMBLY PHASES



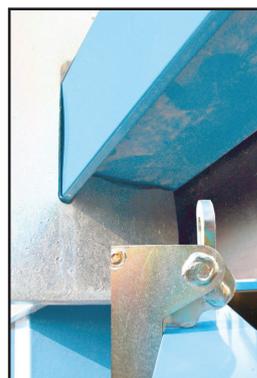
STEP 1:
Take the Lifting Hook and force the spring as showed.



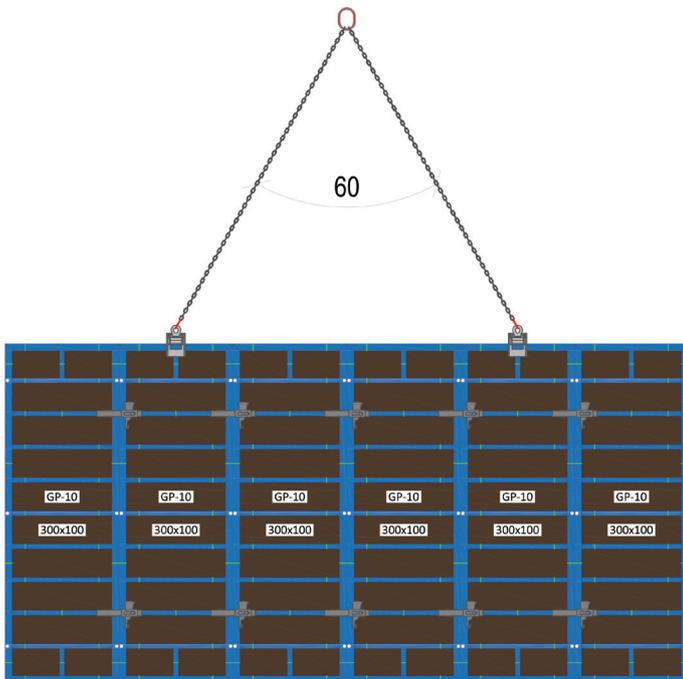
STEP 2:
Insert the Lifting Hook on the Formwork in the steel profile "T2096" or in the aluminium profile "vzFN1424".
Ensure the perfect coupling between the hook plates and the GP-10 steel or aluminum profile.



STEP 3:
Once the hook is inserted, carefully release the return handle. Make sure the springs are in tension.

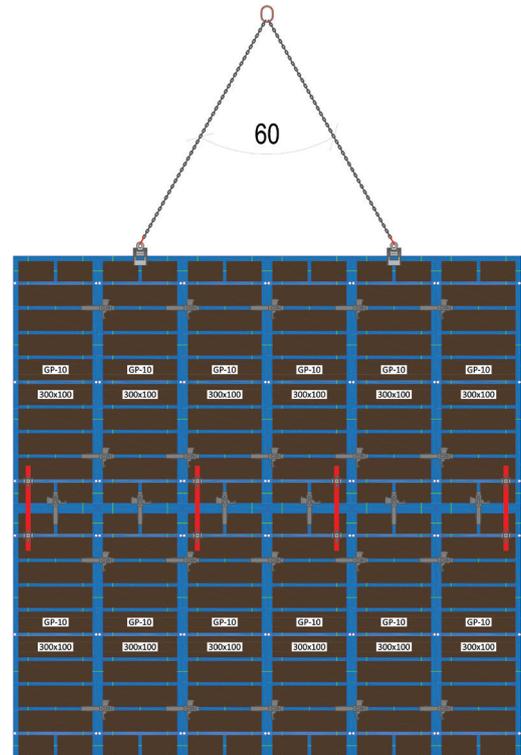


STEP 4:
Before lifting the formworks, make sure that the hook is perfectly inserted and coupled with the "T2096" steel profile or with the "vzFN1424" aluminum profile.



LIFT:

Do not exceed 60 ° as the width of the angle created between one chain and the other. (see picture).



LIFT:

Do not exceed 60 ° as the width of the angle created between one chain and the other. (see picture).

If you raise and / or move walls greater than 3 meters in height, it is mandatory to tighten the panels by means of the aligning tubes and the alignment bracket.



ATTENTION:

It is recommended:

- to use original GPrandina articles in combination with each other;
- not to use items of various brands for the combination of the elements;
- check the hook before each use;
- check the welds and the various components: there must be no signs of wear and deformation, there must be no signs of rust;
- in case of breakages, do not weld and / or repair. Contact a GPrandina technician who will evaluate the possible repair or replacement;
- at the time of demolition all the regulations in force concerning environmental protection and health are respected.

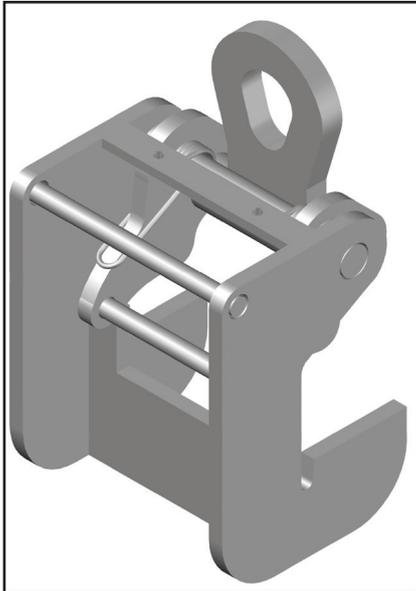
We recommend:

- store the hook in a dry place protected from atmospheric agents;
- do not throw, hit or deform the hook.

GPrandina srl will not respond in the event of malfunctions if the aforementioned recommendations are not respected.

If not, contact our technical department to evaluate the combination of GPrandina products with other brands.

CRANE HOOK GP-10 - ITEM 291002 - KG. 7,00



NORMAL USE CONDITIONS

The LIFTING HOOK 291002 , is adequately protected from corrosion for the life cycle expected considering the normal use in construction sites. Please avoid strong shocks that could damage protection, exposure to saline or prolonged storage in very humid ambient could accelerate corrosion of it. Please check with intervals (depending on usage) but at least once a year, the overall condition of the hook and in particular of the welds, in case of visible deformation or corrosion does not use the hook. Do not repair it and replace with a new one. The LIFTING HOOK P.N. 291002, is made only with Steel UNI EN 10025-S275JO. When demolition is necessary to perform a proper disposal according to applicable standards of environmental protection.



GPRANDINA

CAPACITY KG. 1140

SERIAL 7417/04

GUARANTEE OF CYCLES OF USE 50.000

COLD GALVANIZED

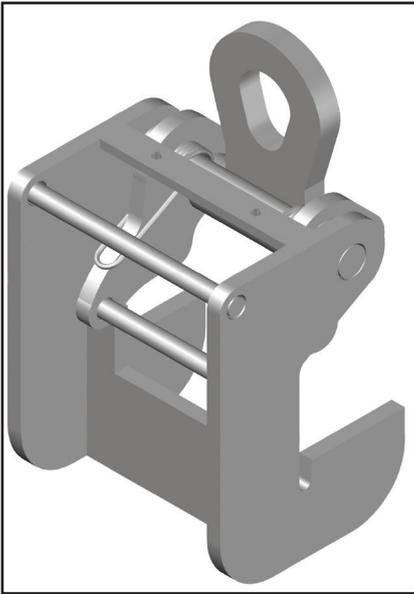


REQUIREMENTS FOR USE AND LIMITATIONS OF USE

The life of the product has been tested and is guaranteed for 50,000 lifting cycles. The working temperature of the hook is between -20 °C to +40 °C. This product was designed and built exclusively for the use specified in the documentation. Uses not listed in this document may cause damage to the product and be dangerous. In particular do not use the hook for lifting people. The action of wind on the suspended load may be dangerous. Pay attention to the requirements that come with the lifting device (crane, etc.). not use the hook in case of strong winds (speed higher than 14m/s-CNR 10021-85). Danger of falling objects from above. Prior to any lifting operation to ensure the proper insertion of the hook on the profile of the formwork. Before using always make sure that the hook has not suffered any obvious damage, dents, deformation or corrosion that may have compromised the safety and reliability. Not groped repairs. But contact the manufacturer for any need. During handling of loads to avoid high speeds (greater than 0.7 m / s cf. CNR 10021-85). Which could cause severe impacts with fixed objects that can damage the hook and undermine the holding of the load. The company disclaims any responsibility for improper use or for purposes other than its intended and stated in the documentation. The company disclaims any responsibility for the safety and proper operation if components are used by other manufacturers.

NORMAL USE CONDITIONS

The lifting hook is sized according to the DPR 24.07.1996 No. 459 and the various contact pressures were verified reports Hertz, with difficulty.



GPRANDINA

CAPACITY KG. 1140

SERIAL 7417/04

GUARANTEE OF CYCLES OF USE 50.000

COLD GALVANIZED



**LIFTING CAPACITY OF
THE HARD HOOK = 1.140 Kg.**

CRANE HOOK

- Hook: Lifting Hole D. 40 mm.
- Sprocket: b = 22 mm.
- Lifting Sector: c = 22 mm
- Tickness: s = 15 mm
- Verification assumes: strain fatigue = 950 kg/cm².
 - $b/s = 20/15 = 1.33$
 - $2bs/1.4 sf \text{ fatigue} = 4.480 \text{ Kg}$
 - $Sf c s = 3.135 \text{ Kg}$.
 - Welding "fillet Welds"
 - L = 70 mm
 - A = 4 mm
 - Resistance section = 6.6 cm²
 - Maximum welding load 4.600 Kg.
- Material : Steel UNI EN 10025- SJ275JO
- Basic treatment : Cold Galvanized

MAIN PIN

- F = 18 mm.
- A = 254 mm²
- Maximum Pin load capacity Kg. 1.350

CYLINDER

- R1 = 9 mm.
- R2 = 10 mm.
- S = 6 mm.
- L = 160 mm
- P. max = 270 kg/cm²

FRAME HOLE D. 18

- B = 12 mm.
- S = 10 mm.
- P.max = 1.140 Kg.

FRAME

- A = 9.1 cm².
- W = 6.9 cm³
- P = 4.300 Kg.

NORMATIVE REQUIREMENTS

The structural calculations are performed with the usual method of construction science to the tensions in relation to the following standards:

CNR-UNI 10011/85 steel constructions;
CNR-UNI 10012/85 actions on constructions ;
CNR-UNI 10027/85 steel structures for provisional works
CNR-UNI 10029/87 high strength steel constructions
DPR N° 547 dated 27/04/55;
DPR N° 164 dated L 07/01/56;
CIRC. N° 80 dated 07/07/86 Ministry of Work;
CIRC. N° 15 dated 19/03/90 Ministry of Work;
D.M. dated 09/01/1996 Technical Rules;
CIRC. N° 65/AA.GG. dated 10/04/1997 Instructions for the application of the technical standards of the D.M. dated 16/01/1996.

The aforementioned rules can be found in EU:

DIN 1050 Requirements for steel constructions;
DIN 1055 Official provisions on load hypotheses;
DIN 1912 Welding with filler material;
DIN 4100 Welding standards;
DIN 4114 Calculation criteria;
DIN 4420 Scaffold and scaffolding;
DIN 17100 Steels for construction, quality requirements.

For the calculation of the single side wall frames the following rules have been followed:

UNI EN 1990-2006 General criteria of structural design;
UNI EN 1993-1-: 2005 Design of steel structures. Part 1-1: General rules and rules for buildings;
UNI EN 1993-1-8: 2005 Design of steel structures. Part 1-8: design of connections;
MINISTERIAL DECREE 14/01/2008 - Technical standards for buildings;
PrEN 12811-1 "Temporary works equipment – Part 1: Scaffolds – Performance requirements and general design;
PrEN 13374 "Temporary edge protection systems – Product specification, test methods".

CRANE HOOK GP-10 - ITEM 291002 - KG. 7,00



CONFORMITY DECLARATION CE
(in accordance with Directive 98/37/EC - Annex II - Part A).

The undersigned , representing the following manufacturer :

GPRANDINA S.R.L.

Via Roma n.37
36060 Schiavon (VI)

states that the Formwork lifting hook called:

CRANE HOOK 7417

and in accordance with the laws of the following directives:

Directive 98/37/EC (Machinery Directive)

and that have been applied harmonized standards and / or specifications listed below:

CNR 10021/85

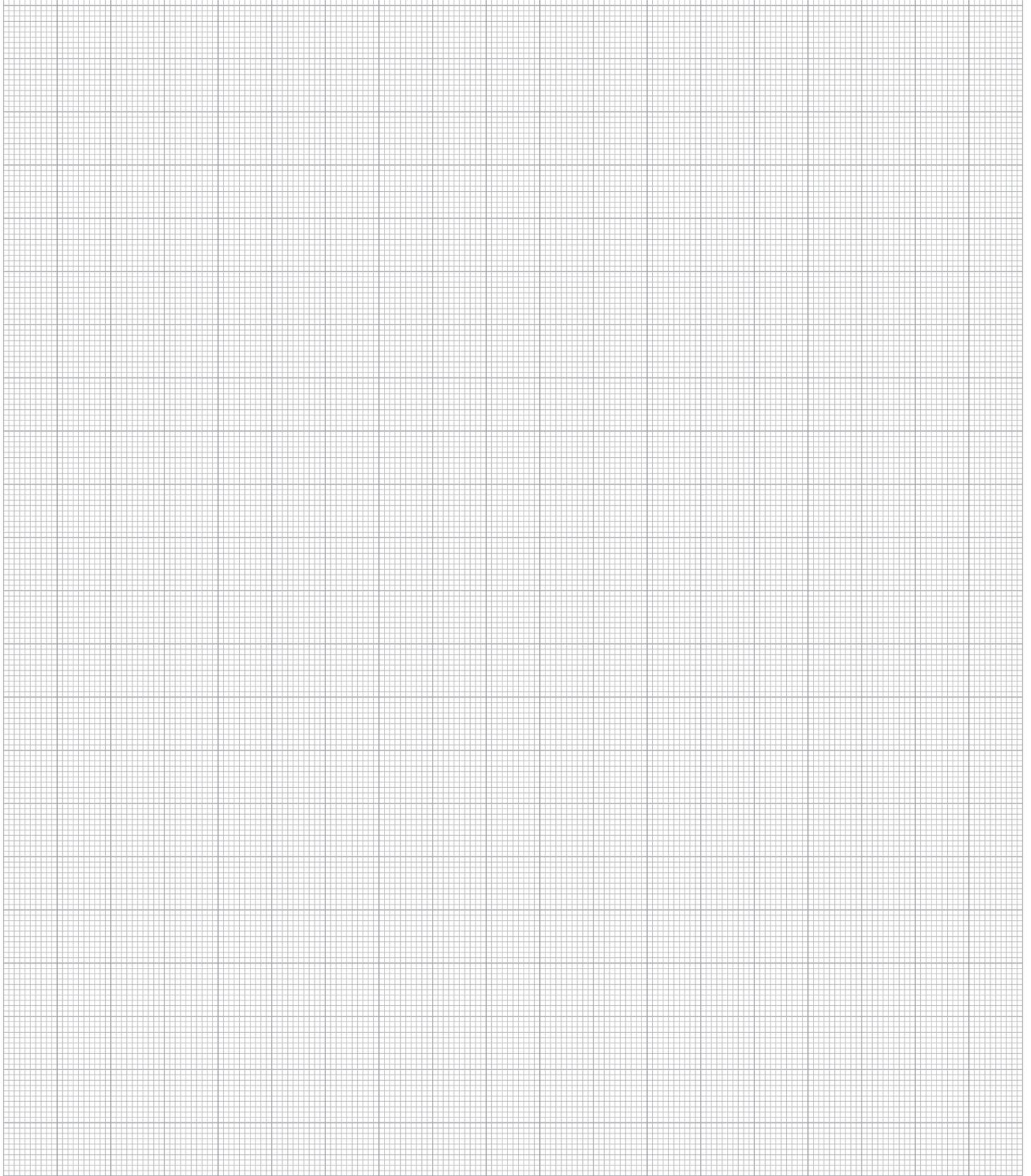
Place of registration: _____

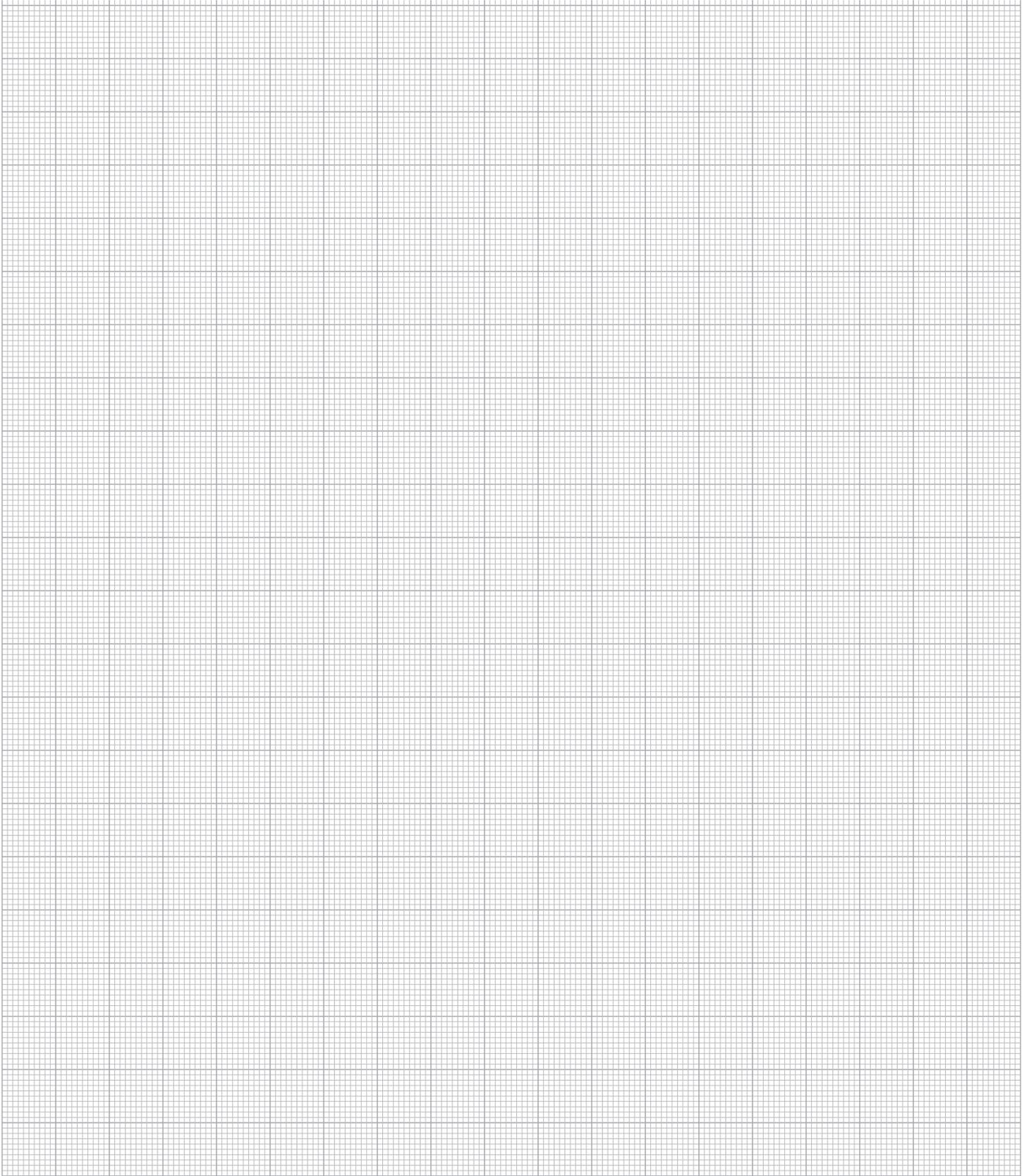
Registration date: _____

Serial number: _____

The Administrator

NOTE





January 2020 edition
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SCHIAVON, VI, Italy

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How to get



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