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SPREAD P



PNEUMATYCZNY SIEWNIK DO POPLONU





SEMOIR PNEUMATIQUE POUR SCRIPTING

ПНЕВМАТИЧЕСКИЙ СЕМЯН ДЛЯ СКРИПТА



Instrukcja obsługi

Biedrzychowice 2020

DEKLARACJA ZGODNOŚCI

DECLARATION OF CONFORMATY DICHIARAZIONE DI CONFORMITA

001/PM/20



NAMYSLO Damian Namysło Biedrzychowice 96A, 48-250 Głogówek Ust-IdNr.(NIP): PL 755-184-91-20, Regon: 369058315

Oświadczamy, że produkowany przez nas wyrób We affirm that product manufacturated by us Affermano che e prodotto da noi

Nazwa: SIEWNIK POPLONU

Name: Nome:

Typ/model: **SPREAD P**Type/model:
Tipo:

Spełnia wymogi następujących norm i norm zharmonizowanych:
Is in accordance with the following harmonized standards:
E in conformita delle seguenti norme:

oraz spełnia wymogi zasadnicze następujących dyrektyw:
And is in accordance with the following directives:
A conforme alle seguenti directive:

2006/42/WE Dyrektywa Maszyn 2006/42/WE Machinery Directive 2006/42/WE Le direttiva macchine

EN ISO 12100-1:2003 Bezpieczeństwo maszyn - Pojęcie podstawowe, ogólne zasady projektowania - Część 1: Podstawowa terminologia, metodyka
EN ISO 12100-1:2003 Safety of machinery - Basic concepts, general principles for design - Part 1: Basic technology, methodology

EN ISO 12100-1:2003 Sicurezza del macchinario - concetti di base, principi generali di progettazone - Parte 1: Concetti fondamentali e metodologia

89/686/EWG Dyrektywa Środków Ochrony Indywidualnej PPE 89/686/EWG Personal Protective Equippment (PPE) Directive 89/686/EWG Directtiva DPI



NA. ... YSLO

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1. INTRODUCTION

NAMYSLO Damian Namysło congratulates you on purchasing a modern pneumatic SPREAD P aftercrop seeder.

We are convinced that the seeder will meet the customer's expectations.

Upon purchase, the user receives a complete machine, factory-assembled and ready for operation.

For proper and safe use, we recommend that you read this manual carefully.

The manual is an important part of the machine and should be kept for future use. The manual includes a catalog of machine parts and a warranty card.

Correct use of the machine along with proper maintenance, lubrication and storage will help keep it in good condition and ready for operation.

The machine has been designed and manufactured taking into account all the requirements related to its safe use, in accordance with applicable standards. However, it is necessary to comply with all recommendations contained in the operating manual and applicable legal regulations regarding the use of the machine.

It should be borne in mind that despite the use of solutions aimed at meeting all the requirements of national and international standards in the field of ergonomics and safety of use, risks related to, for example, residual risk, as well as situations that are difficult to predict during work, cannot be excluded.

Using the machine for other purposes shall be construed as using it against the intended purpose.

Additional information on the rules of use and spare parts can be obtained on the website: www.namyslo.pl, directly or by phone at NAMYSLO Damian Namyslo or at machines selling points.

Any deviation from the manufacturer's requirements and applicable legal regulations, as well as making any changes in the design of the machine, without the manufacturer's consent, the use of spare parts other than original ones will be understood as non-conforming use.

NAMYSLO Damian Namysło shall not be liable for any damages caused then.

The manufacturer reserves the right to introduce design, technological and equipment changes agreed with IBMER and PIMR. These changes will be included in the instructions for use and maintenance on an ongoing basis in the form of annexes.



2. MACHINE INDENTIFICATION

2.1. Name

Seeder for scripting.

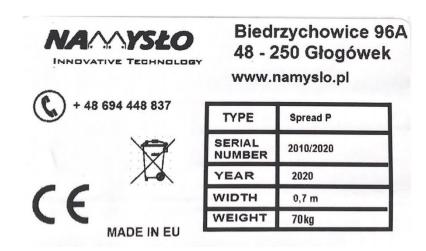
2.2. Model

SPREAD P – pneumatic seeder for scripting

The identifying data is provided on the rating plate, which is placed on the machine (suggested location of the rating plate).



2.3. Name plate





3. INITIAL EXPLANATIONS

When you receive the machine, please check whether it has been damaged in transit and whether it is complete! Only an immediate complaint avoids misunderstandings.

Familiarization with the provisions and guidelines of the manual gives the operator the possibility of safe and failure-free operation of the machine. Failure to follow the instructions may result in an accident or device failure. As a consequence, it may lead to the loss of rights under the guarantee and warranty.

Before each use, check the drill, the machine on which it is built and the tractor with which it is coupled, for operational and transport safety.

The operator is responsible for his own safety and that of people who come into contact with the machine during use, operation and storage.

Before using the SPREAD P seeder, please read the Operator's Manual.

Pay particular attention to the danger warning symbols and safety signs on the machine. They indicate important information about hazards in the operating instructions.

3.1 Directions in the instruction manual

The terms "left side" or "right side" given in the manual mean the left and right sides of the observer facing the direction of travel of the machine.

REMEMBER! NAMYSLO Damian Namysło bears no responsibility for damages resulting from failure to observe the operating instructions.

3.2. Commands and description

Commands identified by the words WARNING, CAUTION, and NOTICE are used to emphasize the importance of information.

WARNING! Indicates a possible hazardous state which, if not avoided, may result in the injury or more serious injuries of the operating personnel.

WARNING! This word is used when there is a danger of damaging the machine.

REMEMBER! This word is used when providing supplementary information.



This symbol warns of a hazard. Information included in the manual, next to the indicated symbol, is especially important for the user of the machine.

Descriptions for drawings and diagrams can be found directly next to or next to them.

Instructions for the actions to be performed by the machine operator are given in the form of bullets:

- Step 1
- Step 2



Service activities described in the manual, marked with this symbol, should be performed by a specialized service.



3.3. Intended use

The SPREAD P seeder is a top-mounted machine that can be attached to various types of aggregates.

The seeder is designed for sowing cereal seeds, it is intended only for agricultural work with sowing catch crops.

The seed drill should be used, serviced and repaired only by persons who are familiar with its construction, operation and safety rules.

The scope of intended use also includes:

- Observance of the provisions of the operating manual (widely understood operating, maintenance, operation, setting, repair and performance regulations),
- Compliance with safety regulations, in particular with warning pictograms on the machine and with the laws of the country where the machine is used,
- Only original spare parts are used,
- Compliance with the limits of permissible loads of the machine (also the recommendations of the manufacturer of the tractor with which the machine is aggregated).

Using the machine for purposes other than those recommended by the manufacturer shall be construed as using it against the intended use.

REMEMBER! Unauthorized changes to the machine without the consent of the manufacturer release him from liability for damage to the machine, accidents to people and other material losses!

4. SAFETY NOTES



REMEMBER! Before starting the operation and use of the set (tractor + unit with mounted catch crops seeder), read this manual, learn about the structure of the machine and its units, their operation, ranges and methods of adjustment, paying particular attention to information on work safety. It is too late for this during work!

The given safety regulations apply to the SPREAD P seeder. Regardless of that, observe the general safety and accident prevention rules and road traffic regulations.



WARNING! Compliance with the safety rules contained in this manual will allow you to avoid accidents, as well as damage or premature wear of the machine.

4.1 General safety rules

The following safety regulations apply to the SPREAD P seeder mounted on a cultivating machine aggregated with a tractor. Regardless of this, however, always obey the general principles of occupational health and safety and road traffic regulations.

- Take particular care during manual and mechanical loading of seeds.
- During loading, lifting devices (eg forklift, overhead crane) may only be operated by appropriately qualified persons. Use frame elements (marked on the machine) as attachment points.
- It is forbidden to work with a damaged or incomplete machine.
- Be especially careful while driving on public roads and comply with the applicable provisions of the Highway Code, including equipping the machine with road lighting.
- The set of the set with the mounted catch crop seeder should be transported with the empty seed box.
- Driving speed during transport should be adjusted to the road surface condition.
- During transport, drive the tractor as close as possible to the right side of the road.
- When maneuvering on roads, pay attention to the free space around the drill. Be especially careful when passing and overtaking, and when cornering.
- The width of the machine during road transport must not exceed 3.0 m.
- The set with a built-up aftercrop seeder should be stored on flat, even, hardened ground, out of the reach of bystanders and animals.



- During repairs that require the machine to be raised, use stable and durable supports to prevent the machine from falling. Do not use supports that may be damaged (e.g. hollow bricks, etc.)
- In the event of clogging of the working units during operation, the machine must be cleaned by raising / lowering it several times on the tractor's suspension system.
- Dry seeds should be used for sowing.
- It is not allowed to leave the tractor with a hitched drill on the slopes or other terrain slopes without securing it against automatic rolling. Be especially careful when working on slopes, reduce and adjust the speed. Exceeding the permissible tilt may cause the set to overturn.
- During work use work clothes and protective gloves. Do not use loose clothing. When using seed dressings, follow the safety recommendations on the labels of these chemicals.
- Never leave the tractor with the engine running. Before leaving the driver's seat, lower the drill to the ground, turn off the tractor engine, remove the key from the ignition switch, pull the handbrake.
- The machine should be raised and lowered gently, without jerks or knocks.
- It is not allowed to use the independent brakes when making returns of the set.
- To secure the connections of the SPREAD P seeder with the set, use the bolts and mounting plates provided by the seeder manufacturer. The use of other safeguards is prohibited and may cause an accident!
- To secure the connections of the cultivator (with the SPREAD P mounted seeder) with the tractor, use special pins and cotter pins. It is forbidden to use substitute safeguards such as bolts, rods, wires, etc., which may shear or fall out during operation or transport and thus cause an accident or damage to the machine. The diameter of the pins must be in accordance with the machine's suspension category.
- It is not allowed to reverse the tractor or make returns while working in the working position of the machine.
- All service, repair and adjustment works should be performed only with the machine lowered and the tractor
 engine switched off. Remove the ignition key! It is forbidden to stay under the lifted set, because it may be
 crushed by structural elements.
- It is forbidden to replace the working elements of the seeder without adequate protection against the machine moving and falling.
- Do not get between the tractor and the machine until the tractor-seeder combination is secured against rolling away by applying the tractor parking brake or placing chocks under the wheels.
- Be especially careful when connecting and disconnecting the drill to the tractor. Turn off the tractor engine, remove the key from the ignition switch, apply the hand brake.
- The seed drill with the assembly and the tractor must be connected in accordance with the description contained in this manual.
- In order to maintain proper tractor controllability, the drill must be connected to a tractor equipped with a set of front axle weights. The front axle load of the tractor with the mounted machine (with seeds) must be at least 20% of the weight of the tractor itself. Do not exceed the permissible load capacity of the drill.
- The machine may only be used by adults who are certified to drive the tractor and who know the operating instructions for both the trailed machine and the tractor.
- The machine must not be used by minors, especially children.
- Before each start-up, check that the drill and the tractor are in a safe condition in motion and during operation.
- During operation, the drill must be fully equipped, it is particularly important to properly fasten all covers of drive units.
- It is forbidden to stay on the cultivator with an intercrop seeder mounted on it during work and transport. Before starting work, make sure that there are no people on or near the machine. Pay special attention to children.
- It is forbidden to rotate the seeds and put your hand inside the seed box while driving (the agitator is moving), as it may injure your hands by the agitator.
- It is forbidden to stand in the vicinity of the drill during lifting / lowering, because it may cause crushing.
- In addition to the instructions in this manual, observe the general principles of occupational health and safety! Comply with the warning symbols on the machine.
- Before each start-up, check that the drill and the tractor are in a safe condition in motion and during operation.
- During operation, the drill must be fully equipped, it is particularly important to properly fasten all covers of drive units.



4.2. Warning signs placed on the seeder

On the machine, in visible places, warning stickers were placed by the manufacturer to inform about constant or periodic hazards. They must not be removed from the machine. When they are damaged, destroyed or become illegible for other reasons, they should be replaced with new ones.

Warning pictograms are available for sale from the machine manufacturer.

Each warning sign consists of two boxes arranged vertically (black on yellow background).

- 1 the drawing with the warning triangle in the background shows the danger
- 2 the figure shows how to behave to avoid the hazard

Below, the warning signs are shown graphically, their location on the machine is indicated and it is explained which type of danger they observe and how to act to stay safe and avoid the risk.



Danger due to non-compliance with the instructions!

This risk can lead to extensive injuries to the operator and third parties. Before using the machine, read the Operator's Manual and its safety regulations.



Risk of uncontrolled rolling of the machine and tractor!

As a consequence of this risk, serious and even fatal injuries may be caused to the machine operator.

Turn off the tractor engine and remove the key from the ignition switch before starting maintenance or repair work!





Danger of crushing or crushing hands or fingers by moving machine parts!

The risks may result in the loss of fingers, a hand or even the entire arm. Do not reach into the area of moving parts of the machine (e.g. cylinders, adjustment points, closing the flap) when the machine is working or when the tractor engine is on or the hydraulic system is started!



Danger of falling on the frame, steps or other parts of the machine!

Failure to comply with the warning may result in personal injury, including death.

Before you start working, make sure that nobody is on the machine! It is strictly forbidden to transport people on the machine!



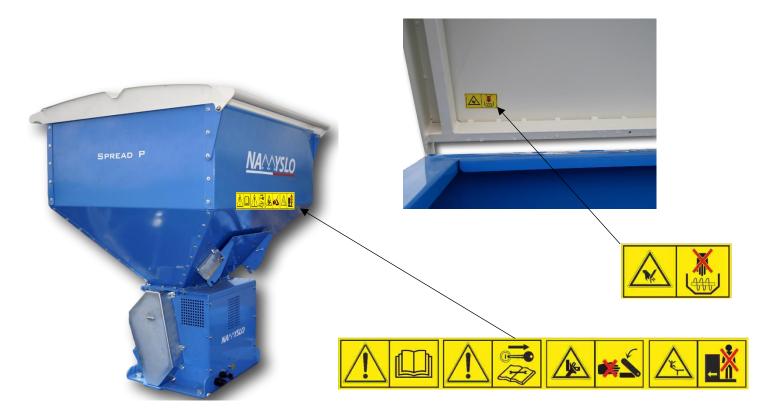
Danger of getting your hands caught by moving machine parts!

This threat may lead to the fingers being cut off, in extreme cases the entire limb.

Never put your hands inside the seed box with the tractor engine running and the agitator moving! Do not remove the covers of the machine component drive chains! Do not reach into machine components powered by the hydraulic or electric system with the tractor engine running!



4.3. Location of warning symbol on the machine



4.4. Other risks

In addition to the hazards defined in chapter 4.2. and shown in the form of warning pictograms placed on the machine, other hazards may also occur during its use, which the manufacturer describes in this chapter.

4.4.1. Electrical instalation

- Electric devices (shaft driving motor, computer controller and lighting system) are powered by electricity.
- Voltage that is too high or too low may cause the electronic device to malfunction or damage it!
- The use of non-original components of electric and electronic devices as well as the wrong fuses can cause a failure!
- Be especially careful when installing electrically powered devices. Incorrect connection with the tractor battery can in extreme cases lead to a fire or explosion of the battery!
- When disassembling electric and electronic devices from the machine, properly protect their components (plugs, cables, etc.) against moisture and weather conditions.

4.4.2. Residual energy



WARNING! When operating the machine, remember that there are residual electrical, pneumatic and mechanical energy on the machine!

Electric current, used to start the computer controller, drive system of the sowing shaft and blowers, and the mechanical energy stored in elastic parts, such as springs, pose a threat to inattentive operators and bystanders!

The machine operator must be careful during work and all service and maintenance activities on the device!



4.4.3. Foreign bodies

During operation of the machine, there is a risk that people in its vicinity will be injured by stones, lumps of earth or other foreign objects unexpectedly thrown by the machine and its rotating components, as well as by seeds thrown out by the sowing plates.



WARNING! During work, nobody may be in the danger zone or come near the machine, as long as the tractor engine is running!

4.4.4. Other obstacles

During field work, there is a risk of burns or electric shock due to contact with overhead power lines or as a result of approaching a dangerous distance to high-voltage cables.



WARNING! Comply with the national regulations regarding the safe distance to live overhead power lines!

4.5. Operator responsibilities and training

4.5.1. Operator responsibilities

The operator must:

- to read the operating manual attached to the machine, and in particular to read the safety regulations for work, repairs and maintenance,
- ensure that the manual is always kept in a place that guarantees its maintenance in good condition and that it is always available during work,
- wear appropriate protective clothing as described in chapter 4.5.3.,
- get acquainted with the legal regulations in force in a given country regarding work safety, accident prevention and environmental protection,
- use the machine according to the manufacturer's recommendations,
- use only original spare parts and do not make any modifications to the machine without the written consent of the manufacturer.

To avoid accidents caused by the contact of children or bystanders with the machine, untrained in its operation, the machine should always be stored and transported securely!

4.5.2. Training of employees

The machine may only be operated by the operator (owner) authorized and trained by the operator. Authorized persons (e.g. employed worker) must:

- have a driving license that complies with the regulations in force in a given country,
- read the operating manual attached to the machine,
- follow general health and safety regulations,
- be trained by the owner in the rules of safe work (installation, operation and maintenance of the machine),
- Familiarize yourself with the structure and operation of the machine.

The above-mentioned provisions also apply to each subsequent owner of the machine at the moment when it is sold on the secondary market



4.5.3. Personal protective equipment

Before starting any service activity, the machine operator must be equipped with:

- protective gloves protecting against sharp edges of machine elements and against direct contact with oils and greases,
- clothes that will not restrict movement, but at the same time will adhere to the body so much that they are not caught by the machine components,
- protective glasses, especially when the seeds used for sowing are heavily contaminated or treated with biological or chemical preparations,
- hearing protectors,
- respiratory protection mask (if seeds treated with biological or chemical agents are to be used).

4.6. Danger zones

The generally defined danger zone is the area around the machine in which people can be reached.

Particularly dangerous places are:

- area between the tractor and the hitched machine,
- close vicinity of moving parts of the machine (sowing shaft, agitators),
- flat surfaces such as the frame (including steps when the machine is in motion).
- area under the machine, when it is raised,
- places in the area of lifting / lowering the seed box flap,
- places near the seed plates where the seeds are ejected.

In such an environment, a person may come into contact with:

- foreign bodies thrown by the machine,
- a machine suspended by unanticipated lowering,
- with the tractor-seeder combination as a result of its rolling or shifting during operation and changing its position during turning and turning maneuvers,
- with the machine suspended by working elements changing its position, driven by mechanical, electric or hydraulic force.

While the machine is running, there is a risk of injury to the body parts of people nearby! This threat may be permanent or periodically varying. Be careful of lumps of earth, stones, grains of cereals thrown pneumatically by the sowing plates and other foreign bodies thrown by the working parts of the working machine and keep a safe distance! During work, no persons may be within the range of the tractor-mounted machine combination, i.e. they may not be directly in front of, behind or next to the machine! It is also forbidden to walk by or stay on the machine during work.

People must not be in the hazardous area until:

- the tractor's engine and operating systems controlling the seeder's working elements (hydraulic system controlling unfolding of markers, etc.) are turned off,
- is secured against rolling away and unintentional movement of both the tractor, the hitched machine and its components.



WARNING! Keep a safe distance!

The danger zone changes when the machine is in motion!



4.7. Residual risk

Apart from the hazards defined directly by the machine manufacturer, there is a risk of an accident which, despite the construction of the machine in accordance with safety regulations, cannot be eliminated. The residual risk results mainly from improper behavior of the operator of a top-mounted seed drill combined with a tractor. The reasons for this behavior of the person operating the machine are ignorance and inattention.

4.7.1. Description of the residual risk

Although the manufacturer of the SPREAD P seeder, NAMYSLO Damian Namysło, is responsible for the design and construction in order to eliminate hazards, certain risks during machine operation are unavoidable.

The greatest danger occurs when performing the following prohibited activities:

- presence of people on the seeder during operation and transport,
- presence of people between the tractor and the seeder with the tractor engine running,
- putting your hands into the seed box while the agitator is moving (driving the seeder),
- presence of people near the seeder while it is being raised or lowered,
- operating the machine with the tractor engine running,
- operation of the machine lifted on the linkage and not secured against falling,
- presence of bystanders near the seeder during operation,
- work with a seed drill and a tractor in poor technical condition.

When presenting the residual risk, the seeder is treated as a machine that has been designed and manufactured according to the state of the art until the start of production.

4.7.2. Residual risk assessment

By following these recommendations:

- carefully read and follow the rules contained in the manual,
- do not put your hands in forbidden places,
- no persons on the machine during operation and transport,
- prohibition of people staying between the tractor and the seeder with the engine running,
- no bystanders may be in the vicinity of the drill during its operation,
- operation of the seed drill only by persons who have been previously trained and who have read this manual,
- performing repairs and maintenance only by persons who have been previously trained,
- securing the seeder against access by children, bystanders and animals, accident hazards during the use of the machine will be eliminated.

This risk can be eliminated when using the drill in accordance with the recommendations of this Operator's Manual.

Following the recommendations of this operator's service will eliminate any threats to people and the environment that may be caused by the drill.



WARNING! Accident risks resulting from the existing residual risk occur in the event of non-compliance with the recommendations and guidelines provided.



5. GENERAL INFORMATION

The aftercrop seeder is delivered by the manufacturer for sale in a condition requiring self-assembly on the aggregate. The operator has to build the main module - the seed hopper with drives on the frame of the aggregate himself, and attach the bars with seeding plates, and connect them with the dispenser with seed conduits. In the optionally equipped set, the operator must additionally install loading steps.

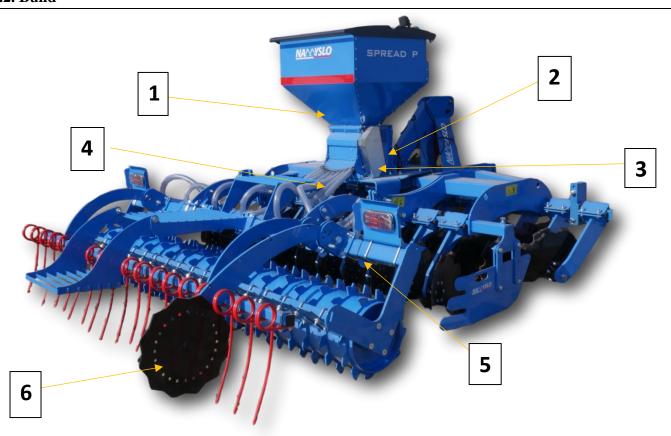
5.1. Technical data of the SPREAD P aftercrop seeder

The information given in the table below is approximate, the final parameters of the machine depend on the additional equipment and configuration in accordance with the individual order.

| No. | SPECIFICATION | I.U. | DATA |
|-----|--|----------------|-------------------------|
| 1. | Туре | | SPREAD P |
| 2. | Working width | m | 2-6 |
| 3. | Weight of the seeder | kg | 70 |
| 4. | Tractor engine power | KM | - |
| 5. | Seed hopper capacity | liter | 220 |
| 6. | Overall dimensions, transport position: - length, - width, - height | mm mm mm | 840 865 1070 |
| 7. | Overall dimensions, working position: - lenght, - width (max with markers) - height, | mm mm mm | 840 865 1070 |
| 8. | Number of lines with seed plates | pcs. | 8 |
| | Type of seed tubing | | elastic |
| 9. | Sowing system | | universal sowing shaft |
| 10. | Transport of grain | | pneumatic |
| 11. | Power for the blower and motor | | 12V/40A |
| 12. | Gearbox | | stepless |
| 13. | Wydajność | ha/h | performance |
| 14. | Working speed | km/h | max 18 |
| 15. | The harrow | | adjustable |
| 16. | Trough for the calibration test | | yes |
| 17. | Agitator for the seed box | | yes (working angle 90°) |
| 18. | Noise | dB | under 70 |
| 19. | Steps to facilitate loading | | option |
| 20. | GPS antenna | | option |



5.2. Build



General view of the SPREAD P seeder kit.

| 1. | Grain tank |
|----|---------------|
| 2. | Blowers |
| 3. | Engine |
| 4. | Seeding lines |
| 5. | Seed plate |
| 6. | Jockey wheel |

5.3. Components - structure and operation

The machine allows you to spread catch crops of various types and sizes of granules. The sowing system is an electric unit (3) that drives the universal sowing shaft with a large speed range. The seed dosed from the 2-liter hopper (1) is transferred by the sowing shaft to the eight-channel distributor, from where it is pneumatically transported to flexible plastic sowing hoses (4) with plates (5). Two electric booster blowers (2) are responsible for this method of transport.

The computer is responsible for the precise dosing of the sown material. A user-friendly computer module that allows the operator to control and adjust the basic sowing parameters.

The system requires entering into the computer memory:

- 1.required dose of grain to be sown per hectare,
- 2. working width of the machine on which the drill is built,
- 3.dose dosed by the sowing shaft during one full revolution (this information can be read by the operator from the sowing table or obtained from a calibration test),
- 4. working speed, the information about which is sent to the computer in real time by the sensor from the tracking wheel (7), or (in the more expensive version) by the GPS antenna.



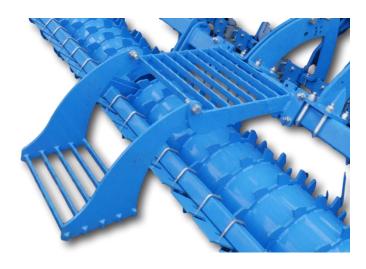
5.4. Additional equipment

5.4.1. GPS Antenna



The seed drill can be equipped with a GPS antenna transmitting to the controller (computer) a signal about the speed at which the machine is moving.

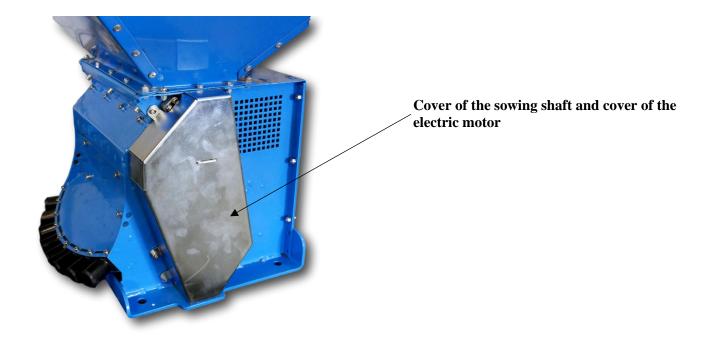
5.4.2. Loading steps



For the safe operation of the drill, especially when loading the tank with grain, they can be useful turn out to be loading steps. Grades of several types they are easily mounted with u-bolts.



5.5. Safety elements - covers





WARNING! It is forbidden to work with the machine without properly secured guards of the moving components! Severe injury can result from working without guards! Before starting work, check the mounting and protection of the guards!

5.6. Design changes

The equipment of your machine may differ slightly from that indicated in the drawings or in the descriptions contained in this manual.

The manufacturer reserves the right to further technical modifications of the machine, both in terms of its basic design and additional equipment due to the adaptation to the constantly evolving technical level.

REMEMBER! Any modifications and alterations to the drill without the written consent of the manufacturer are prohibited, as they may result in a reduction of the machine parameters..



WARNING! Modifications consisting in the construction and welding of load-bearing components, such as the frame, are strictly forbidden! It is also forbidden to drill or cut these elements!



WARNING! During modification and prohibited work, there is a high risk of crushing, cutting or catching body parts, which may lead to permanent disability or even death of the operator or bystanders!



6. Operating service

6.1. Preparation of the seeder

- Before commencing sowing, check the technical condition of the machine, especially its working parts. If you find damage or wear reducing the quality of work, replace the parts with new ones.
- Check screw connections in case of looseness, tighten nuts. At the beginning of operation, after approx. 3 hours of operation, tighten all bolts and nuts.
- Check the settings of the computer driver,
- Check that the adjustment screws rotate without jamming,
- Check the condition of the electric wires.

6.1.1. Installation of the aftercrop seeder on the aggregate

HOSE LENGTH SELECTION

A good spreading effect also depends on the length of the hose and its correct positioning. In the case of a hydraulic fan, the longest sowing hoses should be connected, starting their assembly from the sowing shaft drive side.

OPTIMUM POSITIONING OF THE PNEUMATIC SEED DRILL

The optimal position of the Pneumatic Seeder on the soil tillage implement is determined by the following criteria:

- Short falling hoses
- Optimum mounting position and mounting height of the dispersion plates: approx. 40 cm above the cultivated soil, maximum distance between the dispersion plates 75 cm (measured from the center to the center of the plate)
- Safe filling of the hopper, calibration test and replacement of the seeding shafts
- Sufficient space when folding the soil tillage implement (hopper!)
- Appropriate length of electric wires (6m)
- Appropriate length of hydraulic lines (6m)

In order to correctly and safely connect the seeder, the tractor with the hitched assembly should be standing on hard and even ground.

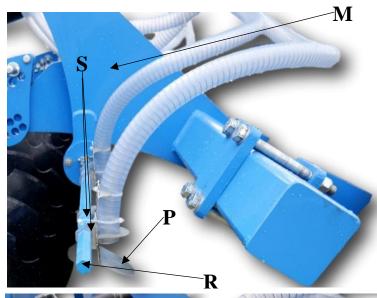


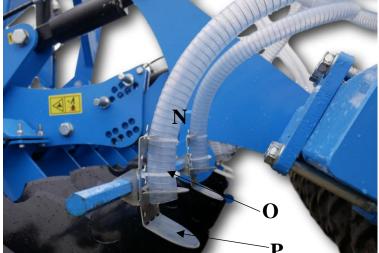
Using the attached mounting plate - adapter (A), you can mount the catch crops seeder on various types of machines.

- Attach the seeder to the machine with the screws type (C) provided by the manufacturer,
- connect the electric cables of the drill to the tractor's electrical sockets, check the correctness of the connection.

After the main machine module has been mounted on the mating unit, the sowing plates should be installed and connected with flexible seed hoses to the grain distributor.







The set includes a multi-part frame (R) (on which the plates are attached) with universal adjustable handles (M).

- Fix the plates (P) to the frame with screws (S),
- Distribute the tiles evenly across the width of the accompanying machine, remembering to set each at an angle of 900 to the frame,
- Set the holders for the tile frame on the machine so that the tiles are at a distance not less than 15 cm from the ground,



Connect the **seed tubes** (**N**) with one end to **the plates** (**P**) with special **clamps** (**O**), and the other end to the correct ends of the **grain distributor** (**R**) (push the seed tubes over the ends of the distributor).



WARNING! There is a risk of crushing in the area of the three-point linkage when mounting the drill on the tractor!



WARNING! In order to safely mount the set on the accompanying machine, use only the adapters and brackets supplied by the seeder manufacturer.

REMEMBER! Make sure that the electric system cables are arranged in a way that prevents them from being damaged (crushed, cut) during machine operation (lifting and lowering) and that the cable ends are properly connected. The manufacturer is not responsible for incorrect setting and assembly of the seeder due to the possibility of building it on various types of machines.



6.2. Filling the seed box

The seed box can be filled with ziran in several ways: from a trailer using a feeder, or manually with grain in bags.



WARNING! It is not allowed to fill the seed box while the seeder connected with the cultivator is not coupled with the tractor!

Observe the instructions in the manual regarding the maximum amount of grain that can be filled in the seed box!



WARNING! It is forbidden to stay on other parts of the machine, apart from the steps (steps). Carry out loading and unloading activities only when the machine is parked with the tractor engine turned off.



Controlling the filling level of the tank grain during work, without leaving the tractor, the indicator on the controller allows.

6.3. Start sowing - setting and sowing table

The settings indicated in the following chapter are especially important when the machine is used for the first time. The correct operation of the SP200 catch crops seeder (dosing per hectare of area) depends on entering the following values into the computer memory (dose / ha, seeding coefficient g / shaft rotation, machine working width) and the changing working speed of the machine (information about the working speed is transferred to the computer, the sensor located on the copying wheel or the GPS antenna).





The machine is equipped with a roller with a construction enabling sowing of grains with a wide range of grammages. The machine is configured so as not to change the roller to other types for sowing seeds of different plant varieties.

Before starting work, after filling the tank with grain: Set the lever of the adjustable bottoms (D) as indicated in the attached fertilizer chart



Enter the following data into the memory of the computer controller (as shown in the diagram below):

- the dose dosed by the sowing shaft during one full revolution (coEF) (this information can be read by the operator from the sowing table or obtained from the calibration test),
- required seed dose to be sown per hectare,
- the working width of the machine on which the seeder is built,

6.3.1. Characteristics of the computer

The characteristics of the computer can be found in a separate manual on the website www.namyslo.pl (in the "DOWNLOAD" tab under the name "AGROTON User Manual").



6.4. Emptying the seed box and preparation for the calibration test







7. TRANSPORT

7.1. Machine delivery and unloading

If the machine is purchased directly from the manufacturer, the terms of carriage are established by NAMYSLO Damian Namysło, unless there are other arrangements with the customer. The delivery date is set by the manufacturer in consultation with the customer. It is up to the seller (manufacturer) to properly pack and protect the machine during transport. The manufacturer is also responsible for loading the machine for transport to the recipient. The carrier is responsible for the machine during transport.

The SPREAD P seed drill is delivered to the customer fully assembled. Some of its components can be placed in the transport position or disassembled. In this case, the components are installed only at the customer's site by an authorized NAMYSLO employee Damian Namysło or an employee of a business partner.

Conditions for safe unloading the machine:

- 1. The seed drill can be lifted using a lifting device (crane, forklift etc.)
- 2. Unloading and loading of the machine and its assemblies should be performed with the use of a crane by persons having the required qualifications.
- 3. The machine may be lifted only by the marked points (attachment points marked with stickers), taking into account the proper load distribution and stability of the lifted machine.
- 4. Make sure the lifting device has sufficient capacity and that there is no risk of the machine falling.
- 5. Use only certified ropes, chains or belts of adequate strength.
- 6. The machine must not be attached directly to the crane hook, always use ropes, chains or straps.
- 7. When lifting the machine, keep the ropes, chains or straps taut to prevent accidental swinging.
- 8. When lifting the machine with a crane, always check the lifting path and remove all obstacles.
- 9. The entire maneuvering area, including the positioning of the vehicle, must be checked in advance for any "danger zones", especially electric, gas or liquid lines. If there are such "danger zones", a different maneuvering place should be selected.
- 10.All workers should maintain a sufficient safety distance so that no-one is injured in the event of a sudden fall of the machine.

7.2. Transport - driving on public roads

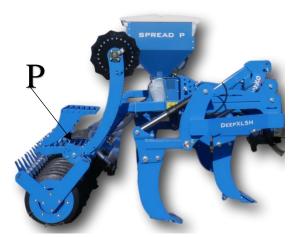


Be careful, as the machine may swing beyond the outline of the tractor when cornering! Before transport, rigidly secure the supports of the tractor's lower links to limit the tractor's sideways movements!

The tractor coupled with a set with a mounted aftercrop seeder should be driven close to the right edge of the road (taking into account road traffic regulations in force in a given country). Do not leave the tractor coupled with the machine hitched on a sloping ground without securing it against automatic rolling!

The drill must not be transported with a loaded seed box! Failure to follow this instruction may damage the machine. The machine, for the purpose of traveling on public roads, must be equipped with lighting and warning signs in accordance with the requirements of the applicable regulations.





To prepare an aftercrop seeder mounted on a set coupled with a tractor for road travel:

- Raise the cultivator with catch crop seeder to the appropriate height,
- Fold the copying wheel arm (as shown in the drawing) and secure it against falling down with a pin (P) with a cotter pin,
- Make sure that no part of the machine is protruding, so that the machine meets the regulations in force in a given country regarding the parameter of the permissible width (maximum width of the set 3 meters).



The SPREAD P seeder has been designed in such a way that the machines from the NAMYSLO Damian Namysło offer, on which it can be attached, and whose working width exceeds 3 meters, folded into the transport position without collisions. The tracking wheels of the catch crop seeder mounted on such aggregates cannot be folded for transport,



Always remember that the rear axle of the tractor is heavily loaded and it is necessary to use ballast at the front of the tractor to maintain the driving properties of the set.



People are not allowed on the steps!

REMEMBER! Before starting the actual work in the field, lighting and warning signs should be removed to avoid damage or destruction

7.2.1. Speed

Always adjust the speed to the road conditions and obey the road traffic regulations. The maximum allowable speed for transporting the drill in all road conditions is 25 km / h.

8. MAINTENANCE



The machine may only be repaired and serviced by people with appropriate knowledge and familiar with the possible dangers and instructions!

In addition to handling the lubricating elements, it is necessary for the correct operation of the machine to check before each working day and during sowing:

- degree of tightening of bolts and nuts connecting machine parts,
- the state of wear of the consumable parts (eg seed hoses), which must be replaced if they are significantly worn or damaged.



REMEMBER! Maintenance intervals (lubrication, replacement of parts) depend on many factors, such as: soil type, weather conditions during which field treatments are performed, operating speeds, type of seed material, in particular mortar, doses and type of fertilizer, etc. are the main factors that have a decisive influence on the final service life of the machine.



WARNING! It is forbidden to work under the raised set with the mounted catch crop seeder without its additional securing!

8.1. Lubrication

The machine is designed so that it does not have any lubrication point.

8.2. Tightening the screws

The machine uses screws with a hardness of 8.8, 10.9 and 12.9. The following table is intended to indicate the force, measured in Nm, with which bolts of the various sizes and hardnesses should be tightened for the various machine components to ensure proper operation and prevent parts from loosening and damage. The table covers most types of bolts used on the machine.

REMEMBER! The suggested values in the table are indicative only.

Bolts and nuts can be lubricated with oil to tighten more easily (using less tightening torque)

REMEMBER!

Damaged bolts should be replaced with new ones with the same quality parameters.

Check the degree of screw tightening during operation!

Tighten all bolts and nuts after the first day of work!

Tighten all bolts and nuts after the end of the working season!

WARNING! It is forbidden to use screws with other parameters than those used by the manufacturer!

| SIZE | HARDNESS | CLAMP TORQUE |
|------|----------|--------------|
| M8 | 5.8 | 15-18 |
| M10 | 5.8 | 32-35 |
| M12 | 5.8 | 58-62 |
| M10 | 8.8 | 50-61 |
| M12 | 8.8 | 80-85 |
| M14 | 8.8 | 137-145 |
| M16 | 8.8 | 195-207 |
| M20 | 8.8 | 380-410 |
| M12 | 10.9 | 102-120 |
| M14 | 10.9 | 178-198 |
| M12 | 12.0 | 135-145 |



8.3. Storage

The machine should be regularly cleaned, especially after the end of the working season, for the period of storage between seasons, which will affect its service life. The seed drill can be cleaned with compressed air. Washing with a pressure washer is not recommended. Water directed directly at bearings, hydraulic cylinders or electrically controlled devices such as computers or blowers could damage the indicated components!

Lubrication of the machine components indicated in the lubrication table is also necessary before and after each working season, as well as after each cleaning of the machine.

The preserved machine should be parked and stored on a hard, even surface, protected from the direct influence of weather conditions (sun, rain, snow), which will protect metal parts without paint from rust and rubber parts from damage.

To prepare the drill for interseason storage:

- perform daily maintenance activities,
- empty the seed boxes and sowing devices from seeds,
- clean the seed tubes thoroughly,
- paint the places where the varnish has been damaged.



WARNING! Children and animals should not have access to the machine.

Additionally, the surfaces which lose their paint protection as a result of working in contact with the ground should be preserved with oil.

8.4. Parts exchange

Parts which technical condition indicates wear should be replaced immediately to prevent wear of other components, which could result in a decrease in the quality of the work performed by the machine. A prerequisite for maintaining the seeder's properties is the use of only original spare parts.

Before replacing any part, you must:

- Place the machine on hard, flat ground,
- You should also turn off the tractor engine, pull the handbrake and secure the tractor wheels with additional supports.

It is advisable to clean the area of the machine that is to be maintained. Only when we make sure that the machine is stable, we can start replacing the worn or damaged parts.



Do not work on the maintenance of the machine without its additional protection against falling, shifting or disconnecting its parts!



Wear protective clothing (gloves, glasses, etc.) to protect against sharp machine parts. Improper handling of the machine can cause injuries!



Protect the skin from direct contact with grease and oils! Do not allow lubricants and oils to get into the soil!



Use only technically sound tools!



8.5. Environemntal protection

When the machine is significantly worn out as a result of the end of its service life, it should be disposed of by specialists, in accordance with the applicable environmental protection regulations.

8.5.1. Metal and plastic parts

Worn and damaged parts of the machine, which have been replaced with new ones, should be treated in a special way. Such parts should be stored on the farm in a specially separated place, protected against access by people and animals, and periodically delivered to collection points (metal purchase).

Also plastic parts (hydraulic lines, seed lines, tires) should be sent to separate collection points so that they can be recycled.

8.5.2. Greases and oils

Worn and damaged parts of the machine, which have been replaced with new ones, should be treated in a special way. Such parts should be stored on the farm in a specially separated place, protected against access by people and animals, and periodically delivered to collection points (metal purchase).

Also plastic parts (hydraulic lines, seed lines, tires) should be sent to separate collection points so that they can be recycled.

8.6. Noise and vibrations

The device does not pose a health risk to the operator, as the noise level / level of emitted acoustic pressure at the workplace, corrected by the A characteristic, does not exceed 70dB (A).

There is also no risk of vibrations when using the seed drill combination. The operator's workplace is the tractor's cabin, appropriately ergonomically shaped and amortized.



WARRANTY CARD SPREAD P – PNEUMATIC SEEDER

| Serial number: | |
|---------------------|--|
| Year of production: | |

The machine complies with the standard and is approved for operation.

Warranty conditions and warranty services:

- 1. Hereby, NAMYSLO Damian Namysło, Biedrzychowice 96A, 48-250 Głogówek, NIP: PL 755-184-91-20, hereinafter referred to as the guarantor, grants the buyer a warranty on the disk aggregate, ensures the smooth operation of the offered product provided that it is used for its intended purpose and operating conditions specified in the operating instructions.
- 2. The warranty period is counted from the date of sale and is:
- pneumatic seeder for scripting SPREAD P 12 months,
- 3. The guarantor grants the customer a guarantee for the period specified above on the basis of a VAT invoice or receipt confirming the sale of the product.
- 4. During the warranty period, the guarantor is obliged to provide spare parts or repair a defective product free of charge. If the guarantor finds that repair of the product is not possible or the cost of repairing the device is disproportionately high in relation to the price of the new device, it is obliged to replace the product with one free from defects.
- 5. Under the warranty, the buyer or third parties shall not be entitled to a claim against the guarantor for any damages resulting from product failure. The guarantor's sole obligation under this warranty is to provide spare parts or repair or replace the product with a non-defective product in accordance with the terms of this warranty.
- 6. The Guarantor is liable to the buyer only for physical defects resulting from causes inherent in the sold product. The warranty does not cover defects resulting from other reasons, especially as a result of:
- external factors: mechanical, thermal, chemical damages, flooding, excessive dirt etc.
- installing and using the product contrary to its intended use specified in the operating manual,
- incorrect assembly, maintenance, storage and transport of the product,
- product damage resulting from the use of non-original accessories or materials that do not comply with the manufacturer's instructions,
- damage resulting from random events, factors bearing signs of force majeure (fire, flood, lightning, etc.)
- malfunction of other installations (e.g. electrical, hydraulic, etc.) and / or devices affecting the operation of the product,
- 7. The warranty does not cover parts subject to normal wear and tear, as well as parts and consumables, such as filters, fuses, batteries, V-belts, greases, oils, etc.
- 8. The buyer loses the rights under the product warranty if it finds:
- · any product modification,
- tampering with the product of unauthorized persons,
- any attempts to repair the product by unauthorized persons,
- use of any spare or consumable parts in the product that are not original parts or recommended by the manufacturer.
- 9. Confirmation by the guarantor of the occurrence of the reason specified in point 6 and 8 is the basis for not recognizing the product complaint. If the complaint is not accepted, the advertised product will be returned to the advertiser at his written request, provided that he covers the costs of shipping the product "to" and "from" the guarantor's service in advance.
- $10. \ Unclaimed \ goods \ referred \ to \ in \ point \ 9 \ after \ 60 \ days \ will \ be \ automatically \ utilized.$
- 11. The basis for accepting a complaint for consideration is jointly meeting the following conditions:
- Buyer submitting a complaint, possibly by fax or e-mail: name of product, date of purchase,
- a detailed description of the damage along with additional information regarding product defects and a photo of the defective product,
- presenting the original invoice or receipt of the advertised product,
- personal delivery or via the carrier of the advertised product to the guarantor's seat.
- 12. Defects or damage to the product revealed during the warranty period should be reported to the guarantor immediately, but no later than 7 days from the date of disclosure.
- 13. The product in which a defect was found should be immediately excluded from use under pain of losing the warranty.
- 14. The guarantor undertakes to perform the warranty service within 14 days from the date of delivery of the device to the guarantor's service.
- 15. The product must be returned to the address after prior agreement with the guarantor, the cost and risk of delivery being borne by the buyer. Acceptance of the buyer's warranty claims will be equivalent to repairing the product or replacing the product with a product free from defects and reimbursement of the shipping costs incurred by the buyer in accordance with the transport price list in force at NAMYSLO Damian Namysło.
- 16. For the place of performance referred to in point 14, the seat of the guarantor shall be considered. The buyer or carrier is responsible for the correct packaging and delivery of the product to the guarantor. This liability in no way passes to the guarantor.
- 17. Products sent back to the guarantor's address at his expense and / or sent back without the guarantor's knowledge and acceptance will not be accepted.
- 18. The guarantor decides about the legitimacy of the warranty claim and the choice of the method of implementation of recognized warranty claims.
- $19. \ Replaced \ defective \ products \ become \ the \ property \ of \ the \ guarantor.$
- 20. The Guarantor reserves the right to charge the buyer the handling costs associated with conducting product expertise, if the claimed product is in good working order or damage is not covered by the warranty.
- 21. The Guarantor reserves the right to conduct a site visit at the place of installation of the advertised product.
- 22. In the event of product repair, the duration of the warranty is extended by this product's non-operational period. If the product is replaced with a new one, this product is covered by a new statutory warranty calculated from the moment the product is delivered.
- 23. The Guarantor is not obliged to modernize or modify existing products after they enter the market with newer versions.
- 24. In matters not covered by these regulations, the provisions of the Civil Code shall apply.

| Date of sale | Signature and stamp of the seller |
|--------------|-----------------------------------|
| | |