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*Rassmotrenы Problems hrafycheskoy Preparation and studentov path s decision.*

***In thechebный process, studentы, methods.***

*The problems of graphic preparation of students and ways of solution.*

***Educational process, students, methods.***

UDC  
631.1

### **DOh JUSTIFICATION FOR Regulatory documentation Technical Service for delivery AGRICULTURAL MACHINERY**

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*Technight service on an analysis of regulations presented as a set  
RobIT tand services to ensure customers cars, efficient use and maintain  
them*

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*good condition. These processes supplying diverse range of existing services. Reasonable range of standard documentation on their performance and the need for its development.*

***Technight service delivery, process, processes, services or regulations.***

**Resolutionska problem.** In theidpovidno Law of Ukraine "On the protection of purchasers of agricultural machinery" [1] technical services - a range of activities and services to ensure buyers agricultural machines, efficient use and maintain them in good condition throughout the period of operation. Consideration of technical service (hereinafter - TS) as activities and services implies the need to consider it conceptually using the system principle. Underlying it is worthwhile to consider the process of quality management and technology TS [2-5]. Found that on average 13.6% (for specific groups of machines - from 0 to 75%) of their total formed at the design stage; 68.3% (for specific groups of machines - from 0 to 100%) - the manufacture and 18.1% (for specific groups of machines - from 0 to 38%) - prand supplying the consumer [6].

Aboveforegoing indicates that when considering theoretical propositions forming quality agricultural machinery (hereinafter - BHT), be sure to consider a set of stages in its lifecycle: design work, manufacturing, supply, operation, including the use of technology in the production processes of agricultural production , maintenance and restore it.

Onprovisions on the requirements for a list of design documentation reviewed during its development in GOST 15.001-88 [7]. He suggests that the development based on the requirements specification and standards associated with this type of product, based on the results tested in specified circumstances develop draft regulatory technical documents for specific products (technical specification or standard) and point all requirements for product quality in design.

However,withandndart not missTitusb to retreatment eqspluatatsiyni papers and documents pursuant TS nomenclature installation, operation and maintenance, as its component.

At the same time, the Law of Ukraine "On standards, technical regulations and conformity assessment procedures" [8] implies the need to develop these regulations in development, Manufacturing and services.

AboveThe specified range defines the problem of improving the design documentation and implementation of the development in accordance with the Law of Ukraine "On Standards, Technical Regulations and Conformity Assessment Procedures" [8].

**Analiz recent research.** SovremNo regulatory requirements documents set out in the Law of Ukraine "On Standards, Technical Regulations and Conformity Assessment Procedures" [8] and providing standards development, together with technical and technological requirements.

*Technight Regulation* - The law of Ukraine or normative legal acts adopted by the Cabinet of Ministers of Ukraine, which defines the characteristics of products or related processes and production methods, and requirements for services, including the relevant provisions, with which compliance is mandatory. It can also contain requirements to terminology, symbols, packaging, marking or labeling requirements as they apply to certain products, process or mode of production.

*Technologistichnyy regulations* - Is the main technical document defining technology regime, the order of operations process, quality products and safe working conditions. Technological regulations - approved in the established order rules of business sectors functions that include: description of processes and operations carried out within the framework of a function, indicating their members and the degree of risk; schema document for a function, process, list of legal acts and software and hardware used in the implementation of processes and operations; description of the risks from each process and the corresponding list of control measures.

Document should include requirements for technology, complex technological equipment in effective and safe usage, quality of output products, integrated and rational use of materials and technological requirements for safety and environmental protection.

Still of way in accordance with the license conditions, technical and technological requirements is both normative technical documents must contain the above requirements. Technical regulations must prioritize product requirements and related processes or methods production and service requirements. Production schedules have priorities in the form of technology modes, order of operations process, quality products and bezpechor working conditions.

It is especially important in the practice of quality management in certain requirements in international standards ISO 9001-

2008, ISO 9004-2000 And harmonized with them DSTU ISO 9001-2009 and 9004-2001 DSTU ISO [2-5]. They are the basis of quality control processes are considered. Review design documents binding on TC services (supply, installation, operation, maintenance) indicates that they are determined by GOST 15.001-88 [7]. They are also not taken into account, as required, and GOST 2.601-95 (Table 2) [8].

**Metand** rehealing **dperssurvey findings.** Atto apply konstruktorskoyi Documents legislative requirements of the Law of Ukraine "On Standards, Technical Regulations and Conformity Assessment Procedures" [8].

Objectives: 1. Analyze legal and regulatory requirements range of design documentation to ensure the quality of the supply TS BHT. 2. To prove konstruktor- tion documentation for quality assurance TC supply of BHT.

3. State the requirements for design documentation to ensure the supply of quality TC BHT. 4. Develop recommended tions concerning the quality of the supply TS BHT by improving the design documentation.

**Noisewild of.** Prand obr'runtuvannya normatyvnoyi documentation concerning the quality of technical service of agricultural machinery, the method of information retrieval and morphological analysis.

DFor this purpose the matrix in the form of tables with columns (Table. 1 and Table. 2), which indicates the regulations to be developed design documentation in accordance with the legal provisions and requirements of the performance standards documents.

**Rezultaty research.** Hand based on information retrieval set discrepancy existing documents [7, 9] Law Ukraine "On Standards, Technical Regulations and Conformity Assessment Procedures compliance "[8] and their lack for TC.

### **1. Youdi operational documents.**

In theEid document	In theyznachennya
1. ConductressYour guide on	The document, which contains information on the design principle of operation, characteristics (properties) of the product, its components and instructions necessary for proper and safe operation of the product (usage by application, maintenance ,, maintenance, storage and transport) and for its technical state in determining the need for sending it in for repair, as well as information about the product and its utilization Glassdovyyhchastyn.

**Buyvzhennya tab. 1**

In theEid document	In theyznachennya
2. Instructions for mon- tazhu, starting, running and regulation	The document, which contains the information necessary for the installation, commissioning, start-up, management, running, delivery of the product and its components in operation at the site of use.
3. Form	Dokument, Imoand misstit informatsiyu To sendabout garantiyi toyrobnnya, basic settings and characteristics (properties) product information on the technical condition of the product,fromomosti on certification and disposal of the product or information that register during operation (duration and conditions of service, maintenance, repairs and other data).
4. Passport document,	which contains information on the manufacturer's warranty, basic settings and characteristics (properties) of the product as well as information about certification and disposal of the product.
5. Etyketka document	which contains the manufacturer's warranty, basic settings and characteristics (properties) of the product, information about certification and disposal of the product (if necessary).
6. Kataloh parts and assembly units	The document, which contains a list of parts and assembly units of product illustration and information about their number.
7. Consumption rate spare parts	The document, which contains a range of spare parts toyrobu and their amount spent on a normalized number of items during the period of operation.
8. Consumption rate of materials	The document, which contains a range of materials and their amount spent on a normalized number toyrobiv during operation.
9. Fromomist compressor portion lektu spare parts, tools and equipment (M & A)	The document, which contains the range, destination, number of seats and packing parts, othersstrumentiv, devices and materials expended for the period of useful life of the product.
10. Training and technical posters	The document, which contains information on product design, operating principles, methods of use, maintenance, disposal areas of technical expertise necessary illustrations.
11. Fromomist eksp- luatatsiynyh	The document, which establishes a set of operational documents and place them packing

dDOCUMENT

**2. Haboutmenklatura norral dca.umentiv and withtbinding upin their development.**

Kfro m	Document Title	Binding development dDOCUMENT	Additional guidance
1	2	3	4

KE 1. Kerivnytstvo

0



**Extension Table. 2**

1	2	3	4
MI	2. Instruction on montazhu, start-up, regulation and Fr.torollers	0	MI up to installation, commissioning, management and run-on products ESTI and its use In the case if those requirements is impractical or impossible to present in CE
FL	3. Form	0	-
PS	4. Passport	0	-
ET	5. Etyketka	0	ET up on products for where the data needed for eksplutted, no more five - shis- Chōhō key indicators. To confirm these figures no need to make PI (PS) and their technically impossible and inappropriate to label on the product.
K6.	DS Product details and Glassdcial units	0	KDC up to products for which, during the service life of the time provided no one-off repairs and parts
7.	Provision expenses microwave parts	0	PandDr. UHF operation for a period of one product refers to the average forward during this period amount of change parts for refusal and working life
HM	8. Consumption rate of materials	0	PandDr. NM on during operation understand the average forward during this period of materials
FromAnd	9. Fromomist kit spare parts, tools and equipment (M & A)	0	FromAnd to make the products for which together supply attached to the kit with them and Set supplied separately from the product, which is designed to operate CO (eg CO single, group, repair, etc.). If the number of items of products and materials is negligible, the CO is allowed to develop, and they list the range of logbook or passport.
		0	UP develop GOST 2,605
		0	In theE is for products in PC-lekt operational documents which are two and
In theP Training	10. The technical posters		
BE	11. Fromomist performance dDOCUME NT		

whiteshesamostiynyhdokumentiv

Legend: ① - A document required; 0 - the need to develop document establishes developer.



Po GOST 15.001-88 equation [7] on standard GOST 2.601-95 operational documents [9] considers a number of operational documents that provide their development (Table. 1). However, only three of the eleven document containing questions relating to the supply of TC products. These include:

1. Manual operation of the need to assess the condition of a car.
2. Andnstruktsiya Installation, start-up, management and running.
3. Training and technical posters on product design, operating principles, methods of use, maintenance.

Assyl say that providing visual performance techniques and facilities maintenance machines provided the relevant figures in the guide of many international companies. The following Table. 2 indicates that all eleven regulations

not Sectionidlyahayut mandatory development. Accordingly, the issue of quality agricultural and services at TC

fieldlies in the deep differences between the demands of consumers for them and their actual quality. Addressing satisfaction

BHT and consumers of services connected with system factors affecting their quality. Implementation of system factors (project-development activities, manufacture, supply, operation, maintenance and repair) should be considered conceptually. It should take into account the general state

onpolicy set out in legislative documents, and focuses on the development of agricultural production. In this regard, the concept of technical service management and service quality BHT at its operation should include the following components: 1. Supply and sale - sale. 2. The use of technology in manufacturing processes of agriculture. 3. Maintenance of equipment. 4. Repair of equipment.

The above indicates the feasibility of developing these documents for SZHTS supply and implementation of sales.

1. Manual operation of the need to assess the condition of a car.
2. Andnstruktsiya Installation, start-up, management and running.
3. Training and technical posters on product design, operating principles, methods of use, maintenance.

Prand it is necessary to take into account technological principles.

CZHTS

onstachannya BHT generally provides the most characteristic range of manufacturing operations following [10]:

- Transportuvannya (T) BHT its manufacturer or supplier;
- RoseLoading (R) BHT to the customer;
- entranceidnyy control (VC) BHT in its customer;

- Saveihannya short BHT (HC) in the intermediary;
- Saveihannya BHT medium (CS) in intermediary;
- Saveihannya BHT long-term (HD) in intermediary;
- doskladannya maSheaCategories (C)  
Categoriesand Sectionidpryemstvi  
materialno-

thathnichnoho support;

- redprodazhne maintenance (O) BHT;
  - Pryymatal control (PC) BHT after storage (HC, cholesterol, HD)
- doskladannya and pre-sales service;
- byLoading (C) BHT to transport it to the consumer;
  - Transportuvannya consumer machines.

Changing the status of BHT in the supply derived from the processes of supply, and the state of the process is measured as the product. Studies show that the supply on the basis of existing regulations manufacturing operations

onservants used 10 different processes services (Fig. 1). The constituent elements of these options are the following technological

transactionsnd i

works:

1 option: transport supplier T + P + unloading incoming inspection VC + R + implementation transport technology consumers Te;

2 option: surgery 1st option + short-term storage of HC + PC control receiver after HC;

3 option: surgery 2nd option doskladannya + C + PC machines after C + TV;

4 option: surgery 3rd option + O + pre-sale service PC + R + Te;

5 option: surgery 4th option + freight on

Tm sites and storage facilities within the enterprise MTZ TP + PC + storage medium Xc Xc + PC after;

6 option: surgery 5th option + C + PC; 7

version: operations 6th option + O + PC;

8 option transaction 7th version of the long-term storage + HD +

PC; 9 option: surgery 8th option + C + PC;

10 option transactions 9th option + O + PC.

Prand development regulations must take into account control, as part of processes [11]. In proponuyemyh regulations should be considered for kontrolyuyemyh parts of machines and parts, indicators and parameters based on their significance. It should be a process control chart to use reception level defects

"Q"(Fig. 2) [10, 12]. For avtomatychnoy processing on the results of observations, it is advisable to control Specified flag codes of shestyu numbers.

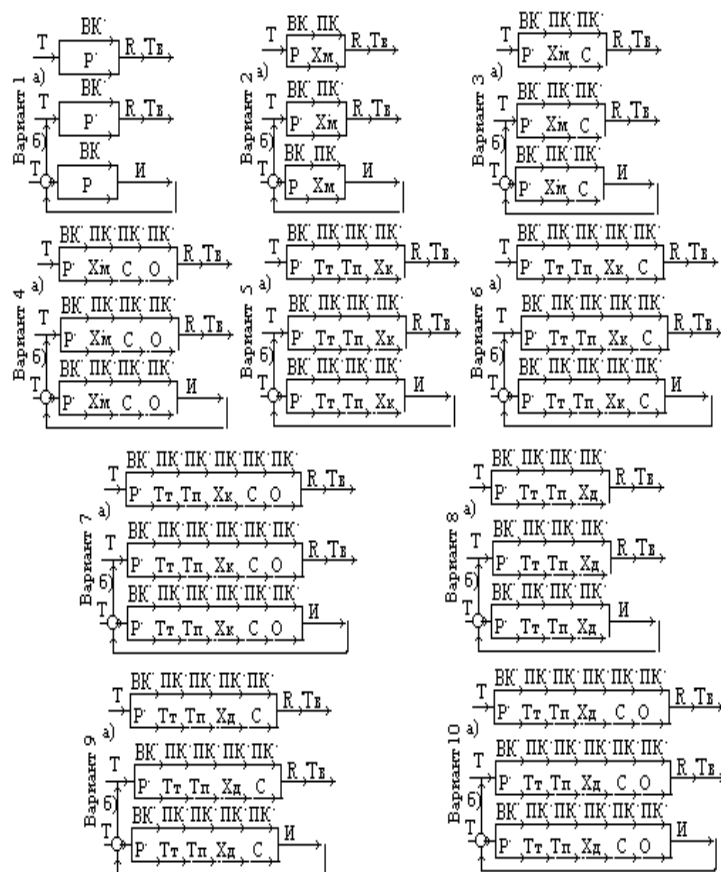


Рис. 1. chain processes at SZHTS supply and sale of agricultural machinery, and - in the absence of defects BHT; б - the presence of defects BHT from their isolation (S) and realizations been corrected.

Organization Developer		KARTA control			Kreslennaya	
					Material	
Name					Andrkushiv	Andrkush
Kfrom concentration trolyuyemoh o	Name contractual rolyuyemoh o index	In theelychyna controlling rolyuyemoho index	Metod tool control	The receiving level defects tnosti, q		
000000	Fromahalno- system performan					
.....	..... ..	.....	..... ..	.....		
000 999	..... ..	.....	..... ..	.....		
001 000	System performan	.....	..... ..	.....		
.....	..... ..	.....	..... ..	.....		
999999	..... ..	.....	..... ..	.....		

Рис. 2. Scheme of the map control.

On the basis of standardized requirements for Unified system of technological documentation were compiled following requirements for control chart (Fig. 2). These includes:

1. Name of the machine, its brand and other necessary details.
2. Pereremedy controlled parameters.
3. Shengstyznachnyy code to transfer the controlled parameter value in the reference and information fund.
4. Name of the controlled parameter (parameter).
5. The value of the parameter controlled parameter of the drawings and specifications and technical documentation.
6. And-building, gauges, equipment and technique, used for control.
7. Pryymatal level defects, q.

Prand this can be developed and updating the content included in an automated Call Fund card controlyu. This provides an additional opportunity to solve the problem by formuvannyu primary defect maps for individual machines, to make them change input parameters and adjust the number of defects in code controlled parameter, create summary maps defects conduct primary statistical analysis of the number of defects and implement a graphical representation of data on defects.

Pof observations and analysis of regulatory documents (ISO, GOST, specifications for manufacture) developed recommendations to statistical control tillage, sowing, harvesting machinery, energy and vehicles.

**Conclusion.** EIDimproving the range of the required set of problem konstruktorskoyi documentation for performance of services of technical service in the supply of agricultural machinery. The necessity of adapting the list of design documentation to the legal requirements of the Law of Ukraine "On standards, technical regulations and conformity assessment procedures." The requirements to design documents to ensure quality technical service in the supply of agricultural machinery. Developed and implemented quality assurance guidelines Technical Service by improving the design documentation.

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*TechnoCesky SERVICE on the results of analysis normatyvnyh As described assembly complex works and services for buyers Provision selskohozyaystvennyy machines effektivnoho Using a podderzhanyya s in yspravnom condition. Pryvedeny tehnolohychnyy Processes supply with raznoobraznoyu suschestvuyuschyh range of services. Obosnovana nomenclature normatyvnoy s documentation to perform Need Her and development.*

***Technycheskyy service, delivery, of technological process, technological surgery, services, normative documents.***

*Technical service according to results of analysis of normative reports is described as complex of works and services on guarantee of buyers with agricultural machines, effective use and their maintenance in the working order. The technologically effective processes of delivery with diverse nomenclature of existing services are given. The nomenclature of normative documentation on their fulfilment and need for its development is substantiated.*

***Technical service, delivery, technological process, technological operation, service, normative documents.***