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2023

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15.03.05 - -

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(5.101 программы)

(Handwritten signatures and marks)

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 - (<http://tstu.ru/>);
 - VitaLMS (<http://vitalms.tstu.ru/login.php>)
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) ;
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 - <http://webiais.admin.tstu.ru:7777/big/f?p=505:1:0:.....>,
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 - http://webiais.admin.tstu.ru:7777/big/f?p=prof_main:LOGIN_DESKTOP:4132303378135,
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 - http://webiais.admin.tstu.ru:7777/zion/f?p=600:LOGIN_DESKTOP:9069017467281.
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4.1

| | () | | | (01.10.2023) | | |
|----------|----------|----------|----------|---------------|----------|----------|
| | | - | | | - | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2019 | 17 | - | - | 44 | - | - |
| 2020 | 14 | - | - | 48 | - | - |
| 2021 | | - | - | 37 | - | - |
| 2022 | | - | - | 31 | - | - |
| 2023 | | - | - | 13 | - | - |

— , 7 , - 22,5 %.
 6 , - 15 %.
 2023 :
 — 2019¹ 17 - 15 ;
 — 2018² 17 - 13 .

¹ (4) - 2019 , (5) -
 2019 , (2) - 2021 ;

- - 88%;
- - 76%.

5.

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5.1

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| 1 | 2 | - | | |
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| (.02, 04, 05; 06-13) | 1 | - | | |
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| () | 9 | - | - | - |
| | 10 | - | - | - |
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| | 12 | - | - | - |
| | 13 | - | - | - |
| (.01) , - (.15, 17-19; 20-23) | 14 | | | |
| : | 15 | | | |
| : | 16 | | | |
| - | 17 | | | |
| | 18 | | | |
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| 14 - : | 20 | | | |
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15.03.05 «

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| 2020/2021 | 2021/2022 | 2022/2023 | 2020/2021 | 2021/2022 | 2022/2023 | 2020/2021 | 2021/2022 | 2022/2023 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 2 | | | | | | | |
| 3 | 3 | 3 | 2 | 2 | 2 | 0,66 | 0,66 | 0,66 |

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» (<https://www.tstu.ru/general/docum/pdf/vseobr/01.31-1.pdf>).

| | | | | | | | | | |
|-----|---|----|----|----|----|---|---|----|-----|
| | | 8 | 31 | 3 | 20 | - | - | 5 | 46 |
| | | 13 | 50 | 9 | 60 | - | - | 4 | 36 |
| | | 5 | 19 | 3 | 20 | - | - | 2 | 18 |
| | | - | - | - | - | - | - | - | - |
| 4 | : | | | | | | | | |
| 4.1 | , | 23 | 88 | 12 | 80 | - | - | 11 | 100 |
| 4.2 | | 3 | 12 | 3 | 20 | - | - | - | - |
| 4.3 | | 2 | 8 | 2 | 14 | - | - | - | - |
| 5 | : | | | | | | | | |
| | | 1 | 4 | 1 | 7 | - | - | - | - |
| | | 1 | 4 | 1 | 7 | - | - | - | - |
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| 6 | | 2 | 8 | 2 | 14 | - | - | - | - |

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|-------|-----|---|------------|------|-------|
| 1. | , | | | - ; - ; | 33,7 | 0,038 |
| 2. | , . | | | | 32 | 0,036 |
| 3. | , | | | - ; - ; | 34 | 0,039 |
| 4. | , . . | | | | 32 | 0,036 |
| 5. | , | . . | | - ; - ; | 33,7 | 0,038 |
| 6. | . . | . . | | | 16 | 0,18 |
| 7. | . . | | | - ; - ; | 17,7 | 0,020 |
| 8. | . . | | | | 32 | 0,036 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----|-----|---|-----------|------|-------|
| 9. | | | | - ; ; | 43,4 | 0,049 |
| 10. | | | | - ; ; - | 43,4 | 0,049 |
| 11. | | . . | | | 33,7 | 0,038 |
| 12. | , . | | | - ; ; - | 17,7 | 0,020 |
| 13. | , . | | | | 32 | 0,036 |
| 14. | , . | | | - ; ; - | 33,7 | 0,038 |
| 15. | , . | | | | 16 | 0,018 |
| 16. | , . | | | | 16 | 0,018 |
| 17. | , . | | | - ; ; - - | 17,7 | 0,020 |
| 18. | , . | | | | 32 | 0,036 |
| 19. | , . | | | - ; ; - | 17,7 | 0,020 |
| 20. | , . | | | | 32 | 0,036 |
| 21. | , . | | | - ; ; - | 17,7 | 0,020 |
| 22. | , . | | | | 32 | 0,036 |
| 23. | , . | | | - ; ; - | 36 | 0,041 |
| 24. | , . | | | | 64 | 0,073 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----|---|---|---------|------|-------|
| 25. | , . | - | | - ; ; - | 36 | 0,041 |
| 26. | , . | - | | ; ; - | 32 | 0,036 |
| 27. | , . | - | | | 32 | 0,036 |
| 28. | , . | - | | - ; ; - | 18 | 0,02 |
| 29. | , . | - | | | 16 | 0,018 |
| 30. | , . | - | | | 16 | 0,018 |
| 31. | , . | - | | - ; ; - | 17,7 | 0,020 |
| 32. | , . | - | | ; ; - | 32 | 0,036 |
| 33. | , . | - | | | 35,4 | 0,040 |
| 34. | , . | - | | - ; ; - | 32 | 0,036 |
| 35. | , . | - | | - ; ; - | 32 | 0,036 |
| 36. | , . | - | | - ; ; - | 16 | 0,018 |
| 37. | , . | - | | | 33,7 | 0,038 |
| 38. | , . | - | | - ; ; - | 33,7 | 0,038 |
| 39. | , . | - | | | 16 | 0,018 |
| 40. | , . | - | | - ; ; - | 33,7 | 0,038 |
| 41. | , . | - | | | 48 | 0,055 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|---|---|---------|------|-------|
| 42. | , | - | | | 10,5 | 0,012 |
| 43. | , | | | - ; ; - | 17,7 | 0,020 |
| 44. | , | | | ; | 32 | 0,036 |
| 45. | . | | | | 34 | 0,039 |
| 46. | , | | | | 16 | 0,018 |
| 47. | , | | | | 16 | 0,018 |
| 48. | , | | | - ; ; - | 16 | 0,018 |
| 49. | , | | | | 17,7 | 0,020 |
| 50. | , | | | | 16 | 0,018 |
| 51. | , | | | - ; ; - | 34 | 0,039 |
| 52. | , | | | | 16 | 0,018 |
| 53. | , | - | | - ; ; - | 17,7 | 0,020 |
| 54. | , | - | | | 32 | 0,036 |
| 55. | , | | | - ; ; | 18 | 0,020 |
| 56. | , | | | - ; ; | 32 | 0,036 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|---|---|---------|------|-------|
| 57. | , | | | | 16 | 0,018 |
| 58. | , | | | - ; ; - | 18 | 0,020 |
| 59. | , | - | | | 16 | 0,018 |
| 60. | , | | | - ; ; - | 34 | 0,039 |
| 61. | , | | | | 16 | 0,018 |
| 62. | , | | | - ; ; - | 34 | 0,039 |
| 63. | , | | | | 16 | 0,018 |
| 64. | , | | | - ; ; - | 17,7 | 0,020 |
| 65. | , | - | | - ; ; - | 18 | 0,020 |
| 66. | , | - | | | 16 | 0,018 |
| 67. | , | - | | | 16 | 0,018 |
| 68. | , | - | | - ; ; - | 33,7 | 0,038 |
| 69. | , | - | | | 16 | 0,018 |
| 70. | , | | | - ; ; | 52 | 0,059 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|------|---|---|------------|------|-------|
| | . | | | - ; - | | |
| 71. | . | | | | 16 | 0,018 |
| 72. | , . | | | | 48 | 0,055 |
| 73. | , . | | | - ; - ; | 10,5 | 0,012 |
| 74. | , . | - | | - ; - ; | 16 | 0,018 |
| 75. | , .. | - | | | 16 | 0,018 |
| 76. | , . | - | | - ; - ; | 16 | 0,018 |
| 77. | , .. | | | - ; - ; | 33,7 | 0,038 |
| 78. | , .. | | | - ; - ; | 18 | 0,020 |
| 79. | , . | | | - ; - ; | 16 | 0,018 |
| 80. | , . | | | | 32 | 0,036 |
| 81. | , . | | | - ; - ; | 16 | 0,018 |
| 82. | , . | | | - ; - ; | 25 | 0,028 |
| 83. | , . | | | | 84 | 0,095 |
| 84. | , . | | | - ; - ; | 16 | 0,018 |
| 85. | , . | | | | 32 | 0,036 |
| 86. | , . | | | - ; - ; | 23,4 | 0,027 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|---|---|---------|------|-------|
| 87. | , | | | - ; ; - | 17,7 | 0,020 |
| 88. | , | | | ; ; - | 32 | 0,036 |
| 89. | , | | | - ; ; - | 34 | 0,039 |
| 90. | , | - | | ; ; - | 16 | 0,018 |
| 91. | , | - | | ; ; - | 16 | 0,018 |
| 92. | , | | | ; ; - | 10,5 | 0,012 |
| 93. | , | - | | - ; ; - | 33,7 | 0,038 |
| 94. | , | - | | ; ; - | 16 | 0,018 |
| 95. | , | - | | ; ; - | 16 | 0,018 |
| 96. | , | | | - ; ; - | 18 | 0,020 |
| 97. | , | | | ; ; - | 32 | 0,036 |
| 98. | , | | | - ; ; - | 34 | 0,039 |
| 99. | , | | | ; ; - | 32 | 0,036 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------------|---|---|---|---------|------|-------|
| 100. | , | | | - ; ; - | 34 | 0,039 |
| 101. | , | | | - ; ; - | 16 | 0,018 |
| 102. | , | | | - ; ; - | 32 | 0,036 |
| 103. | , | - | | - ; ; - | 34 | 0,039 |
| 104. | , | - | | - ; ; - | 16 | 0,018 |
| 105. | . | | | - ; ; - | 67,7 | 0,077 |
| 106. | . | . | | - ; ; - | 32 | 0,036 |
| 107. | . | . | | - ; ; - | 48 | 0,055 |
| 108. | , | - | | - ; ; - | 10,5 | 0,012 |
| 109. | | | | - ; ; - | 304 | 0,035 |
| 110. | . | | | - ; ; - | 51,7 | 0,059 |
| 111. | . | | | - ; ; - | 16 | 0,018 |
| 112. | | | | - ; ; - | 16 | 0,018 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|---|---|---|-------|------|-------|
| | . | | | | | |
| 113. | , | | | - ; ; | 34 | 0,039 |
| 114. | . | | | - ; ; | 16 | 0,018 |
| 115. | , | - | | - ; ; | 34 | 0,039 |
| 116. | . | - | | - ; ; | 16 | 0,018 |
| 117. | , | - | | - ; ; | 34 | 0,039 |
| 118. | . | - | | - ; ; | 16 | 0,018 |
| 119. | , | | | - ; ; | 33,7 | 0,038 |
| 120. | . | | | | 16 | 0,018 |
| 121. | , | | | | 16 | 0,018 |
| 122. | . | | | - ; ; | 18 | 0,020 |
| 123. | , | - | | - ; ; | 16 | 0,018 |
| 124. | . | - | | | 32 | 0,036 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|---|---|---|---------|------|-------|
| 125. | | | | | 17,7 | 0,020 |
| 126. | | | | | 32 | 0,036 |
| 127. | | | | - ; ; - | 17,7 | 0,020 |
| 128. | | | | | 32 | 0,036 |
| 129. | | | | - ; ; - | 19 | 0,022 |
| 130. | | | | - ; ; - | 13 | 0,015 |
| 131. | - | | | - ; ; - | 42 | 0,048 |
| 132. | - | | | - ; ; - | 18 | 0,020 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|---|---|---|---------|---|-------|
| 133. | - | | | - ; ; - | 6 | 0,007 |
| 134. | - | | | - ; ; - | 6 | 0,007 |
| 135. | - | | | - ; ; - | 6 | 0,007 |
| 136. | - | | | - ; ; - | 6 | 0,007 |
| 137. | - | | | - ; ; - | 7 | 0,008 |
| | | | | - ; ; - | 7 | 0,008 |
| | | | | - ; ; - | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| 138. | , | | | - ; ; - | 7 | 0,008 |
| | | | | - ; ; - | 7 | 0,008 |
| | | | | - ; ; - | 7 | 0,008 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------|---|---|---|---------|------|-------|
| | | | - | | 7 | 0,008 |
| | | - | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| 139. | | | | - ; ; - | 17,7 | 0,020 |
| 140. | | | | - ; ; - | 17,7 | 0,020 |

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 2. , - , -
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----|---|---|---|---------|------|-------|
| 1. | | | | - ; ; - | 33,7 | 0,038 |
| 2. | | | | | 16 | 0,018 |
| 3. | | | | | 16 | 0,018 |
| 4. | | | | - ; ; - | 34 | 0,039 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|---|---|---|---------|------|-------|
| 5. | , | | | | 16 | 0,018 |
| 6. | , | | | - ; ; - | 34 | 0,039 |
| 7. | , | | | | 16 | 0,018 |
| 8. | , | | | - ; ; - | 33,7 | 0,038 |
| 9. | , | | | - ; ; - | 18 | 0,020 |
| 10. | , | | | - ; ; - | 16 | 0,018 |
| 11. | , | | | | 16 | 0,018 |
| 12. | , | | | - ; ; - | 16 | 0,018 |
| 13. | , | | | - ; ; - | 25 | 0,028 |
| 14. | , | | | | 84 | 0,095 |
| 15. | , | | | - ; ; - | 16 | 0,018 |
| 16. | , | | | | 32 | 0,036 |
| 17. | , | | | - ; ; - | 23,4 | 0,027 |
| 18. | , | | | - ; ; - | 17,7 | 0,020 |
| 19. | , | | | | 32 | 0,036 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | , | . | | | | |
| 20. | | | | | 10,5 | 0,012 |
| 21. | , | | | - ; ; - ; ; | 16 | 0,018 |
| 22. | | | | - ; ; ; ; - | 18 | 0,020 |
| 23. | , | . | - | | 16 | 0,018 |
| 24. | , | . | - | | 32 | 0,036 |
| 25. | , | . | | | 17,7 | 0,020 |
| 26. | , | . | | | 32 | 0,036 |
| 27. | | - | | - ; ; ; ; | 18 | 0,020 |
| 28. | | - | | - ; ; ; ; - | 6 | 0,007 |
| 29. | | - | | - ; ; ; ; | 6 | 0,007 |
| 30. | | - | | - ; ; ; ; | 6 | 0,007 |
| 31. | | - | | - ; ; | 6 | 0,007 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
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| | | | | ;; - | | |
| 32. | - | | | - ; - ; | 7 | 0,008 |
| | | | | - ; ; - ; | 7 | 0,008 |
| | | | | - ; ; - ; | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| 33. | , | | | - ; - ; | 7 | 0,008 |
| | | | | - ; ; - ; | 7 | 0,008 |
| | | | | - ; ; - ; | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | - | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |
| | | | - | | 7 | 0,008 |

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| 1 | 2 | 3 | 4 | 5 | 6 |
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| / |) | - | - | , | () |
| 1. | | « » | 2021 | 41,7 , (1984 . 2017 . 2017 . 2019 2019 2021 , . 2021 .) | 0,018 |
| 2. | | « », . | « », . | 15,5 , (2009 . 2013 . - 2013 . . .) | 0,016 |
| 3. | | ‘ ’, . | , | 12 | 0,016 |

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| 1 | 2 | 3 | 4 | 5 | 6 |
|----|---|---|--------|---|--------|
| | | | ‘ ’, . | (.2012 2020 - - “ ”, . , 2020 . . “ ” | |
| 4. | | " " " . . (“ ”) | “ ”, | 17 (.2007 2020 - 2020 . .) | 0,016 |
| 5. | | « » , . . | - | 5 (2014 . 2019) | 0,09 |
| 6. | | « » , . . | - | 5 (2014 . 2019) | 0,324 |
| 7. | | , . , ; 5, . , - , « » , . « » , . , - - , | , | 12,6 (08.1961 . 12.1961 , , 03.1962 . 08.1962 . - , 08.1962 . 08.1964 ., 04.1968 . 04.1972 . , , 08.1970 . 06.1971 , , | 0,1595 |

| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---------|---|-----------------|---|
| | | « » , . | - | (2014 . 2019) | |

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2. , - , 0,64

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| 1 | 2 | 3 | 4 | 5 | 6 |
|-----|---|----------------------|----------|---|-------|
| 8. | | « » , . " " " , . | 2021 . . | 41,7 , (1984 . 2017 . 2017 . 2019 , 2019 2021 , . 2021 .) | 0,018 |
| 9. | | « » , . , | « » , . | 15,5 , (2009 . 2013 . - 2013 . . .) | 0,016 |
| 10. | | ‘ ’ , . | ‘ ’ , . | 12 (.2012 2020 - - “ ” , . , 2020 . . | 0,016 |

| | | | | | | |
|--|--|--|--|---|--|--|
| | | | | <p>“ ”</p> <p>193-04</p> <p>15.08.2018):</p> <p>1.</p> <p>.</p> <p>31.08.2017 2422;</p> <p>2.</p> <p>18-07-20042.</p> <p>V-</p> <p>-</p> <p>«</p> <p>,</p> <p>- 2018".</p> <p>4.</p> <p>,</p> <p>.</p> <p>.</p> <p>2016-01-6525-</p> <p>1544 (2016</p> <p>. .);</p> <p>5.</p> <p>,</p> | | |
|--|--|--|--|---|--|--|

| | | | | | | | |
|--|--|--|--|---------------------------------|------------------------------------|---|---|
| | | | | <p>3557 (. .).</p> <p>2013</p> | | | |
| | | | | | <p>2018. – .24, 2. – .307-317.</p> | <p>Proceedings of the VI International scientific conference, North Charleston, USA, 27-28 February 2018. Section « Engineering». - North Charleston: Create Space, 2018.</p> | <p>XXI</p> <p>(15 2018, . - .68-70.</p> |

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|--|--|--|--|--|----|---|--|
| | | | | | | . 41-45 | |
| | | | | | 2. | Sviatskii V., Holubek R., Ruzarovsky R., Sokolov M. Design of the forming device with a vertical blow head for the production of synthetic fibers intended for filter process in the mining industry. Acta Montanistica Slovaca. Volume 23 (2018), number 4, p. 412-421. | (- 2018): V « ». 2018. .5. .3. . |
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| | | | | | | | <p>Acoustic method for predicting wear tools for turning processing /</p> <p>... //</p> <p>,</p> <p>(- 2022):</p> <p>VIII</p> <p>« ».</p> <p>2022. . 8</p> |
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| | | | | | | | <p>/</p> <p>· ,</p> <p>· //</p> <p>,</p> <p>IX</p> <p>-</p> <p>. 2023. .</p> <p>299-303.</p> |
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| 3. | 1. .3 | | , 106/5, 2 |

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| 8. | 1. .7 | , - (402/) , - , - (404/) , - , - (405/) , - , - | , 112- |

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| 13. | 1. .12 | <p>, , -</p> <p>« » (-224)</p> <p>« » (-227)</p> <p>« » (229)</p> <p>:</p> <p>1. (2).</p> <p>2. (1).</p> <p>3. (2).</p> <p>4. (2).</p> <p>5. (1).</p> <p>:</p> <p>1. (2);</p> <p>2. (2);</p> <p>3. (1);</p> | , 112- |

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| 14. | 1. .13 | <p>429 : : , , , , , , , - , , , , MS Office, Windows /</p> | , 112- |

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| 17. | 1. .15.1 | <p>, , -</p> <p>:</p> <p>: , , , :</p> <p>- ; ;</p> <p>- ;</p> <p>;</p> <p>;</p> | , 112- |

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| 18. | 1. .15.2 | .317/ - . ,116 : : : : 1. : - ; - ; - . 2. - 97-5 , 97-5 3. - 33. - 4. - -33. - 5. - 6. 1 , 98-6. (97-4. - 7. . 8. - 9. . | , . ,112- |

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| 19. | 1. .15.3 | <p>MS Office, Windows /</p> <p>Microsoft Open License 61010664,</p> <p>60979359, 61316870, 45560005, 45341392, 44964701,</p> <p>49066437, 48248804, 49487340, 43925361, 44544975,</p> <p>43239932, 42882586, 46733190, 45936776, 46019880,</p> <p>47425744, 47869741, 60102643, 41875901</p> <p>-3D 16 -10-00646</p> <p>44867/VRN3 19.12.2013 .</p> <p>AutoCAD 2014,2015, 2016, 2017, 2018</p> <p>Autodesk</p> <p>Autodesk</p> <p>#110001637279</p> | , 112- |
| 20. | 1. .16 | | , 112- |

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| | | <p style="text-align: right;">,</p> <p style="text-align: right;">: .109,</p> <p>.113</p> <p>:</p> <p style="text-align: right;">,</p> <p style="text-align: right;">:</p> <p style="text-align: right;">:</p> <p>1. LaserJet</p> <p>2. 3770</p> <p>3. -3</p> <p>4. -8</p> <p>5. -3</p> <p>6. -3</p> <p>7. -3</p> <p>8.</p> <p>9.</p> <p>12. «Epson»</p> <p>10. «Philips» 107</p> <p>11. Aquarius</p> <p>1. -2 2. -2 3. -</p> <p>-4</p> <p>4. -4. 5. -0,5-1,0.</p> <p>6. , 4 . 7. .</p> <p>8. .</p> <p>MS Office, Windows /</p> <p>Microsoft Open License 61010664,</p> <p>60979359, 61316870, 45560005, 45341392, 44964701,</p> <p>49066437, 48248804, 49487340, 43925361, 44544975,</p> <p>43239932, 42882586, 46733190, 45936776, 46019880,</p> <p>47425744, 47869741, 60102643, 41875901</p> | |
| 21. | 1. .17 - | , | , 112- |

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| 24. | 1. .20 | , « » « » , : : () ; -209; | , 112- |

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| 25. | 1. .21 | <p>MS Office, Windows / Microsoft Open License 61010664, 60979359, 61316870, 45560005, 45341392, 44964701, 49066437, 48248804, 49487340, 43925361, 44544975, 43239932, 42882586, 46733190, 45936776, 46019880, 47425744, 47869741, 60102643, 41875901 AutoCAD Inventor Professional Suite 2009-2011 110000204293 11580/VRN3/35-03/120 26.06.2009 . T-FLEX 0DE36697 53- / -2009/35-03/105 10.06.2009 .</p> | , 1 |
| 26. | 1. .22 | | , 116 |

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| 27. | 1. .23 | <p>MS Office, Windows / Microsoft Open License 61010664, 60979359, 61316870, 45560005, 45341392, 44964701, 49066437, 48248804, 49487340, 43925361, 44544975, 43239932, 42882586, 46733190, 45936776, 46019880, 47425744, 47869741, 60102643, 41875901</p> | , 116 |
| 28. | 1. .24 | <p>MS Office, Windows / Microsoft Open License 61010664,</p> | , 106/5, 2 |

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| 36. | 1. . .7 | , , -) : : , , 1. - 2. . 3. - : : , - , MS Office, Windows / Microsoft Open License 61010664, 60979359, 61316870, 45560005, 45341392, 44964701, 49066437, 48248804, 49487340, 43925361, 44544975, 43239932, 42882586, 46733190, 45936776, 46019880, 47425744, 47869741, 60102643, 41875901 OpenOffice / -3D 16 -10-00646 - 44867/VRN3 19.12.2013 . AutoCAD 2014,2015, 2016, 2017, 2018 Autodesk - | , . , 116 , . , 116 , . , 116 |

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| 62. | 3. .1 | : , , : , , - MS Office, Windows / Microsoft Open License 61010664, 60979359, 61316870, 45560005, 45341392, 44964701, 49066437, 48248804, 49487340, 43925361, 44544975, 43239932, 42882586, 46733190, 45936776, 46019880, 47425744, 47869741, 60102643, 41875901 | , 116 |
| 63. | 3. .1 | : , , : , , - MS Office, Windows / Microsoft Open License 61010664, 60979359, 61316870, 45560005, 45341392, 44964701, 49066437, 48248804, 49487340, 43925361, 44544975, 43239932, 42882586, 46733190, 45936776, 46019880, 47425744, 47869741, 60102643, 41875901 | , 116 |
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| 66. | | <p>() : : - « » - , - , (Wi-Fi) MS Office, Windows / Microsoft Open License 66426830</p> | , 112- |
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