

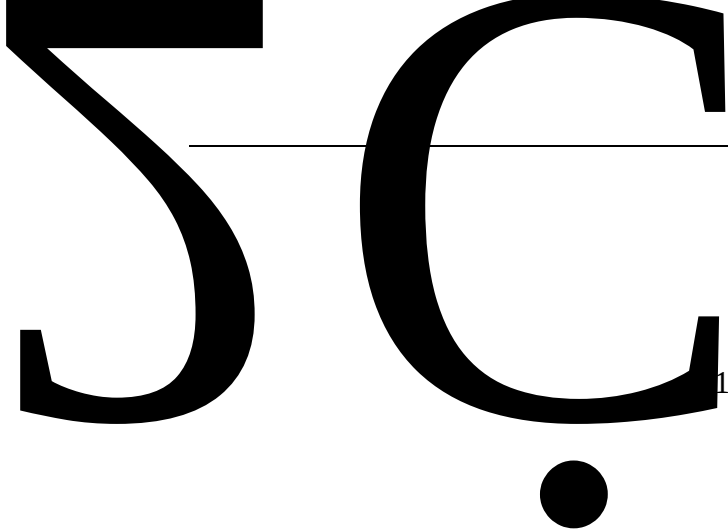
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39

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|     |       |    |
|-----|-------|----|
| 1.1 | ..... | 1  |
| 1.2 | ..... | 1  |
| 1.3 | ..... | 5  |
| 1.4 | ..... | 5  |
|     |       |    |
| 2.1 | ..... | 7  |
| 2.2 | ..... | 7  |
| 2.3 | ..... | 8  |
| 2.4 | ..... | 14 |
| 2.5 | ..... | 14 |
| 2.6 | ..... | 14 |
| 2.7 | ..... | 17 |
|     |       |    |
| 3.1 | ..... | 20 |
| 3.3 | ..... | 26 |
|     |       |    |
| 4.1 | ..... | 32 |
| 4.2 | ..... | 32 |



1.

1.1

1.2

1.2.1.

|      |    |    |  |      |   |      |     |      |     |   |
|------|----|----|--|------|---|------|-----|------|-----|---|
| 1    |    |    |  |      |   |      |     | 2021 | 9   | 1 |
| 2    |    |    |  |      |   |      |     | 2024 | 11  | 1 |
| 3    |    |    |  |      |   |      | 591 |      | 645 |   |
| 2013 | 12 | 7  |  |      |   |      |     |      |     |   |
| 4    |    |    |  |      |   |      | 708 | 2019 | 4   | 1 |
| 5    |    |    |  |      |   | 2025 |     |      |     |   |
| 14   |    | 34 |  | 2025 | 5 | 29   |     |      |     |   |
| 6    |    |    |  |      |   |      |     |      |     | 1 |
| 2019 | 1  | 1  |  |      |   |      |     |      |     |   |
| 20y  |    |    |  |      |   |      |     |      | 3   |   |







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1.2.2.

1

GB50156-2021

2

1.2.3.

|    |      |      |      |
|----|------|------|------|
| 1  | 2005 | 4    |      |
| 2  |      |      | 2002 |
| 11 |      |      |      |
| 3  |      | 2003 | 7    |

1.3

- 1
- 2
- 3
- 4
- 5

1.4

1-1

---

1.4-1

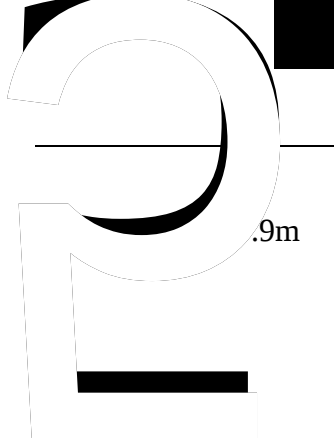
2.

|   |              |                  |   |                  |   |
|---|--------------|------------------|---|------------------|---|
| 6 | FF           | 4                | 1 | 1                | 1 |
|   | 4            | 30m <sup>3</sup> | 3 | 30m <sup>3</sup> | 1 |
|   | GB50156-2021 | 3.0.9            |   |                  |   |

Q

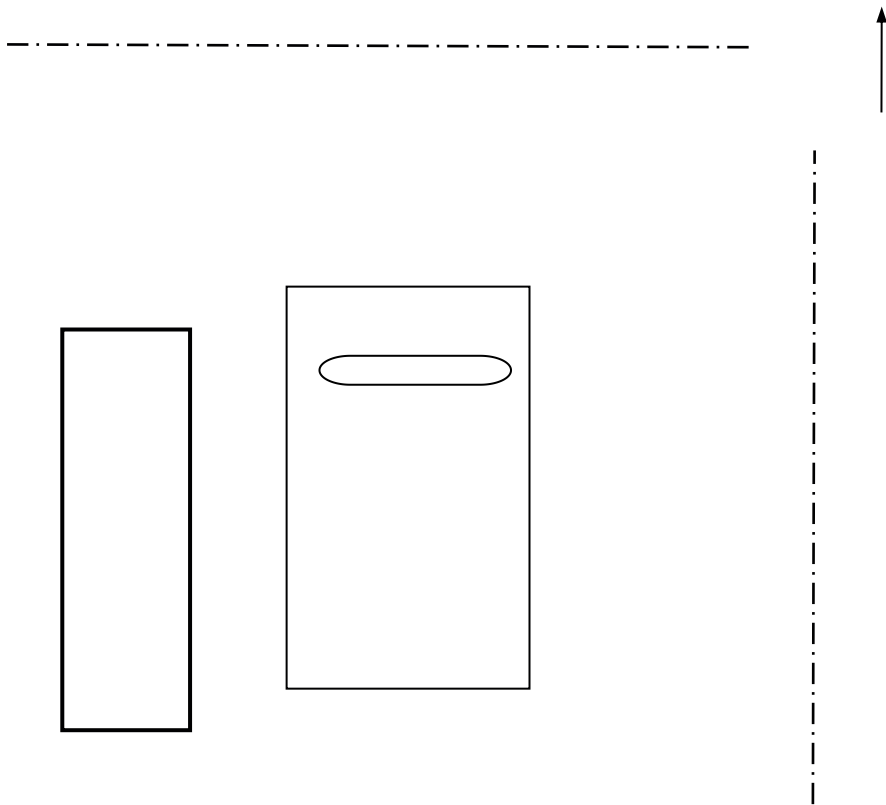
1541P





.9m

0.5m



2.3-1

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2.3-1

m

m

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H

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| 2.3-2 |     |     |     | m |    |     |    |   |    |   |      |   |    |
|-------|-----|-----|-----|---|----|-----|----|---|----|---|------|---|----|
| 0.5   | 0.5 | 0.5 | 0.5 | - | -  | -   | -  | - | -  | - | -    | - | -  |
| 0.5   | 0.5 | -   | -   | - | -  | -   | -  | - | -  | - | -    | - | -  |
| -     | -   | -   | -   | - | -  | -   | -  | - | -  | - | -    | 3 | 16 |
| -     | -   | -   | -   | - | -  | -   | -  | - | -  | - | -    | 2 | 16 |
| 4     | 8   | 3   | 8   | 4 | 20 | 3.5 | 20 | 5 | 10 | 5 | 10   | 5 | 14 |
| 2     | 16  | 2   | 25  | 2 | 20 | 2   | 20 | - | -  | - | -    | - | -  |
| 8.5   | 11  | 6   | 16  | 7 | 22 | 6   | 22 | 7 | 13 | 7 | 12.5 |   |    |

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2.4

2.4-1

2.4-1

|   |                   |      |
|---|-------------------|------|
| 1 | 92m <sup>2</sup>  | -    |
| 2 | 204m <sup>2</sup> | H=6m |
| 3 | 12m <sup>2</sup>  |      |

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2

3

1

2

1.0 1.2

3

10min

2min



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2.7

2.7.1

1

912101037464861237

2024 12 17

2

2023 000399

2023 3 14 2026 3 13

3

(1062017007)[2025]0106ZSY099

2025 11 7 2026 5 6

4

^ 2<4# -



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2.7.2

1

2

a. 5

b.

c.

3

4

TN-S

UPS 2h

5

5

6

8 2m<sup>3</sup> 5kg 5 2kg

8 5kg 12 35kg 2

5kg 2

7



11

5

5

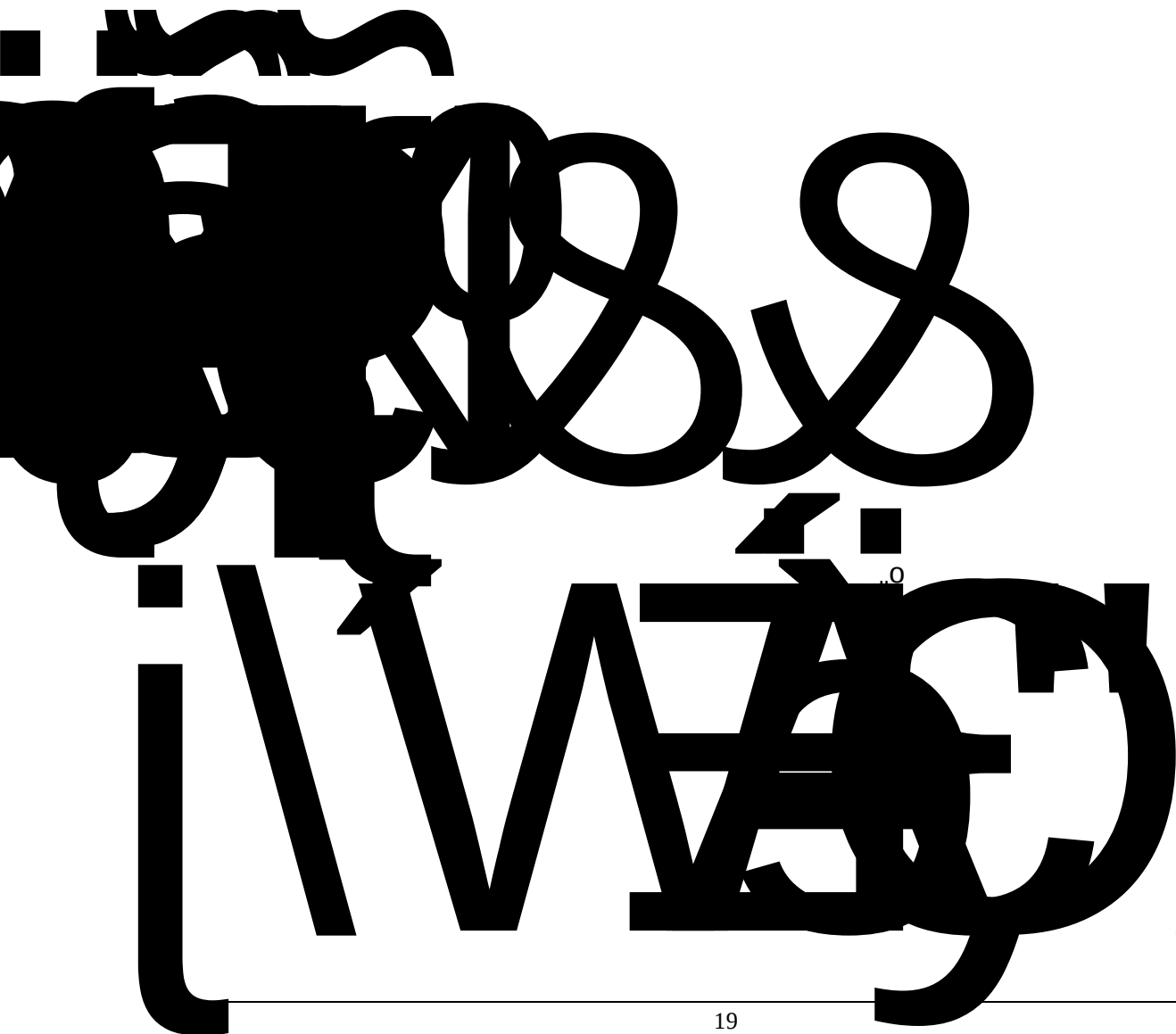
4.5m 1

4m

90%

Đ, { F

Đ



2



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$$Q_1 \quad Q_2 \dots Q_n \text{ ————— } t$$

3

3.1.3

$$23 \leq 60 \qquad 3.1-1$$

| 3.1-1 |  |       |
|-------|--|-------|
| 1     |  | 200t  |
| 2     |  | 5000t |

$$\begin{array}{ccc} 90\text{m}^3 & 0.75 & 67.5\text{t} \\ 30\text{m}^3 & 0.82 & 24.6\text{t} \end{array}$$

$$S=67.5/200+24.6/5000=0.34242<1$$

3.2

3.2.1

$$\begin{array}{ccccc} & 2^* & & 1\text{B} & 2 \\ 1 & - & 2 & - & 2 \\ & 1630 & & & \end{array}$$

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PC-TWA 300mg/m<sup>3</sup>

1

2

3

4

1.5

5

1

30

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2

3

1000m<sup>3</sup>

1

2

( )

( )

0.5m<sup>3</sup>

100mm

3

4

GB 7231

5

15min

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300m

50m

1674

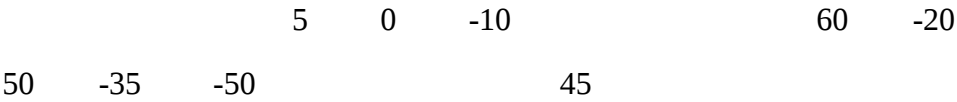
-18

=1

0.79~0.84

282-338

0.6%~7.2%



15min

10



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### 3.3.2

1

2

3

### 3.3.3

3.3.4



3.3.5

3.3.6

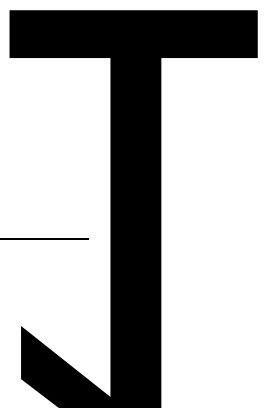
3.3.7

2m

2m

3.3.8

1





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4.

4.1

8

1

2

3

4

5

6

7

8

4.2

Ě m r

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5.

8

5-1

5-1

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|  |    |  |  |
|--|----|--|--|
|  | 10 |  |  |
|  | 11 |  |  |
|  | 12 |  |  |
|  | 13 |  |  |
|  | 14 |  |  |
|  | 15 |  |  |
|  | 16 |  |  |
|  | 17 |  |  |
|  | 18 |  |  |
|  | 19 |  |  |
|  | 1  |  |  |
|  | 2  |  |  |
|  | 3  |  |  |
|  | 1  |  |  |
|  | 1  |  |  |
|  | 2  |  |  |
|  | 3  |  |  |
|  | 1  |  |  |
|  | 2  |  |  |
|  | 3  |  |  |

2025 7 31

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5-3



|  |                                               |                            |                |  |
|--|-----------------------------------------------|----------------------------|----------------|--|
|  | 7                                             | GB50156-2021<br>5.0.8      |                |  |
|  | 8                                             | GB50156-2021<br>5.0.9      |                |  |
|  | 300m <sup>2</sup>                             |                            |                |  |
|  | 9                                             | GB50156-2021<br>5.0.10     | 1<br><br>4.0.4 |  |
|  | 4.0.4<br><br>“ ” “<br>”                       |                            |                |  |
|  | 10                                            | GB50156-2021<br>5.0.11     |                |  |
|  | 11                                            | GB50156-2021<br>5.0.12     |                |  |
|  | 2.2m<br><br>4.0.4 1.5<br>25m<br><br><br>4.0.4 |                            |                |  |
|  | 12                                            | GB50156 5.0.13-1<br>5.0.13 | 2.3-1<br>2.3-2 |  |
|  | 13                                            | 5.0.13-1<br>5.0.11         |                |  |

|  |    |        |                        |  |
|--|----|--------|------------------------|--|
|  | A  | 5.0.15 |                        |  |
|  | 14 | C      | GB50156-2021<br>5.0.16 |  |

3

5-4

1

GB 50156-2021  
6.1.1

2

GB 50156-2021  
6.1.2

3

GB 50156-2021  
6.1.3

FF

4

1

AQ3020

GB 50156-2021  
6.1.4

FF

Ä ? ¾>~ 6.1.4

0.08MPa  
5

FF

SH/T3177

GB50156-2021  
6.1.5

|  |    |                                                                                                         |                            |    |  |
|--|----|---------------------------------------------------------------------------------------------------------|----------------------------|----|--|
|  | 6  | GB/T 51344                                                                                              | GB 50156-2021<br>6.1.6     | FF |  |
|  | 7  | $10^9\Omega$<br>$10^9\Omega$<br><br>$6.1.7$<br>$A=0.04V_t$ $6.1.7$<br>$A$ ——<br>$m^2$<br>$V_t$ —— $m^3$ | GB 50156-2021<br>6.1.7     | FF |  |
|  | 8  | 11.2                                                                                                    | GB<br>50156-2021     6.1.8 | FF |  |
|  | 9  |                                                                                                         | GB 50156-2021<br>6.1.9     | FF |  |
|  | 10 | 80mm     4mm                                                                                            | GB 50156-2021<br>6.1.10    | FF |  |



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50L/min

GB 50156-2021

6.2.2

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|   |               |
|---|---------------|
| 1 | GB 50156-2021 |
|   | 6.6.6         |
| 2 |               |
| 3 |               |
| 4 |               |
| 5 |               |

|   |               |
|---|---------------|
| 1 | GB 50156-2021 |
|   | 6.3.1         |

|   |               |
|---|---------------|
| 2 | GB 50156-2021 |
|   | 6.3.2         |

|   |               |
|---|---------------|
| 3 | GB 50156-2021 |
|   | 6.3.3         |
| 4 |               |

|       |               |
|-------|---------------|
| 100mm | GB 50156-2021 |
|       | 6.3.4         |

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7

1

50mm

1.0 1.2

25mm

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|  |                           |                       |                      |  |
|--|---------------------------|-----------------------|----------------------|--|
|  | 4<br>“<br>”<br>,          | XF/T<br>3004-2020 8.1 |                      |  |
|  | 5<br>“<br>” “<br>” “<br>” | XF/T<br>3004-2020 8.2 | “<br>” “<br>” “<br>” |  |

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|   |     |         |      |                        |      |
|---|-----|---------|------|------------------------|------|
| 6 |     |         |      |                        |      |
|   | LNG | CNG     | LPG  | GB50156-2021<br>13.1.6 |      |
| 7 |     |         |      |                        |      |
|   |     | GB50058 |      | GB50156-2021<br>13.1.7 |      |
| 8 |     |         | IP44 | GB50156-2021<br>13.1.8 | IP44 |
| 1 |     |         |      |                        |      |
|   |     | 2       |      | GB50156-2021<br>13.2.1 | FF   |
| 2 |     |         |      |                        |      |
|   |     |         |      | GB50156-2021<br>13.2.2 |      |
|   |     | 4Ω      |      |                        |      |
| 3 |     |         | LPG  |                        |      |
|   |     |         |      | GB50156-2021<br>13.2.4 |      |
| 4 |     |         |      |                        |      |

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5

GB50156-2021

13.2.7

6

GB50156-2021

13.2.8

7 380/220V

TN-S

380V

TN-C-S

|  |                        |                         |           |  |
|--|------------------------|-------------------------|-----------|--|
|  | 13<br>100Ω             | GB50156-2021<br>13.2.15 |           |  |
|  | 14<br>1                | GB50156-2021<br>13.2.16 | 1         |  |
|  | 1                      | 6.1.2.1                 |           |  |
|  | 2                      | 6.1.2.2.1               |           |  |
|  | 3                      | 6.1.2.2.2               |           |  |
|  | 1                      | 6.1.1.1                 |           |  |
|  | 2<br>UPS<br>2h         | 6.1.1.2                 | UPS<br>2h |  |
|  | 3<br>GB 50348 2018 3.9 | 6.1.1.3                 |           |  |
|  | 1                      | GB50156-2021<br>13.5.1  |           |  |

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|  |    |                        |  |  |
|--|----|------------------------|--|--|
|  | 2. |                        |  |  |
|  | 1  |                        |  |  |
|  | 2  | GB50156-2021<br>13.5.2 |  |  |
|  | 3. | GB50156-2021<br>13.5.4 |  |  |

3

5-7

1

140kW

|  |           |                        |                      |  |
|--|-----------|------------------------|----------------------|--|
|  | 3         | GB50156-2021<br>14.1.5 |                      |  |
|  | 1         | GB50156-2021<br>14.2.1 |                      |  |
|  | 2         |                        |                      |  |
|  | 4.5m      |                        |                      |  |
|  | 2m        |                        | 6m                   |  |
|  | GB50068   | GB50156-2021<br>14.2.2 | GB50009<br>GB/T50011 |  |
|  | GB50009   |                        |                      |  |
|  | GB/T50011 |                        |                      |  |
|  | 3         |                        |                      |  |
|  | 0.15      |                        |                      |  |
|  | 0.2m      |                        |                      |  |
|  | 1.2m      |                        |                      |  |
|  | 0.6m      | GB50156-2021<br>14.2.3 | 1.2m<br>0.2m<br>0.6m |  |
|  | 100mm     |                        |                      |  |
|  | 0.5m      |                        |                      |  |

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4

GB50016

50156-2021

14.2.4

GB

5

GB50156-2021

14.2.7

6

GB50156-2021

14.2.9

7

300m<sup>2</sup>

GB50156-2021

14.2.10

8

B

GB50016

GB50156-2021

14.2.1 300m<sup>2</sup>

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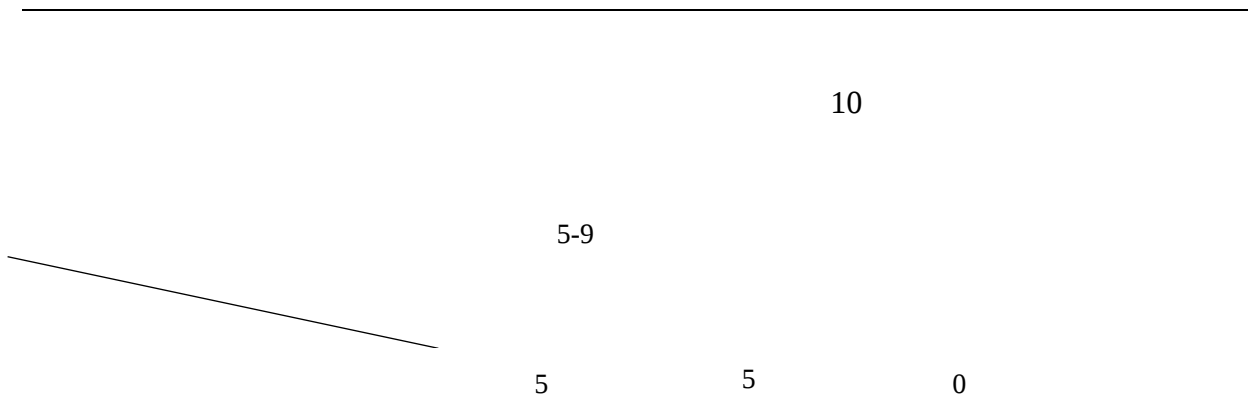
17

18

19

20

90m<sup>3</sup>



1

5kg

2

12.1.1.1

2

5kg

12

1

5kg

1

6L

2

2

1

35kg

15m

6

5

2m<sup>3</sup>

2

2m<sup>3</sup>

GB50156-2021

35kg

12.1.1.1

2

5kg

1

6L

2

2

1

35kg

15m

5

2m<sup>3</sup>

5

2

---

6.

1

2

3

“ ” “

” “ ”

4

---

6

“

”

“

”

7

8

9

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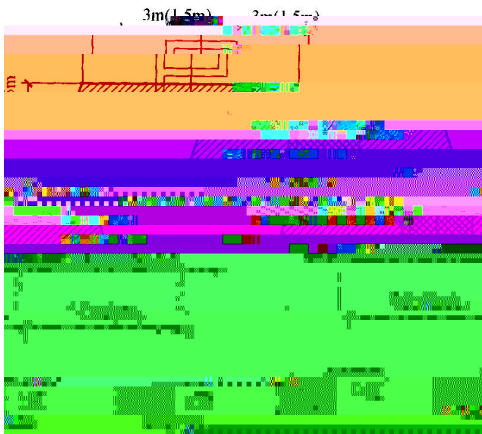
7.

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1.  
GB50058-2014

1 0  
2 1  
3 2

2. 1  
3. 1  
1 1  
2 4.5m  
0.15m 3m 2



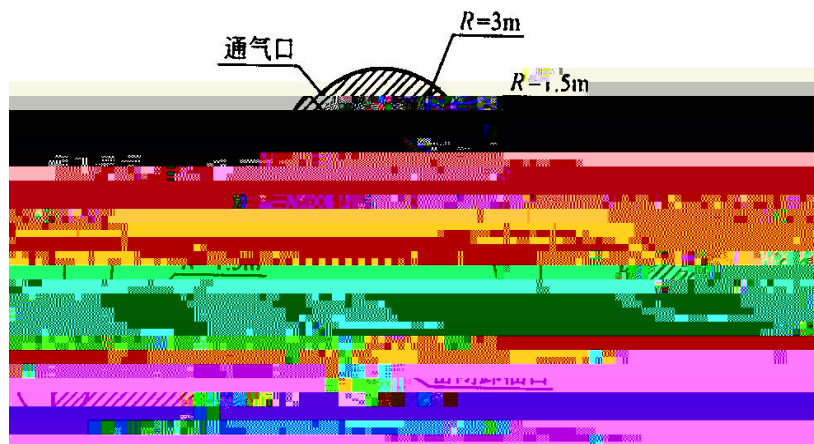
1  
4. 2  
1 0  
2 1.5m 0.5m  
1

3

3m

1.5m

2



2

5.

3

1

0

2

1.5m 0.75m

0.5m

1

3

1.5m

1m

3m 2m

1.5m

2

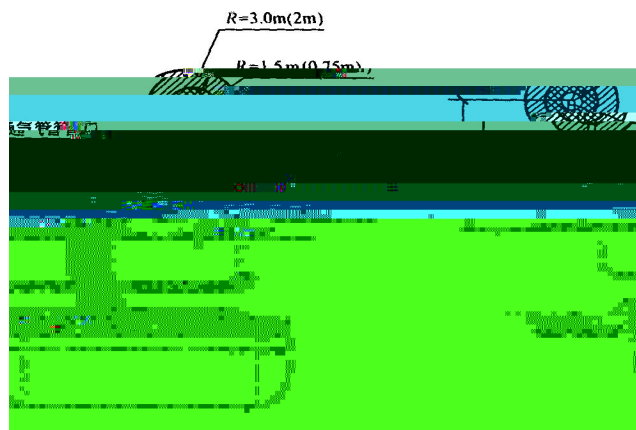
4

1

1m

1.5m

2



3

- 
- 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 9
  - 10
  - 11
  - 12