



12176-1—  
2021

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(ISO 12176-1:2017, IDT)



2021

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» ( « »)  
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364 « »

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11 2021 . Nv 551-

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12176-1:2017 «

1.

» (ISO 12176-1:2017 «Plastics pipes and fittings — Equipment for fusion jointing polyethylene systems — Part 1: Butt fusion». IDT).

ISO/TC 138 «

SC 4 «

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12176-1—2011

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29 2015 . N9 162- «

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(www.gost.ru)

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1 ..... 1

2 ..... 1

3 ..... 1

4 ..... 2

    4.1 ..... 2

    4.2 ..... 2

5 ..... 2

    5.1 ..... 2

    5.2 ..... 3

6 ..... 5

    6.1 ..... 5

    6.2 ..... 6

    6.3 ..... 6

    6.4 ..... 6

    6.5 ..... 6

7 ..... 6

    7.1 ..... 6

    7.2 ..... 7

8 ..... 7

    8.1 ..... 7

    8.2 ..... 7

    8.3 ..... 8

    8.4 ..... 8

    8.5 ..... 8

9 ..... 9

10 ..... 9

    10.1 ..... 9

    10.2 ..... 10

    10.3 ..... 10

11 ..... 13

12 ..... 13

13 ..... 13

14 ..... 14

    (        ) ..... 15

    (        ) ..... 16

    (        ) ..... 18

..... 19

012176

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- . »:
- 1.
- 2. ;
- 3. ;
- 4. .

Plastics pipes and fittings. Equipment for fusion joining polyethylene systems.  
Part 1. Butt fusion

— 2021—09—01

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4437-2 [1]

4437-3 [2]

4427-2 (3)

(  
4427-3 (4).

2

8

( )

ISO 4287, Geometrical Product Specifications (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters [ (GPS). ]

ISO 11414. Plastics pipes and fittings — Preparation of polyethylene (PE) pipe/pipe or pipe/fitting test piece assemblies by butt fusion [ ( ), ].

3

: <http://www.electropedia.org/>;

: <http://www.iso.org/obp>

3.1 (base framework): , -

1 — /

3.2 (frictional resistance of the butt fusion machine): , -

1— 6.1.

3.3  $d_n$  (nominal outside diameter): -

1—

3.4 (nominal wall thickness): -

1—

3.5 (drag compensation):

3.6 ; SDR (standard dimension ratio): -

(  $d_n$  4427-1:2007,3.1.1.15)

4

4.1

, , 10 " 40 °C. -

4.2

- :  
- :  
- ):

- ;

-

SDR

— , (5).

5

5.1

/

400

$d_n$  400

$d_n$

5.2

5.2.1

1.

1—

$e_n S4.5$	\$5
$4.5 < \$ 7$	\$6
$7 < e_n S12$	\$8
$12 < \$ 19$	£10
$19 < \$26$	\$12
$26 < \$ 37$	\$16
$37 < S 50$	\$20
$50 < \$ 70$	\$25
$70 < S 90$	\$30
$90 < \$130$	\$35

5.2.2

10.3.4  
2.

Sp1 Sp2 ( . . . 5).

2—

d	
$d_n \leq 315$	0,25
$315 < d_n \leq 630$	0.50
$630 < d_n \leq 800$	0.65
$800 < d_n \leq 1000$	0.80
$1000 < d_n \leq 1200$	0.95
$1200 < d_n \leq 1600$	1,30
$1600 < d_n$	$0,2\%OTd_n$

5.2.3

0.2

10.1.2.1.

0.5

10.1.2.2.

315

( . . . 1)

3.

3—

{

SDR 17.6 SDR 17)

$d_n$	
\$225	0,50
250	1
315	2







7.2

10.2,

2.

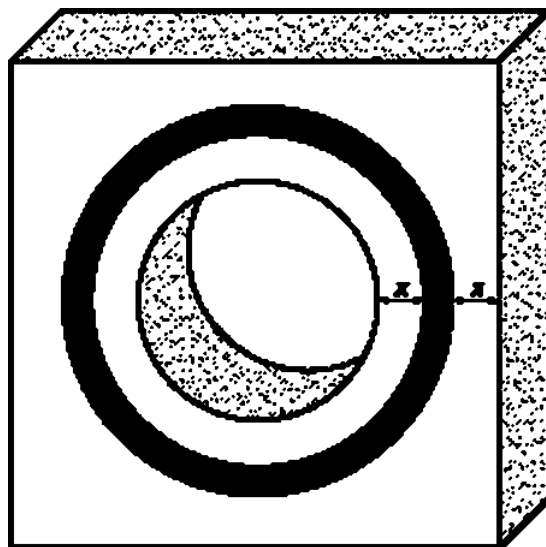
8

8.1

8.2

4.

( . 2)



4 —

$d_{ft}$	( . 2).
$d_n S250$	10
$250 < d_n \leq 630$	2 15
$630 < d_n \leq 1600$	220

$\pm 0,1$  / . 0,5  $d_n$  250 , 0.2  $d_n$  250

8.3

( )

8.4

4

50 ' .

$\pm 5$  ' .

8.5

8.5.1

*Ra.*

4287,

0.63

10.3.1:

10.3.1

8.5.2

*Ra* 2.5.

270 \*

1 .

$\pm 7$

10 ' .

40 .

170 ' .

260 ,



10.1.2

10.1.2.1

$d_n$

10.1.2.2

200

6

0.1 %

5.2.3.

4).

1 4

5.2.3.

200

10.2

2.

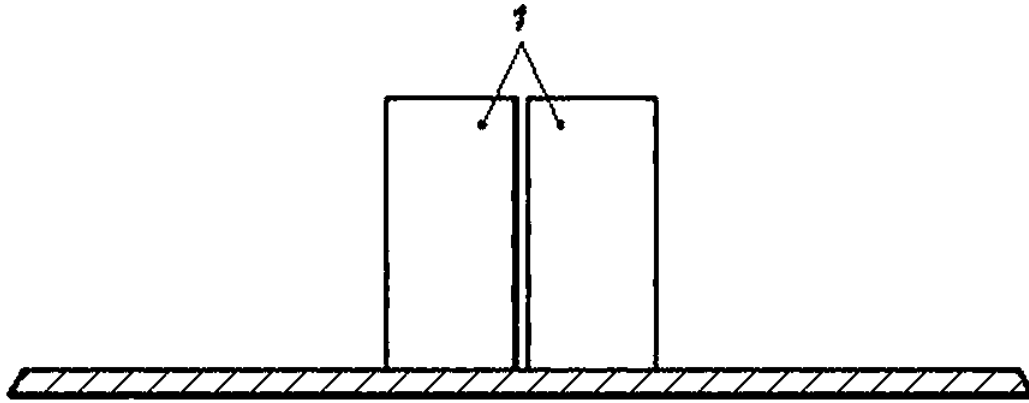
10.3

10.3.1

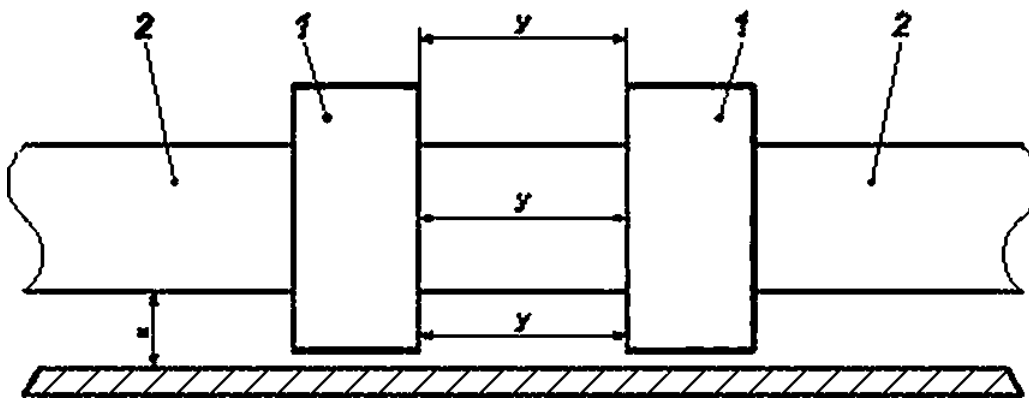
45\*

*Ra*

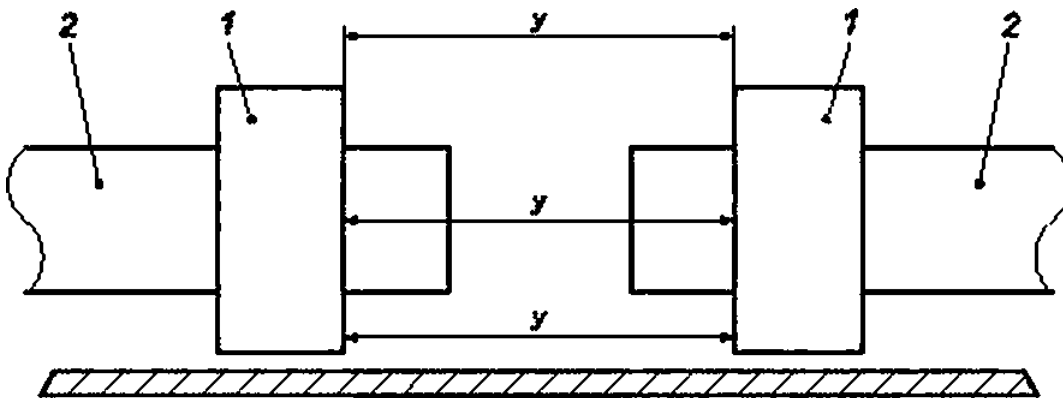
8.5.1.



а) Начальная настройка



б) 0



в) Степень разведки

— .2— , —

8 200

4—

10.3.2

(23 ± 2) °C.

8.5.2.

50

8.5.2.

10.3.3

(5 ± 2)

4

8.5.3.

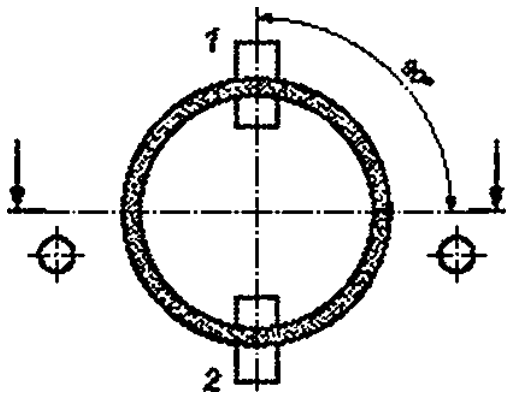
10.3.4

90

0,15 / 2.

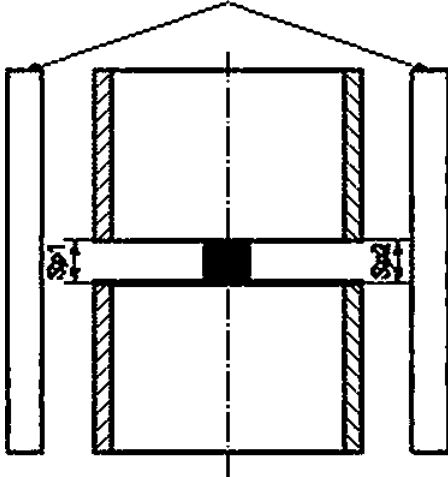
Sp1 Sp2 ( 5 6)

2.



A-A

3



1.2—  
90°

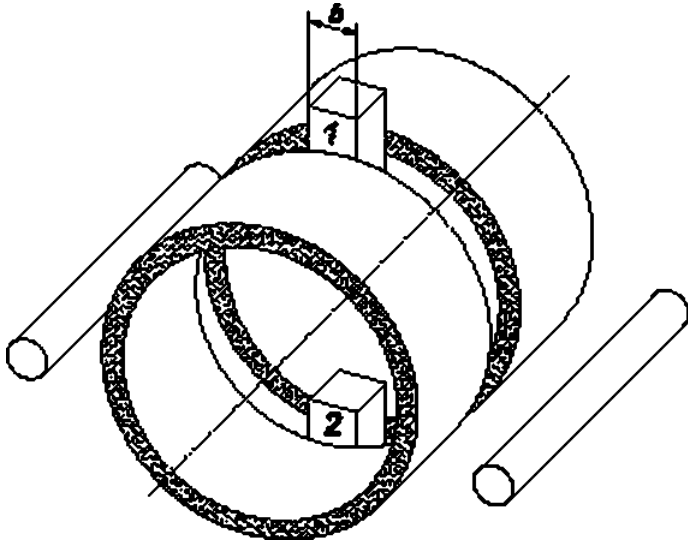
\$ 1—

); 3 —  
; Sp2 —

5—



5.  
6.



1.2—

< 90° ) ; —  
 - } 00 ( 10 ), —  
 6—

11

\*

12

13

- a) ; ;
- b) ;
- c) ( ) ;

- d) ;
- e) , .

14

- a) :
- b) ( ) ;
- c) SDR : ;
- d) ( ) ;
- e) . , - .

( )

.1

11414.

.2

,

.

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,

.4

SDR

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( )

.1

- a)
- b)
- c)
- d)
- e)

.1— .4.

.7.

.2

.1.

.1—

( )	1
( )	2
( )	3
( )	4

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12176-4 (6)	™,

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DIPS,

IPS.

CTS).

.7

2-M-M-N-8\*DIPS

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8

DIPS:

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3-P-A-N-1200

—

1200 :

3-S-M-D-250

—

250 :

-

- - - -315

—

(

™)

315 :

3- - - -315

—

15 .

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( )

.1

ISO 4287		4287—2014 « (GPS). »
ISO 11414		11414—2014 « / ( ), »
<p>— : • IDT —</p>		

- [1] ISO 4437-2, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes ( ) 2.
- [2] ISO 4437-3, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3: Fittings ( ) 3.
- [3] ISO 4427-2, Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 2: Pipes [ ] 2.
- [4] ISO 4427-3, Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 3: Fittings [ ] 3.
- [5] Directive 2006/42/ of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (Text with EEA relevance)
- [6] ISO 12176-4, Plastics pipes and fittings — Equipment *for* fusion jointing polyethylene systems — Part 4: Traceability coding ( ) 4.

621.791:006.354

25.160.30

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17.06.2021.

28.06.2021.

60\*84 .

. . .2.79. - . . .2.37.

117416

- . .3t. .2.

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