

1

2

3

4

5

6

7

8

9

10

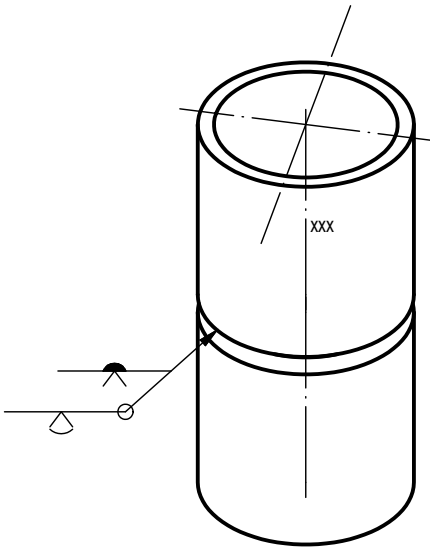
TEST COUPON 1A (PIPE):

MATERIAL: CARBON STEEL PIPE

2 PCS Ø114.3 X 8.56 WALL X 115 LONG

NOTE:

THE NUMBER OF TACKS IS TO BE LIMITED WITH A MAXIMUM 4 TACKS.



WELDING POSITION

ISO 6947/AWS A3.0

H-LO4S/6G

WELDING PROCESSES

ISO 4063 / AWS A3.0

ROOT PASS

GTAW (141)

FILL & CAP

SMAW (111)

EVALUATION:

1. VISUAL

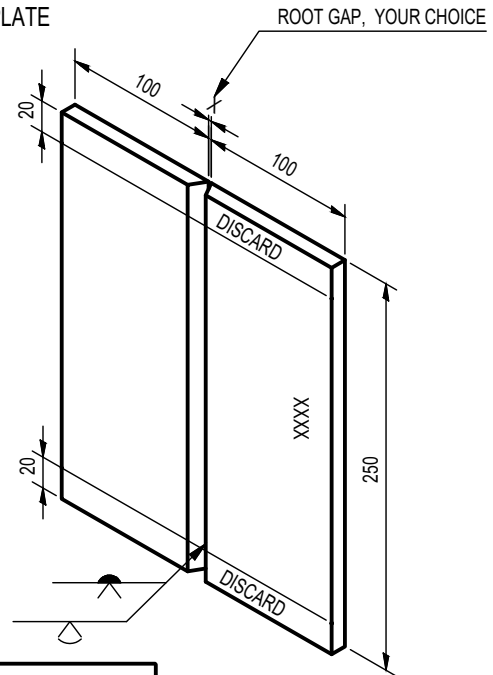
2. X-RAY ENTIRE WELD JOINT

TEST COUPON 1B (PLATE 10 mm):

MATERIAL: CARBON STEEL PLATE

THICKNESS: 10 mm.

ROOT GAP, YOUR CHOICE



WELDING POSITION

ISO 6947/AWS A3.0

PC/2G

WELDING PROCESSES

ISO 4063 / AWS A3.0

ROOT PASS

GMAW (135)

FILL & CAP

GMAW (135)

EVALUATION:

1. VISUAL

2. X-RAY ENTIRE WELD JOINT

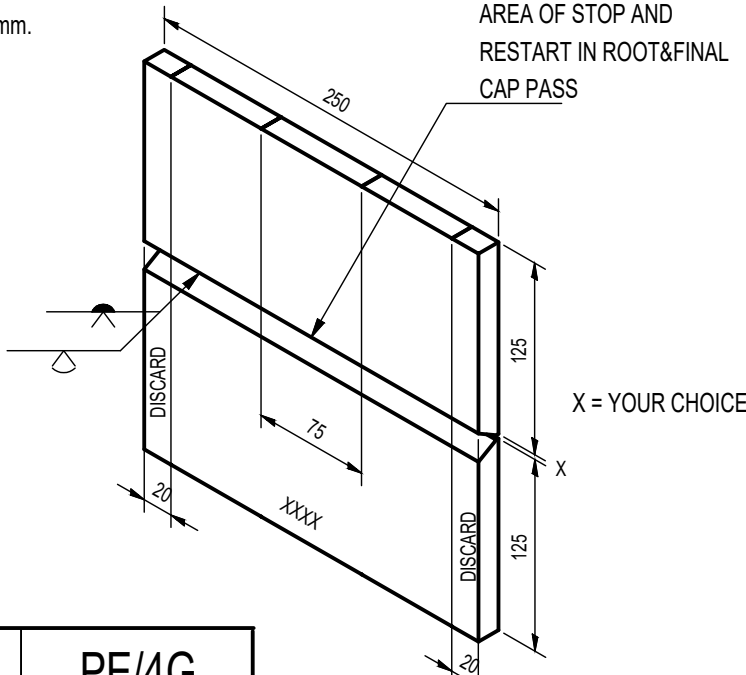
TEST COUPON 1C (PLATE 16 mm):

MATERIAL: CARBON STEEL PLATE

THICKNESS: 16 mm.

HOLD POINT

AREA OF STOP AND RESTART IN ROOT&FINAL CAP PASS



WELDING POSITION

ISO 6947/AWS A3.0

PE/4G

WELDING PROCESSES

ISO 4063 / AWS A3.0

ROOT PASS

GMAW (135)

FILL & CAP

FCAW (136)

EVALUATION:

1. VISUAL

2. X-RAY ENTIRE WELD JOINT

TEST COUPON 1D (FILLET WELD 12 mm):

MATERIAL: CARBON STEEL PLATE

THICKNESS: 12 mm.

NOTE:

1. EDGE PREPARATION MUST REMAIN AT 90° TO THE PLATE FACE. NO CHAMFER AND NO GAP ALLOWED.

2. TACK WELD ON EACH END OF THE COUPON AND TWO TACKS (MAX. 25 mm) ON ONE SIDE OF BRACKET.

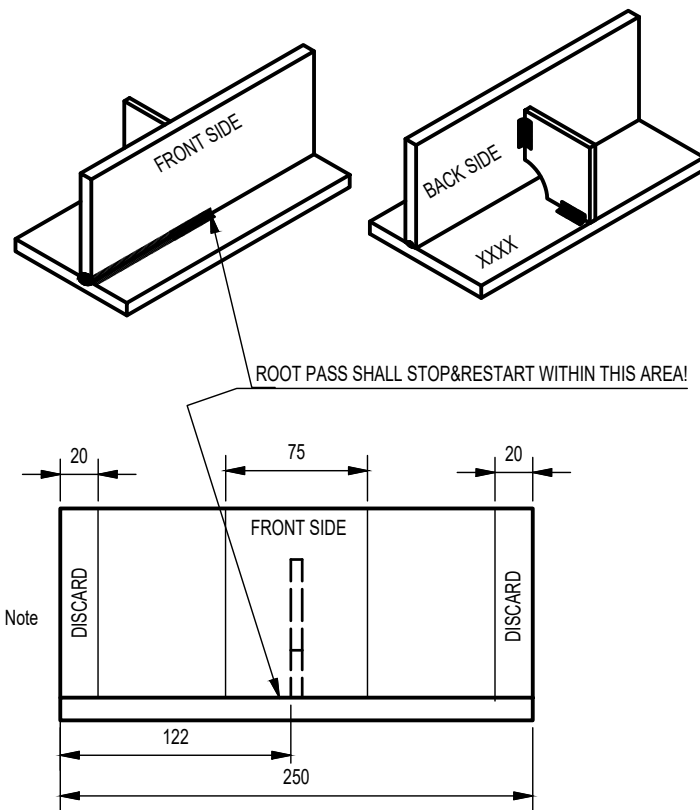
3. DEPOSIT A FILLET WELD ON THE FRONT SIDE OF THE JOINT WITH A 10 mm (+2.0/-0) mm LEG LENGTH. THE ROOT PASS SHALL STOP&RESTART WITHIN THE AREA SHOWN AS THE SKETCH.

4. WELD TO BE DEPOSITED WITH A MINIMUM OF 2 RUNS AND A MAXIMUM OF 3 RUNS.

FRONT SIDE

BACK SIDE

XXXX



12

100

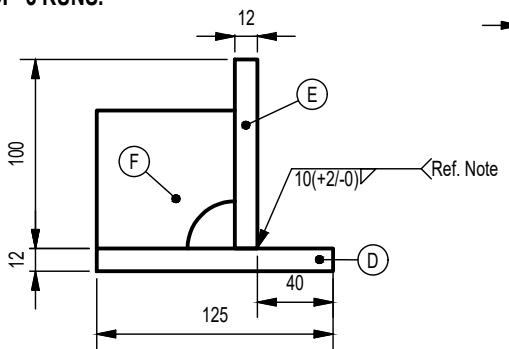
12

125

40

10(+2/-0)

Ref. Note



20

75

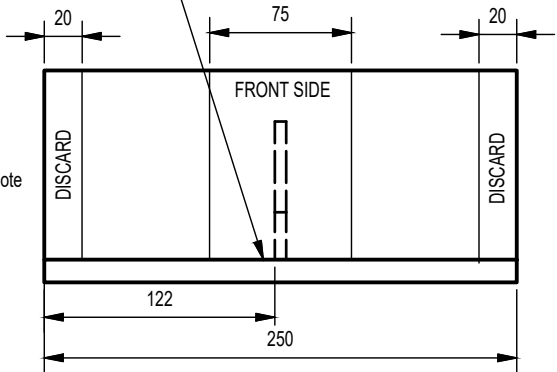
20

122

250

FRONT SIDE

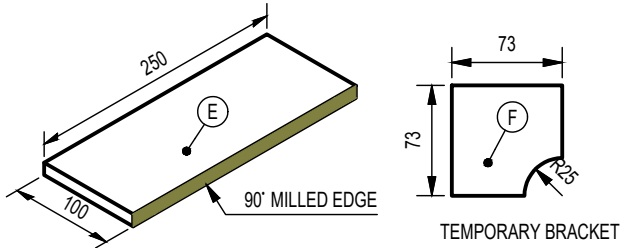
DISCARD



250

100

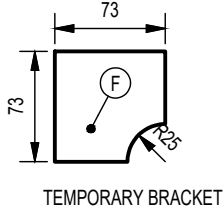
90° MILLED EDGE



73

73

TEMPORARY BRACKET



NOTE:

1. ANY PROCESS AND ANY POSITION MAY BE USED FOR TACKWELDING.

2. ALL TACK WELDS EXCEPT TWO TACKS ON TEMPORARY BRACKET FOR FILLET COUPON ARE TO BE NOT LONGER THAN 15 mm.

3. TWO TACKS (MAX. 25 mm) OF TEMPORARY BRACKET FOR FILLET COUPON SHALL BE MADE ONLY ON ONE SIDE SHOWN AS SKETCH.

4. ALL PLATE OR PIPE COUPONS ARE TO BE TACKWELDED BEFORE ANY WELDING COMMENCES.

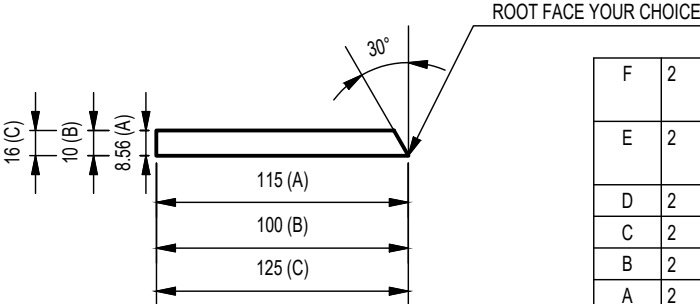
5. PROCESS INDICATED FOR ROOT WELD TO BE USED ONLY FOR ONE RUN, NOT FOR SECOND AND/OR SUBSEQUENT PASSES.

6. ALL PLATE OR PIPE COUPONS MUST BE WELDED IN THE POSITION AS INDICATED FOR EACH TEST.

7. GRINDING IS **NOT** ALLOWED FOR THE CLEANING OF THE FINAL SURFACES OF BOTH CAP AND ROOT WELDS.

8. XXXX= COMPETITOR'S I.D.

ROOT FACE YOUR CHOICE



16 (C)

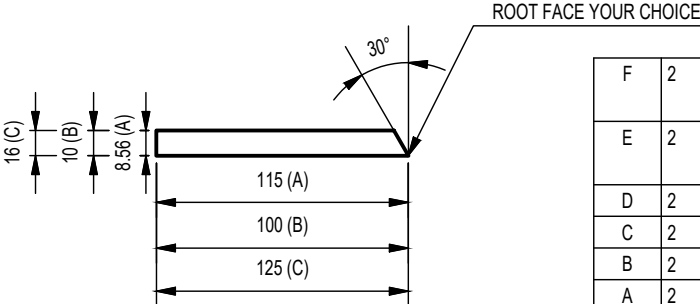
10 (B)

8.56 (A)

115 (A)

100 (B)

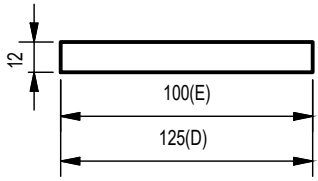
125 (C)



12

100(E)

125(D)



DETAIL OF MILLED BEVEL & SIDE

ALL DIMENSIONS IN MILLIMETRES

BUT DO NOT SCALE DRAWING

NTS = NOT TO SCALE

F	2	CARBON STEEL	PLATE 73 X 73 X 6	BRACKET FOR TEMPORARY BACKING
E	2	CARBON STEEL	PLATE 250 X 100 X 12	ONE 90 deg. MILLED EDGE AS PER SKETCH
D	2	CARBON STEEL	PLATE 250 X 125 X 12	
C	2	CARBON STEEL	PLATE 250 X 125 X 16	30 deg. MILLED BEVEL
B	2	CARBON STEEL	PLATE 250 X 100 X 10	30 deg. MILLED BEVEL
A	2	CARBON STEEL	PIPE Ø 114.3 X 8.54 WALL X 115 LONG	30 deg. TURNED BEVEL
ITEM	QTY	MATERIAL	DESCRIPTIONS	REMARKS

Test Project for the 45th WorldSkills Competition in Kazan, Russia 2019

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Skill: 10. Сварочные технологии, Welding, Schweißen, Soudage


Scale: N. T. S

Date: 09. May. 2019


Paper: A3

Designed/Drawn by: Chih-Peng Chen TW

Description: Module I--Test Coupons (Plates/Pipe/Fillet)



OR



Drawing No: TP10\_45RU\_DAY1\_GENERIC

Rev. 5

Page: 1 of 1