

MANUFACTURER'S WPQR NO	3D-INCERTA REFERENCE NO:	PAGE NO
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MANUFACTURER	CODE / TESTING STANDARD
Alesta Dalgıçlık ve Sualtı Hizmetleri San.Tic.Ltd.Şti. Kavacık, Uluer Plaza, Ekinciler Cd. No:2 K:6, 34810 Beykoz/İstanbul	TS EN ISO 15614-1:2017
	Level : II
	DATE OF WELDING
	14.09.2023

Test piece**Product form:** Plate to Plate

	RANGE OF QUALIFICATION			
	Process 1	Process 2	Process 3	Process 4
Welding Process(es)	111			
Weld Metal Thickness [mm]	max 40			
Type of joint and weld	Butt Weld			
Parent Material Group(s) and sub group(s)	1.1 to 1.1			
Parent Material Thickness [mm]	10 to 40			
Throat Thickness * [mm]	N/A			
Single run / Multi run	Multi run			
Outside Pipe Diameter [mm]	N/A			
Filler Material Designation	equivalent mechanical properties, same type of covering core or flux, same nominal composition and the same or lower hydrogen content			
Filler Material Make	When impact testing is required, for processes 111, 114, 12, 136 and 137 the range of validity is restricted to the specific make used in the procedure test			
Filler Material Size	It is permitted to change the size of filler material providing heat input limitations			
Designation of Shielding Gas/Flux*	N/A			
Designation of Backing Gas*	N/A			
Type of Welding Current and Polarity	Identical to the welding test			
Transfer mode*	N/A			
Heat Input (J/mm)	the upper limit of heat input qualified is 25 % greater than that used in welding test piece the lower limit of heat input qualified is 25 % lower than that used in welding test piece			
Welding Positions	Welding of a test in any one position (pipe or plate) qualifies for welding in all positions (pipe or plate) except for PG and J-L045 where a separate welding procedure test shall be required			
Preheat Temperature	the lower limit of qualification is the nominal preheat temperature applied at the start of the welding test			
Interpass Temperature	The upper limit of the qualification is the highest interpass temperature reached in the welding procedure test			
Post Heating	The temperature and duration of post-heating for hydrogen release shall not be reduced. Post-heating shall not be omitted but may be added.			
Post Weld Heat Treatment*	Addition or deletion of post-weld heat-treatment is not permitted.			
Other Information	None			
*If required				

Certified that test welds prepared, welded and tested satisfactorily in accordance with the requirements of the code / testing standard or directive indicated above.

İSTANBUL	13.10.2023	MUSTAFA GÖKYÜREK (Name & Sign)
Location	Date of Issue	Examiner

WELDING PROCEDURE QUALIFICATION TEST CERTIFICATE

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3D-Incerta Belgelendirme Mühendislik Gözetim ve Denetim Ltd. Şti.

RECORD OF WELD TEST

Test Location	Beykoz / İSTANBUL	Any Special Baking or Drying	None
Manufacturer's pWPS No	ALESTA-preWPS-01	Shielding Gas / Flux	N/A
Welder's / Operator's Name	Serkan YALIM	Backing Gas / Flux	None
Mode of Metal Transfer	None	Shielding Gas Flow Rate [lt/min]	N/A
Joint Type and Weld	Butt Weld - BW	Backing Gas Flow Rate [lt/min]	N/A
Method of Preparation and Cleaning	Grinding and Brushing	Tungsten Electrode Size / Type	N/A
Parent Material Specification	EN 10025-2 S235JR	Details of Back Gouging /Backing	With Back Gouging
Material Thickness [mm]	20 mm	Preheat Temperature [°C]	20
Outside Pipe Diameter [mm]	N/A	Interpass Temperature [°C]	250
Welding Position	PA	Post Heating	None
Filler Material Designation and Make	EN ISO 2560-A: E 42 0 RR 12		

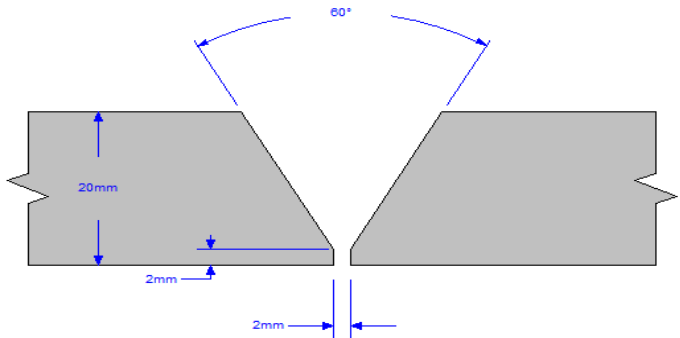
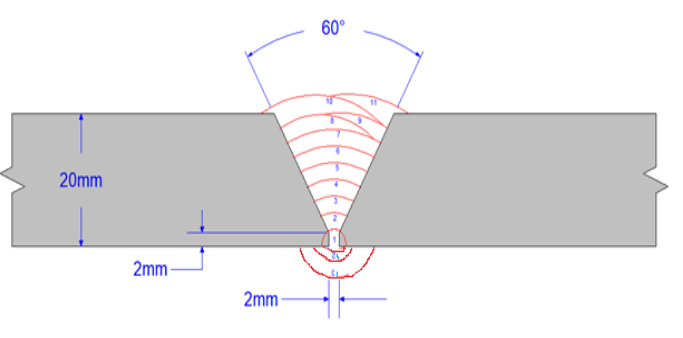
Other Information

Weaving : (max width of run) [mm]	N/A	Distance contact tube / workpiece:	N/A
Oscillation : (amplitude, frequency, dwell time)	N/A	Plasma welding details:	N/A
Pulse welding details :	N/A	Torch Angle:	N/A

Post Weld Heat Treatment

Method	Heating Rate [°C/h]	Temperature [°C]	Duration [h]	Cooling Rate[°C/h]
-	-	-	-	-

WELD PREPARATION DETAILS*

Joint Design 	Welding Sequences 
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WELDING DETAILS

Run	Welding Process	Size of Filler Material	Current A	Voltage V	Type of Current / Polarity	Wire Feed Speed m/min.	Travel Speed * mm/sn	Heat Input * J/mm	Metal Transfer
1	111	2,5	96	8,8	DC (+)	-	1,75	0,39	-
2	111	2,5	98	9,1	DC (+)	-	2,00	0,36	-
3	111	2,5	103	9,6	DC (+)	-	1,79	0,44	-
4	111	3,25	135	12,8	DC (+)	-	1,71	0,81	-
5	111	3,25	148	14,2	DC (+)	-	1,75	0,96	-
6	111	3,25	150	14,6	DC (+)	-	1,79	0,98	-
7	111	3,25	152	14,9	DC (+)	-	1,94	0,93	-
8	111	3,25	149	14,4	DC (+)	-	2,06	0,83	-
9	111	3,25	147	14,9	DC (+)	-	1,71	1,03	-
10	111	3,25	137	12,9	DC (+)	-	3,18	0,44	-
11	111	3,25	140	13,4	DC (+)	-	2,73	0,55	-
12	111	3,25	138	13,3	DC (+)	-	2,54	0,58	-
13	111	3,25	151	14,9	DC (+)	-	2,69	0,67	-

Alesta Dalgıçlık ve Sualtı Hizmetleri San.Tic.Ltd.Şti.	Mustafa GÜKYÜREK 13.10.2023
MANUFACTURER (Name , Date & Signature)	EXAMINER(Name, Date & Signature)

TRA NO: 54087183893

(KYEK-E18-F.002 Rev:00 Rev.Tarihi:22.08.2022 Yayınlanma Tarihi15.10.2015)

WELDING PROCEDURE QUALIFICATION TEST CERTIFICATE

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Visual Examination (%100)

According to Standard:	EN ISO 17637	Test Result:	Acceptable
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Fracture Test

According to Standard:	-	Report No:	-
Specimen No:	Description, Type, Size	Type And Size of Irregularities	Assessment Group
-	-	-	-

Transverse Tensile Tests

According to Standard:	TS EN ISO 4136	Report No:	23-TT-3412		
Specimen No	Size (∅ or WxL) [mm]	Area [mm ²]	Total Load [kN]	Tensile Strength [N/mm ²]	Result
1555-23-01	20x24,025	480,5	232,24	483,0	Acceptable
1555-23-02	20x24,595	491,9	234,1	476,0	Acceptable

Bend Tests

According to Standard:	TS EN ISO 5173	Report No:	23-BT-3413
Specimen No	Type	Angle	Result
1555-23-03	Side Bend	180°	Acceptable
1555-23-04	Side Bend	180°	Acceptable
1555-23-05	Side Bend	180°	Acceptable
1555-23-06	Side Bend	180°	Acceptable

Impact Tests

According to Standard:	TS EN ISO 9016	Type:	V	Specimen Size:	10x10x55	
Notch Location	Temp. [°C]	Values				Result
		1	2	3	Avg	
WELD	20°	67,13	65,27	68,19	66,86	Acceptable
HAZ	20°	72,18	73,27	74,28	73,24	Acceptable

Hardness Tests

According to Standard:	TS EN ISO 9015-1	Type/Load:	HV 10	Result:	Acceptable
Location of the measurement: (Sketch)					

Measurement Values

Base Metal			HAZ			Weld			HAZ			Base Metal		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
170	171	173	163	163	165	181	183	185	161	160	164	163	163	165
173	175	174	166	167	168	184	186	188	163	164	165	165	167	165

Test Reports Attached

%100 RT / UT	According to :	TS EN ISO 17640-1	Report No:	3D-23-0376-UT-001
%100 PT / MT	According to :	EN ISO 3452-1	Report No:	3D-23-0376-MT-001
Macro / Micro Exam.	According to :	EN ISO 17639	Report No:	23-MT-3415
Other Tests	According to :	TS EN ISO 9015-1 TS EN ISO 9016-1 EN ISO 17637	Report No:	23-HT-3416 23-CT-3414 3D-23-0376-VT-001

The results of the above approval tests are in accordance with the specification and were carried out in the presence of:

The test results are: ACCEPTABLE <input checked="" type="checkbox"/> NOT ACCEPTABLE <input type="checkbox"/>	3D-Incerta Gözetim Denetim Belgelendirme Ltd. Şti. Mustafa GÖKYÜREK 13.10.2023 (Name, Date, Signature)
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MANUFACTURER'S WPQR NO	3D-INCERTA REFERENCE NO:	PAGE NO
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MANUFACTURER	CODE / TESTING STANDARD
Alesta Dalgıçlık ve Sualtı Hizmetleri San.Tic.Ltd.Şti. Kavacık, Uluer Plaza, Ekinciler Cd. No:2 K:6, 34810 Beykoz/İstanbul	TS EN ISO 15614-1:2017
	Level : II
	DATE OF WELDING
	14.09.2023

Test piece**Product form:** Plate to Plate

	RANGE OF QUALIFICATION			
	Process 1	Process 2	Process 3	Process 4
Welding Process(es)	111			
Weld Metal Thickness [mm]	max 40			
Type of joint and weld	Fillet Weld			
Parent Material Group(s) and sub group(s)	1.1 to 1.1			
Parent Material Thickness [mm]	3 to 40			
Throat Thickness * [mm]	No restriction			
Single run / Multi run	Multi run			
Outside Pipe Diameter [mm]	N/A			
Filler Material Designation	equivalent mechanical properties, same type of covering core or flux, same nominal composition and the same or lower hydrogen content			
Filler Material Make	When impact testing is required, for processes 111, 114, 12, 136 and 137 the range of validity is restricted to the specific make used in the procedure test			
Filler Material Size	It is permitted to change the size of filler material providing heat input limitations			
Designation of Shielding Gas/Flux*	N/A			
Designation of Backing Gas*	N/A			
Type of Welding Current and Polarity	Identical to the welding test			
Transfer mode*	N/A			
Heat Input (J/mm)	the upper limit of heat input qualified is 25 % greater than that used in welding test piece the lower limit of heat input qualified is 25 % lower than that used in welding test piece			
Welding Positions	Welding of a test in any one position (pipe or plate) qualifies for welding in all positions (pipe or plate) except for PG and J-L045 where a separate welding procedure test shall be required			
Preheat Temperature	the lower limit of qualification is the nominal preheat temperature applied at the start of the welding test			
Interpass Temperature	The upper limit of the qualification is the highest interpass temperature reached in the welding procedure test			
Post Heating	The temperature and duration of post-heating for hydrogen release shall not be reduced. Post-heating shall not be omitted but may be added.			
Post Weld Heat Treatment*	Addition or deletion of post-weld heat-treatment is not permitted.			
Other Information	None			
*If required				

Certified that test welds prepared, welded and tested satisfactorily in accordance with the requirements of the code / testing standard or directive indicated above.

İSTANBUL	13.10.2023	MUSTAFA GÖKYÖREK (Name Sign)
Location	Date of Issue	Examiner

WELDING PROCEDURE QUALIFICATION TEST CERTIFICATE

MANUFACTURER'S WPQR NO	3D-INCERTA REFERENCE NO:	PAGE NO
ALESTA-WPQR-02	3D-23-0376-PQR-02	2 / 3

3D-Incerta Belgelendirme Mühendislik Gözetim ve Denetim Ltd. Şti.

RECORD OF WELD TEST

Test Location	Beykoz / İSTANBUL	Any Special Baking or Drying	None
Manufacturer's pWPS No	ALESTA-preWPS-02	Shielding Gas / Flux	N/A
Welder's / Operator's Name	Serkan YALIM	Backing Gas / Flux	None
Mode of Metal Transfer	None	Shielding Gas Flow Rate [lt/min]	N/A
Joint Type and Weld	Fillet Weld - FW	Backing Gas Flow Rate [lt/min]	N/A
Method of Preparation and Cleaning	Grinding and Brushing	Tungsten Electrode Size / Type	N/A
Parent Material Specification	EN 10025-2 S235JR	Details of Back Gouging /Backing	Without Back Gouging
Material Thickness [mm]	20 mm	Preheat Temperature [°C]	20
Outside Pipe Diameter [mm]	N/A	Interpass Temperature [°C]	250
Welding Position	PB	Post Heating	None
Filler Material Designation and Make	EN ISO 2560-A: E 42 0 RR 12		

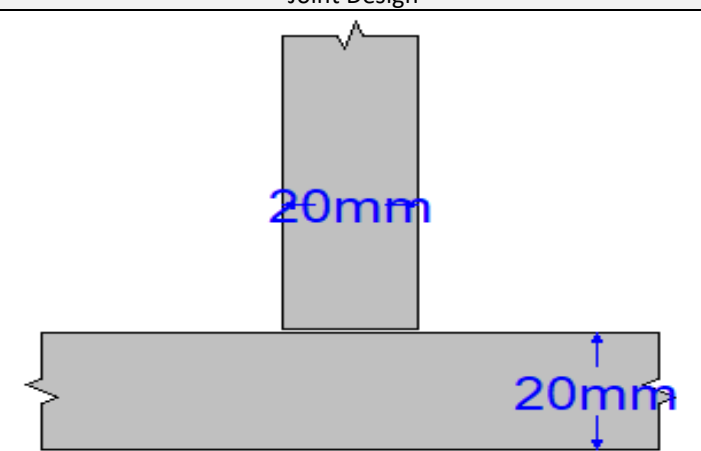
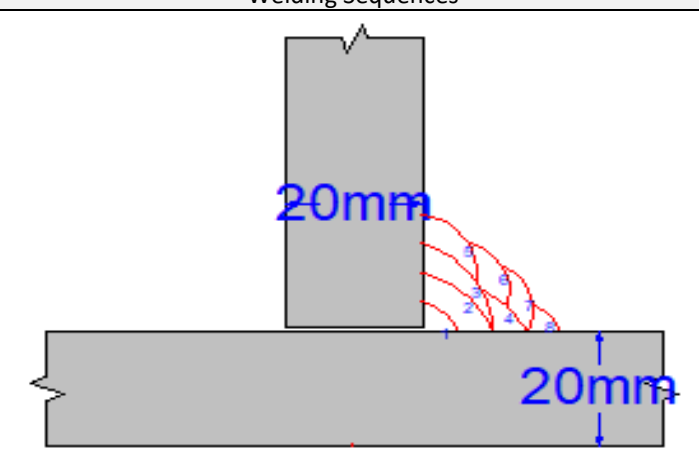
Other Information

Weaving : (max width of run) [mm]	N/A	Distance contact tube / workpiece:	N/A
Oscillation : (amplitude, frequency, dwell time)	N/A	Plasma welding details:	N/A
Pulse welding details :	N/A	Torch Angle:	N/A

Post Weld Heat Treatment

Method	Heating Rate [°C/h]	Temperature [°C]	Duration [h]	Cooling Rate[°C/h]
-	-	-	-	-

WELD PREPARATION DETAILS*

Joint Design	Welding Sequences
	

WELDING DETAILS

Run	Welding Process	Size of Filler Material	Current A	Voltage V	Type of Current / Polarity	Wire Feed Speed m/min.	Travel Speed * mm/sn	Heat Input * J/mm	Metal Transfer
1	111	3,25	148	14,2	DC (+)	-	2,76	0,61	-
2	111	3,25	140	14,1	DC (+)	-	2,61	0,60	-
3	111	3,25	150	14,6	DC (+)	-	2,06	0,85	-
4	111	3,25	157	15,2	DC (+)	-	2,38	0,80	-
5	111	3,25	147	14,8	DC (+)	-	2,05	0,85	-
6	111	3,25	145	14,1	DC (+)	-	2,50	0,65	-
7	111	3,25	148	14,6	DC (+)	-	2,69	0,64	-
8	111	3,25	146	14,2	DC (+)	-	3,33	0,50	-

Alesta Dalgıçlık ve Sualtı Hizmetleri San.Tic.Ltd.Şti.	Mustafa GÖRYÜREK 15.10.2023
MANUFACTURER (Name , Date & Signature)	EXAMINER(Name, Date & Signature)

TRA NO: 54087183893

(KYEK-E18-F.002 Rev:00 Rev.Tarihi:22.08.2022 Yayınlanma Tarihi15.10.2015)

WELDING PROCEDURE QUALIFICATION TEST CERTIFICATE

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Visual Examination (%100)

According to Standard:	EN ISO 17637	Test Result:	Acceptable
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Fracture Test

According to Standard:	-	Report No:	-
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Specimen No:	Description, Type, Size	Type And Size of Irregularities	Assessment Group
-	-	-	-

Transverse Tensile Tests

According to Standard:	TS EN ISO 4136	Report No:	-
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Specimen No	Size (∅ or WxL) [mm]	Area [mm ²]	Total Load [kN]	Tensile Strength [N/mm ²]	Result
-	-	-	-	-	-

Bend Tests

According to Standard:	TS EN ISO 5173	Report No:	-
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Specimen No	Type	Angle	Result
-	-	-	-

Impact Tests

According to Standard:	TS EN ISO 9016	Type:	-	Specimen Size:	-
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Notch Location	Temp. [°C]	Values				Result
		1	2	3	Avg	
-	-	-	-	-	-	-

Hardness Tests

According to Standard:	TS EN ISO 9015-1	Type/Load:	HV 10	Result:	Acceptable
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Location of the measurement: (Sketch)		
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Measurement Values

Base Metal			HAZ			Weld			HAZ			Base Metal		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
179	180	181	195	200	198	217	220	215	180	181	183	167	168	170
180	183	185	200	200	202	220	222	224	185	187	188	170	173	172

Test Reports Attached

%100 RT / UT	According to :	-	Report No:	-
%100 PT / MT	According to :	EN ISO 3452-1	Report No:	3D-23-0376-MT-002
Macro / Micro Exam.	According to :	EN ISO 17639	Report No:	23-MT-3417
Other Tests	According to :	TS EN ISO 9015-1 EN ISO 17637	Report No:	23-HT-3418 3D-23-0376-VT-002

The results of the above approval tests are in accordance with the specification and were carried out in the presence of:

The test results are: ACCEPTABLE <input checked="" type="checkbox"/> NOT ACCEPTABLE <input type="checkbox"/>	3D-Incerta Gözetim Denetim Belgelendirme Ltd. Şti. Mustafa GÖKÇEK 13.10.2023 (Name, Date & Signature)
EXAMINER	