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| **Ultrasonic Thickness Measurement report**  **Протокол по результатам проведения ультразвуковой толщинометрии** | | | | | | | | | | | | | | |
| **JOB DETAILS / РАБОЧАЯ ИНФОРМАЦИЯ** | | | | | | | | | | | | | | |
| **Client**  Клиент | | | **NCOC N. V.** | | | | | **Project**  Проект | | | | **ESKENE WEST** | | |
| **Work location**  Место работы | | | **KUT Unit 570** | | | | | **Control object**  Объект контроля | | | | **A1-570-TA-061** | | |
| **Material**  Марка стали | | | **A 333 Gr.6**  **A 516 Gr.60** | | | | | **Dimension**  Размер | | | | **L=1788 mm**  **ID=2650 mm** | | |
| **Calibration Temperature**  Температура калибровочного блока | | | **+3°C** | | | | | **Object Temperature**  Температура объекта контроля | | | | **+5°C** | | |
| **Surface condition**  Состояние поверхности | | | **Coated** | | | | | **Couplant**  Контактная жидкость | | | | **UT Gel** | | |
| **Correction factors**  Поправочные факторы | | | **n/a** | | | | | **Roughness**  Шероховатость | | | | **-** | | |
| **INSPECTION PROCEDURE / НОРМАТИВНЫЕ ДОКУМЕНТЫ** | | | | | | | | | | | | | | |
| **Procedure**  Процедура | | **QP-11-UTT-Q01**  **Rev 04** | | | | **Standard for testing**  Стандарт по контролю | | | **GOST 28702-90** | | **Standard for item**  Стандарт для ОК | | | **BS: 799-5** |
| **EQIPMENT PARAMETERS / ПАРАМЕТРЫ ОБОРУДОВАНИЯ** | | | | | | | | | | | | | | |
| **Probe, S/N**  Датчик, № | | | | | **D790 / 1306596** | | | **Size**  Размер | | | | **11 mm** | | |
| **Angle**  Угол ввода | | | | | **0º** | | | **Crystal**  ПЭ | | | | **Dual** | | |
| **Frequency**  Частота преобразователя | | | | | **5 MHz** | | | **Accuracy**  Точность | | | | **± 0,1 mm** | | |
| **CALIBRATION BLOCK DETAILS / ПАРАМЕТРЫ КАЛИБРОВОЧНОГО БЛОКА** | | | | | | | | | | | | | | |
| **Calibration Block**  Калибровочный блок | | | | | **Step wedge** | | | **Calibration Block Range**  Диапазон толщин калибровочного блока | | | | **5.00-40.00 mm** | | |
| **INSPECTION EQUIPMENT / ОБОРУДОВАНИЕ ИНСПЕКЦИОННОГО КОНТРОЛЯ** | | | | | | | | | | | | | | |
| **№** | **Equipment**  Оборудование | | | **Manufacture** Изготовитель | | | **Serial number**  Серийный номер | | | **Certificate**  Сертификат поверке | | | **Expire date**  Дата истечения поверки | |
|  | DL-38 | | | OLYMPUS | | | 171421601 | | | KZ-01-21-Ж-0169 | | | 01.03.2022 | |
|  | Step wedge calibration block  5-10-20-40 | | | Fizpribor | | | 3255-20 | | | - | | | - | |
| **Job description:**   1. UT spot check performed in according to provided Scope of work. 2. Echo to echo UT technique was used. 3. Inspection performed on South, North, East, West, Top and Bottom sides related to object position. 4. Inspection performed of shell from bottom to top in 8 sectors 300 mm wide each on 0, 45, 90, 135, 180, 225, 270, 315 degrees. | | | | | | | | | | | | | | |
| **Notes** / Примечания: | | | | | | | | | | | | | | |

| **INSPECTION RESULTS / РЕЗУЛЬТАТЫ КОНТРОЛЯ** | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Line / Tag N** | **Item description** | **Section number** | **Diameter, mm** | **Nominal thickness, mm** | **0 degree**  **North** | **45 degree** | **90 degree**  **East** | **135 degree** | **180 degree**  **South** | **225 degree** | **270 degree**  **West** | **315 degree** |
| **A1-570-TA-061** | Course 1 | - | 2650 | 6.00 | 6.41 | 6.37 | 6.23 | 6.25 | 6.29 | 6.33 | 6.40 | 6.44 |
| Course 2 | - | 6.36 | 6.30 | 6.20 | 6.22 | 6.22 | 6.23 | 6.31 | 6.37 |

| **INSPECTION RESULTS / РЕЗУЛЬТАТЫ КОНТРОЛЯ** | | | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Line / Tag N** | **Item description** | **Section number** | **Diameter, mm** | **Nominal thickness, mm** | **South, mm** | **North, mm** | **West, mm** | **East, mm** | **Top, mm** | **Bottom, mm** | **Extrados, mm** | **Intrados, mm** | **Center, mm** |
| **A1-570-TA-061** | Nozzle N1 | - | 76 | 5.49 | - | - | 5.27 | 5.63 | 4.91 | 5.87 | - | - | - |
| Nozzle N2 | - | 50 | 3.91 | 3.46 | 3.47 | - | - | 3.72 | 3.50 | - | - | - |
| Nozzle N3 | - | 101 | 6.02 | 5.75 | 5.80 | 6.10 | 5.94 | - | - | - | - | - |
| Nozzle N4 | - | 76 | 5.49 | 5.30 | 5.64 | 5.48 | 5.49 | - | - | - | - | - |

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| Examined by / Контроль провёл: | | Approved by / Протокол утвердил: | | Client representative /  Представитель клиента | |
| Name / ФИО | Dariskaliyev Nurdaulet | Name / ФИО | Kuryanau Dzmitry | Name / ФИО |  |
| Signature / Подпись |  | Signature / Подпись |  | Signature / Подпись |  |
| Date / Дата | 06.12.2021 | Date / Дата | 06.12.2021 | Date / Дата |  |
| Cert. № /  № серт-та | UT L II cert. No 628  exp date: 19.12.2022 | Cert. № /  № серт-та | UT Level II cert. No 2B 230/20 exp date: 31.05.2025 | Cert. № /  № серт-та |  |

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| Annex 1 / Приложение 1  Inspection Drawing / Схема контроля |
|  |
| **A1-570-TA-061** |