



**MATERIAL INSPECTION CERTIFICATE**

According to EN 10204:2004

|                                                                         |                                           |
|-------------------------------------------------------------------------|-------------------------------------------|
| <b>PROJECT: GLASS FIBER REINFORCED POLYMER</b>                          | <b>Ref: BVGH/2023/121/INC/GH</b>          |
| <b>BV Client: VIVA &amp; CO GHANA LIMITED</b>                           | <b>P/o nr: 2023/121</b><br>(client to BV) |
| <b>Supplier: VIVA &amp; CI GHANA LIMITED</b>                            | <b>Report nr:</b>                         |
| <b>Manufacture And Location of the plant: TSOPOLI</b>                   | <b>Sample ID Nr:</b><br>MEL2/23           |
| <b>Inspection requested by (purchaser): VIVA &amp; CO GHANA LIMITED</b> |                                           |

|                                                                       |
|-----------------------------------------------------------------------|
| <b>Material dimension subject to inspection / Supply description:</b> |
| Glass Fibre-Reinforced Polymer Bar                                    |
| Quantity: 09 Specimen                                                 |
| Delivery condition: – SATISFACTORY                                    |

|                                                                                                    |
|----------------------------------------------------------------------------------------------------|
| <b>Material specification</b>                                                                      |
| Specification or grade & standard: ASTM D7205/D7205M                                               |
| Additional testing/examination specified in the order if any: GLASS FIBER REINFORCED POLYMER REBAR |

|                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test results</b>                                                                                                                                                                                                                                     |
| Testing and/or inspection carried out by: TRAWULE RAFIAH YUSIF                                                                                                                                                                                          |
| Date(s) of testing and/or inspection: 11 <sup>TH</sup> AUGUST 2023                                                                                                                                                                                      |
| Number of pages attached:                                                                                                                                                                                                                               |
| Identification of attachments: TENSILE AND SHEAR STRENGTH RESULTS                                                                                                                                                                                       |
| <b>Important note:</b> This certificate is not valid without attached documents which contain details of Tensile and Shear strength Methods , Tensile and Shear Strength Specification , Tensile and Shear forces and Results or any additional results |

|                                                                                                                                               |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Witness Test:</b> To ensure that the shear and tensile strength of a glass fibre polymer bar conforms to the specification standard of ACI | <b>BV Stamping:</b><br> |
| <b>Comments</b> or particular mentions: <b>SATISFACTORY</b>                                                                                   |                         |

The manufacturer declares that the product identified above has been manufactured, tested, examined and supplied in conformity with the requirements of the order. Bureau Veritas declares that the tests and examinations carried out under the supervision of Bureau Veritas surveyors, within the scope of its General Conditions, have been found in compliance with the technical specifications of the purchase order.

|                                                                                                   |                                                                                 |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Bureau Veritas INSPECTOR's Name: TRAWULE RAFIAH YUSIF<br>Position: NDT INSPECTOR<br>TEMA 21-08-23 | APPROVED BY:<br>Name: KOUME KOFFI<br>Position: INC MANAGER<br>TAKORADI 21-08-23 |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|





**Industry & Facilities Division**  
**Third Party Inspection Report**

|                                                                                                                                                     |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b>                                                                                                                         | <b>Revision Nr</b> |
| <input type="checkbox"/> Initial <input type="checkbox"/> Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Resident       |                    |
| Inspection requested by: <b>VIVA &amp; CO GHANA LIMITED</b>                                                                                         |                    |
| Inspection performed as Recognised Authority: <input checked="" type="checkbox"/> Yes.: GHANA STANDARDS AUTHORITY (GSA) <input type="checkbox"/> No |                    |
| BV Job Nr: 2023/121/INC/GHA                                                                                                                         |                    |

|                                                                                    |                                                                    |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Project: GLASS FIBER-REINFORCE POLYMER TEST APPLICATION</b>                     | <b>IPO Ref (If applicable): 2023/121/INC/GHA (BV internal P/o)</b> |
| <b>BV Client: VIVA &amp; CO GHANA LIMITED</b>                                      | <b>P/o nr:2023/121 (client to BV)</b>                              |
| <b>Manufacturer/Vendor: VIVA &amp; CO GHANA LIMITED</b>                            | <b>P/o nr: (client to Manufacturer)</b>                            |
| <b>Sub-Vendor (If applicable):</b>                                                 |                                                                    |
| <b>Inspection Location: GHANA STANDARD AUTHORITY (GSA)</b>                         | <b>Previous Inspection (If applicable): (Date)</b>                 |
| <b>Inspection performed on: GLASS FIBER REINFORCED POLYMER</b><br>Date: 11-08-2023 | <b>Next Inspection (If applicable): (Date)</b>                     |

| <b>MATERIAL / SUBJECT OF INSPECTION</b>                                                                                          | <b>ITEM / TAG Nr</b> | <b>QTY As per P/O</b> | <b>QTY Offered for inspection</b> |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|-----------------------------------|
| <input type="checkbox"/> Refer to attachment section J instead<br>(Indicate if separate material list is provided in attachment) |                      |                       |                                   |
| Glass Fibre Reinforced Polymer 7MM                                                                                               | 244 / MEL2 / 23      | THREE (03)            | THREE (03)                        |

**A – INSPECTION RESULT**

**Satisfactory (Without comments)**    
  **Satisfactory with comments (Any of trailing Punch or Non Conformity items is still open)**    
  **Not Satisfactory (NCR raised during the inspection)**

**Inspection Summary:** (for details refer to section D)

The tensile test conducted was a success as per standard ASTM D7205/D7205M, SPECIFICATION GS ACI 440.6-08. The standard tensile strength for 7mm is 760N/mm2 min, results from the test were 1834N/mm2 and 1712N/mm2, which is above the standard. This implies that the tensile strength from VIVA Co & GHANA has superior properties and of high quality and can withstand

|                               |                                                                |                                        |
|-------------------------------|----------------------------------------------------------------|----------------------------------------|
| <b>Open Non-Conformities:</b> | <input type="checkbox"/> Yes, details in section G             | <input checked="" type="checkbox"/> No |
| <b>Open Punch List Items:</b> | <input type="checkbox"/> Yes, details in section H             | <input checked="" type="checkbox"/> No |
| <b>Release Note Issued:</b>   | <input type="checkbox"/> Yes, number(s): (Release Note number) | <input checked="" type="checkbox"/> No |

This template is intended exclusively when BV is acting as 3° party inspection body. The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.



|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

BV Traceability Stamping:  Yes,  No

BV Inspector: RAFIAH YUSIF TRAWULLE BV SUPERVISOR: RICHARD ARTHUR

BV Office: TEMA OFFICE Inspection Report Date: 11-08-2023

Distribution:  CLIENT  BV  MANUFACTURER  OTHER: ..... Attachments Report:  Yes, details in section J  No



**B- ATTENDEES**

| Name                                      | Position                            | Representing              |
|-------------------------------------------|-------------------------------------|---------------------------|
| BROLIN AMOAKO                             | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARDS AUTHORITY |
| DAVID OWUSU AGYARE                        | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARD AUTHORITY  |
| IVAN ROMANOV                              | DIRECTOR OF VIVA & CO GHANA LIMITED | VIVA & CO GHANA LIMITED   |
| <i>(Add lines for additional records)</i> |                                     |                           |

**C - MEASURING & TESTING EQUIPMENT USED**

Refer to attachment section J instead  
*(Indicate if separate equipment list is provided in attachment)*

| Equipment Type | Equipment Identity n° | Last Calibration Date | Expiry Date    |
|----------------|-----------------------|-----------------------|----------------|
| UTM MACHINE    | 20/10/D 943N          | (12-DEC-2022)         | (12-DEC -2023) |
|                |                       |                       |                |
|                |                       |                       |                |

**D - INSPECTION DETAILS**

**D1 – Details of Witness (W) & Hold (H) Inspection Points**

7MM SAMPLE 244 / MEL2 / 2023

- The 7mm glass fibre is passed between the two jaws and clamped firmly
- Once the sample is placed in right position , the jaws are pulled apart to apply tension on the sample
- The tension is applied to the sample until it reaches the fracture point

**D2 – Details of Monitoring and Surveillance Patrols**

Tick if conducted during the visit

This template is intended exclusively when BV is acting as 3° party inspection body.

The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.



|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

**NON-APPLICABLE**

**D3 – Details of Certificates Review**  Tick if conducted during the visit

**NON-APPLICABLE**

**E– HEALTH, SAFETY & ENVIRONMENT COMMENTS**

- Safety was observed; operators were in their appropriate PPE
- The environment was safe and conducive for operation

This template is intended exclusively when BV is acting as 3° party inspection body.

The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.



|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|

**F- NON CONFORMITIES**  Refer to attachment section J instead  
 (Indicate if separate punch list is provided in attachment)

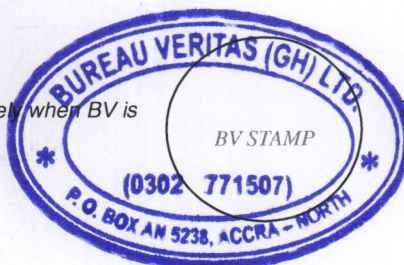
| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
| NON  | NON         | NON    | NON       | NON        | NON       | NON        |          |
|      |             |        |           |            |           |            |          |

Conformity was observed.  
 All procedures were observed and inspection was a Success as per Applicable Standard

**G – PUNCH LIST ITEMS**  Refer to attachment section J instead  
 (Indicate if separate punch list is provided in attachment)

| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
| NON  | NON         | NON    | NON       | NON        | NON       | NON        |          |
|      |             |        |           |            |           |            |          |

All items were intact and inspection was a success as per Applicable Standards

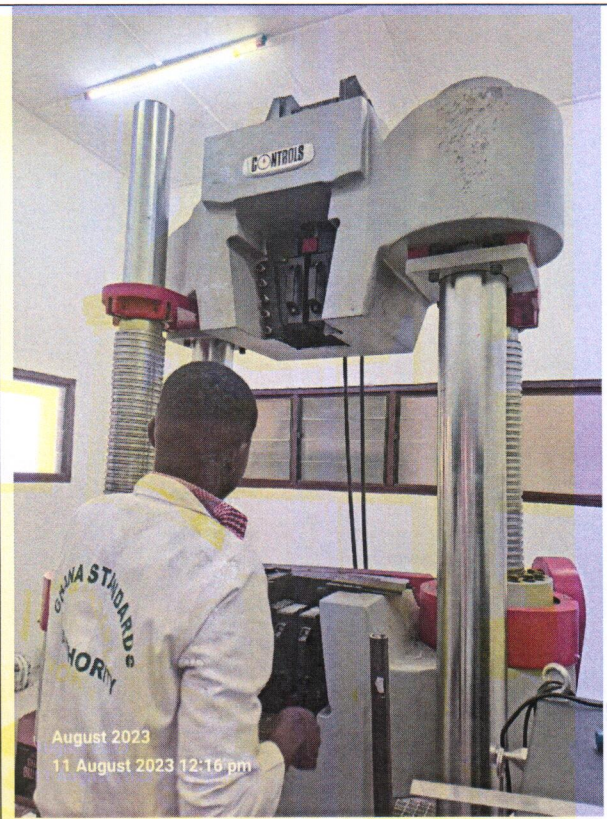


|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

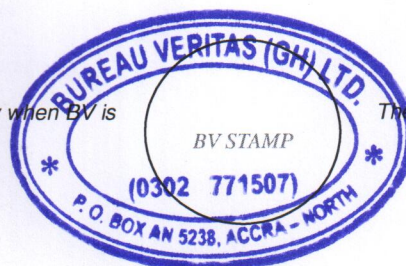
H - DIGITAL PICTURES



Description: UNIVERSAL TESTING MACHINE



Description: OPERATOR ABOUT TO INSIST THE SAMPLE



|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|



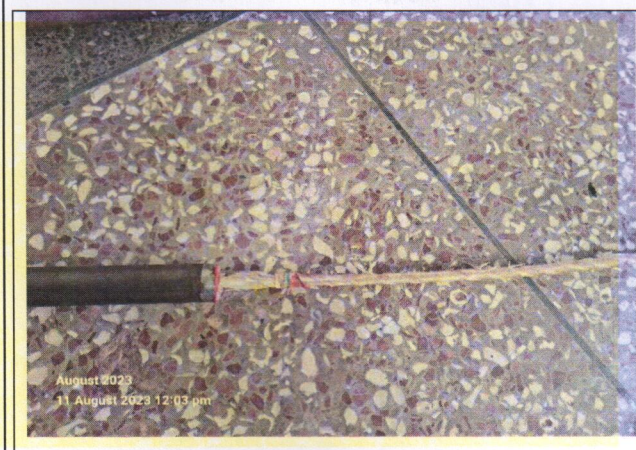
August 2023  
 11 August 2023 11:24 am

Description: 7MM REBAR SAMPLES; BEFORE TEST



August 2023  
 11 August 2023 12:27 pm

Description: 7MM REBAR SAMPLES; AFTER TEST



August 2023  
 11 August 2023 12:03 pm

Description: FRACTURED SAMPLE; AFTER TEST



August 2023  
 11 August 2023 11:29 am

Description: SERIAL NUMBER OF UTM

GM-SI-101 INSP002-En Rev. 3

Copyright Bureau Veritas 10/2019

This template is intended exclusively when BV is acting as 3° party inspection body.

The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.



|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|



END OF REPORT







Industry & Facilities Division  
Third Party Inspection Report

|                                                                                                                                                     |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b>                                                                                                                         | <b>Revision Nr</b> |
| <input type="checkbox"/> Initial <input type="checkbox"/> Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Resident       |                    |
| Inspection requested by: <b>VIVA &amp; CO GHANA LIMITED</b>                                                                                         |                    |
| Inspection performed as Recognised Authority: <input checked="" type="checkbox"/> Yes.: GHANA STANDARDS AUTHORITY (GSA) <input type="checkbox"/> No |                    |
| BV Job Nr: 2023/121/INC/GHA                                                                                                                         |                    |

|                                                                                    |                                                                    |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Project: GLASS FIBER -REINFORCE POLYMER TEST APPLICATION</b>                    | <b>IPO Ref (If applicable): 2023/121/INC/GHA (BV internal P/o)</b> |
| <b>BV Client: VIVA &amp; CO GHANA LIMITED</b>                                      | <b>P/o nr: 2023/121 (client to BV)</b>                             |
| <b>Manufacturer/Vendor: VIVA &amp; CO GHANA LIMITED</b>                            | <b>P/o nr: (client to Manufacturer)</b>                            |
| <b>Sub-Vendor (If applicable):</b>                                                 |                                                                    |
| <b>Inspection Location: GHANA STANDARD AUTHORITY (GSA)</b>                         | <b>Previous Inspection (If applicable): (Date)</b>                 |
| <b>Inspection performed on: GLASS FIBER REINFORCED POLYMER</b><br>Date: 11-08-2023 | <b>Next Inspection (If applicable): (Date)</b>                     |

| MATERIAL / SUBJECT OF INSPECTION                                                                                                 | ITEM / TAG Nr   | QTY<br>As per P/O | QTY<br>Offered for inspection |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|-------------------------------|
| <input type="checkbox"/> Refer to attachment section J instead<br>(Indicate if separate material list is provided in attachment) |                 |                   |                               |
| Glass Fibre Reinforced Polymer 8MM                                                                                               | 245 / MEL2 / 23 | THREE (03)        | THREE (03)                    |

| A – INSPECTION RESULT                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                   |                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Satisfactory (Without comments)                                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> Satisfactory with comments (Any of trailing Punch or Non Conformity items is still open) | <input type="checkbox"/> Not Satisfactory (NCR raised during the inspection) |
| <b>Inspection Summary:</b> (for details refer to section D)<br><br>The tensile test conducted was a success as per standard ASTM D7205/D7205M, SPECIFICATION GS ACI 440.6-08. The standard tensile strength for 8mm is 760N/mm2 min, results from the test were 1490N/mm2 and 1512N/mm2 , which is above the standard. This implies that the tensile strength from VIVA Co & GHANA has superior properties and of high quality. |                                                                                                                   |                                                                              |
| <b>Open Non-Conformities:</b>                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> Yes, details in section G                                                                | <input checked="" type="checkbox"/> No                                       |
| <b>Open Punch List Items:</b>                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> Yes, details in section H                                                                | <input checked="" type="checkbox"/> No                                       |

This template is intended exclusively when BV is acting as 3° party inspection body. The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.

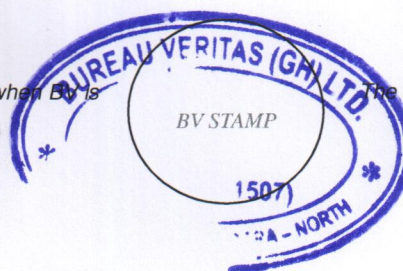


|                                                                                                                                                                        |  |                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|
| INSPECTION REPORT Nr                                                                                                                                                   |  | Revision Nr                                                                                                      |  |
| Release Note Issued: <input type="checkbox"/> Yes, number(s): (Release Note number)                                                                                    |  | <input checked="" type="checkbox"/> No                                                                           |  |
| BV Traceability Stamping: <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No                                                                         |  | <input type="checkbox"/> No                                                                                      |  |
| BV Inspector: RAFIAH YUSIF TRAWULE                                                                                                                                     |  | BV SUPERVISOR : RICHARD ARTHUR                                                                                   |  |
| BV Office: TEMA OFFICE                                                                                                                                                 |  | Inspection Report Date: 11-08-2023                                                                               |  |
| Distribution:<br><input checked="" type="checkbox"/> CLIENT <input type="checkbox"/> BV <input type="checkbox"/> MANUFACTURER<br><input type="checkbox"/> OTHER: ..... |  | Attachments Report:<br><input type="checkbox"/> Yes, details in section J <input checked="" type="checkbox"/> No |  |

| B - ATTENDEES                             |                                     |                           |
|-------------------------------------------|-------------------------------------|---------------------------|
| Name                                      | Position                            | Representing              |
| BROLIN AMOAKO                             | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARDS AUTHORITY |
| DAVID OWUSU AGYARE                        | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARD AUTHORITY  |
| IVAN ROMANOV                              | DIRECTOR OF VIVA & CO GHANA LIMITED | VIVA & CO GHANA LIMITED   |
| <i>(Add lines for additional records)</i> |                                     |                           |

| C - MEASURING & TESTING EQUIPMENT USED                                                                                                   |                       |                       |                |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|----------------|
| <input type="checkbox"/> Refer to attachment section J instead<br><i>(Indicate if separate equipment list is provided in attachment)</i> |                       |                       |                |
| Equipment Type                                                                                                                           | Equipment Identity n° | Last Calibration Date | Expiry Date    |
| UTM MACHINE                                                                                                                              | 20/10/D 943N          | (12-DEC-2022)         | (12-DEC -2023) |
|                                                                                                                                          |                       |                       |                |
|                                                                                                                                          |                       |                       |                |

| D - INSPECTION DETAILS                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D1 – Details of Witness (W) &amp; Hold (H) Inspection Points</b>                                                                                                                                                                                                                                                                                                |
| <p>8MM SAMPLE 244 / MEL2 / 2023</p> <ul style="list-style-type: none"> <li>➤ The 8mm glass fibre is passed between the two jaws and clamped firmly</li> <li>➤ Once the sample is placed in right position, the jaws are pulled apart to apply tension on the sample</li> <li>➤ The tension is applied to the sample until it reaches the fracture point</li> </ul> |



|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

**D2 – Details of Monitoring and Surveillance Patrols**  Tick if conducted during the visit

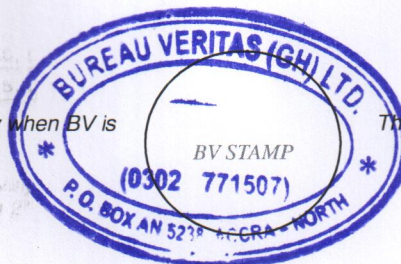
**NON-APPLICABLE**

**D3 – Details of Certificates Review**  Tick if conducted during the visit

**NON-APPLICABLE**

**E – HEALTH, SAFETY & ENVIRONMENT COMMENTS**

- Safety was observed ; operators were in their appropriate PPE
- The environment was safe and conducive for operation



|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|

**F- NON CONFORMITIES**

Refer to attachment section J instead  
 (Indicate if separate punch list is provided in attachment)

| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
| NON  | NON         | NON    | NON       | NON        | NON       | NON        |          |

Conformity was observed , Inspection was a success as per Applicable Standards

**G – PUNCH LIST ITEMS**

Refer to attachment section J instead  
 (Indicate if separate punch list is provided in attachment)

| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
|      |             | NON    |           |            |           |            |          |

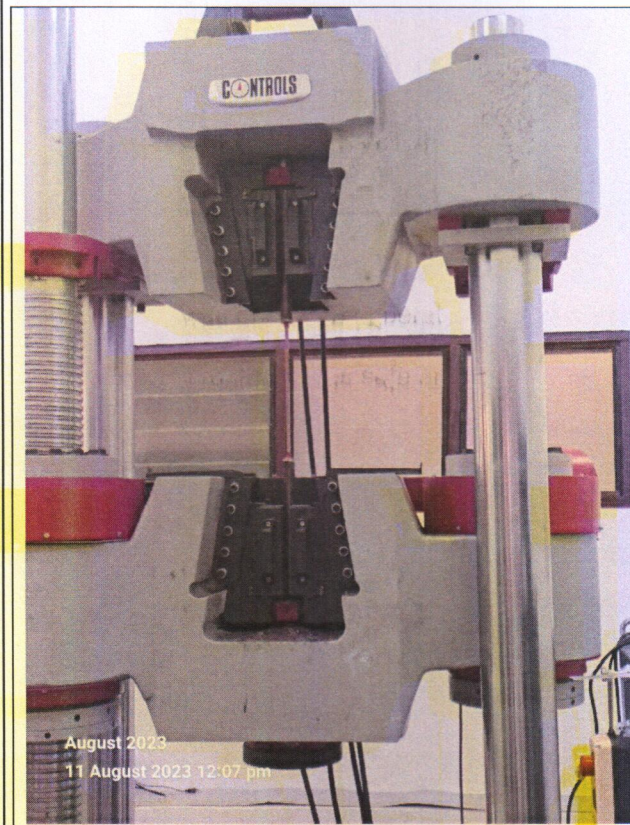


|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|

|            |     |  |     |     |     |     |     |
|------------|-----|--|-----|-----|-----|-----|-----|
| <b>NON</b> | NON |  | NON | NON | NON | NON | NON |
|            |     |  |     |     |     |     |     |

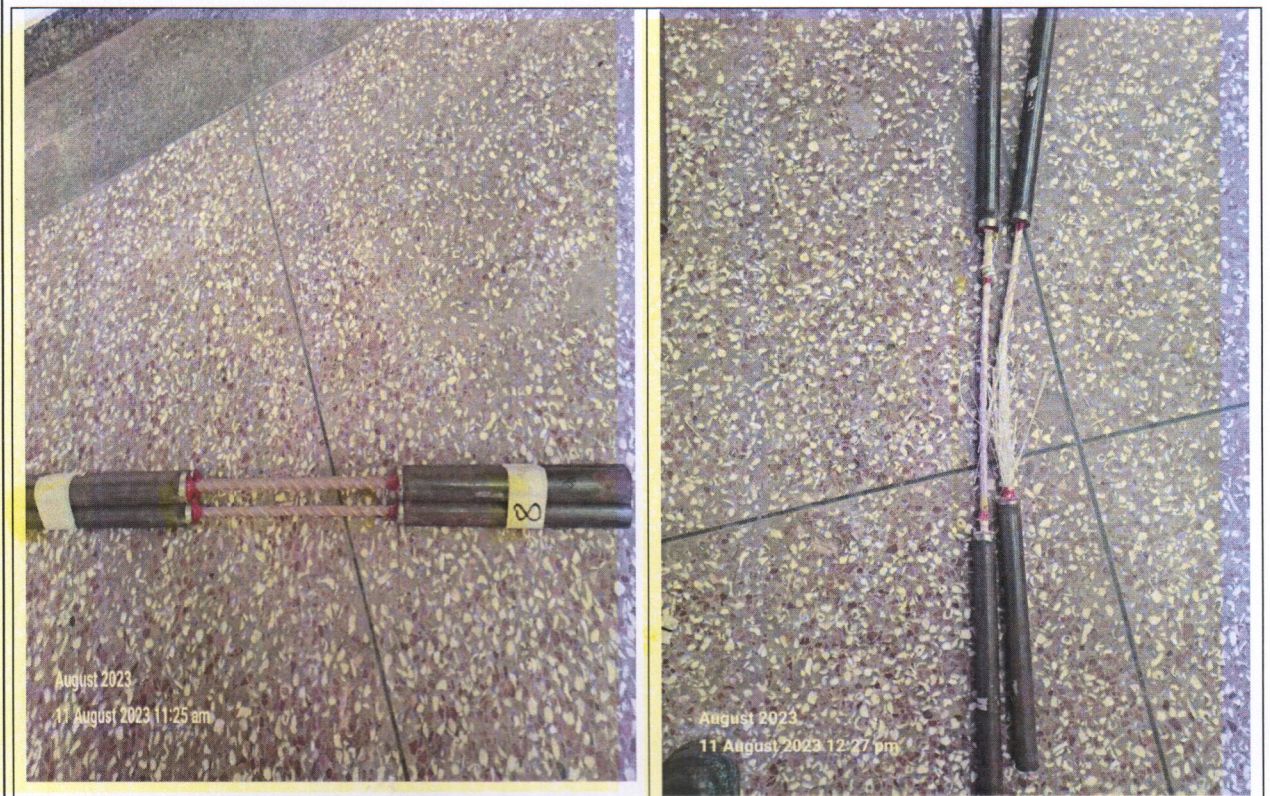
All items were intact, and inspection was a success as per Applicable Standards

**H - DIGITAL PICTURES**



|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|

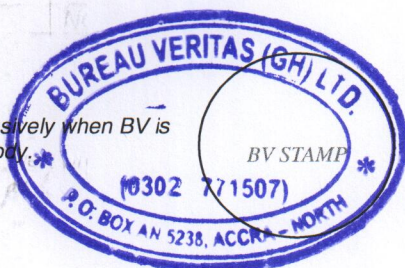
|                                        |                                               |
|----------------------------------------|-----------------------------------------------|
| Description: UNIVERSAL TESTING MACHINE | Description: OPERATORS WORKING ON THE MACHINE |
|----------------------------------------|-----------------------------------------------|



|                                             |                                            |
|---------------------------------------------|--------------------------------------------|
| Description: 8MM REBAR SAMPLES; BEFORE TEST | Description: 8MM REBAR SAMPLES; AFTER TEST |
|---------------------------------------------|--------------------------------------------|

GM-SI-101 INSP002-En Rev. 3

This template is intended exclusively when BV is acting as 3<sup>rd</sup> party inspection body.



Copyright Bureau Veritas 10/2019

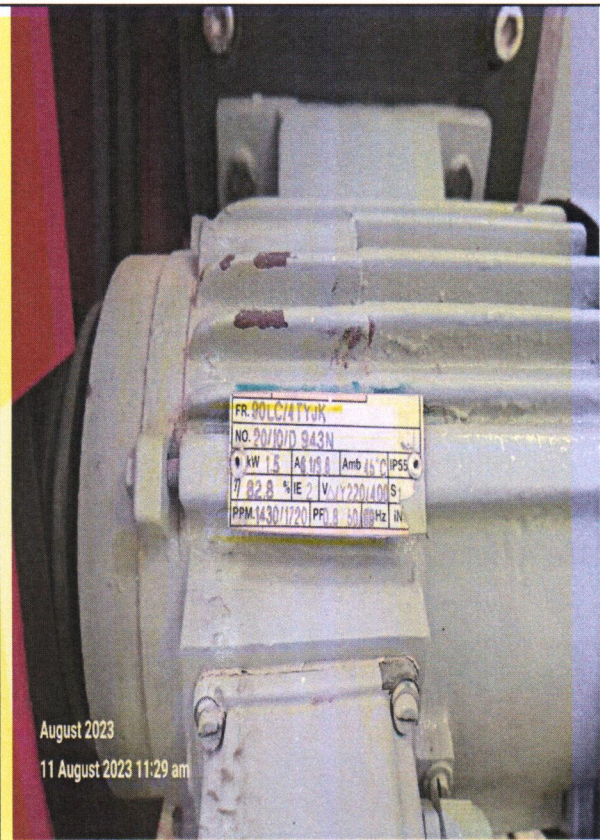
The use of present template is forbidden in the frame of 2<sup>nd</sup> party services where Client specification and templates must be used.

INSPECTION REPORT Nr

Revision Nr



August 2023  
 11 August 2023 12:10 pm



August 2023  
 11 August 2023 11:29 am

Description: FRACTURED SAMPLE; AFTER TEST

Description: SERIAL NUMBER OF UTM

END OF REPORT

GM-SI-101 INSP002-En Rev. 3

This template is intended exclusively when BV is acting as 3<sup>rd</sup> party inspection body.



Copyright Bureau Veritas 10/2019

The use of present template is forbidden in the frame of 2<sup>nd</sup> party services where Client specification and templates must be used.



**Industry & Facilities Division**  
**Third Party Inspection Report**

|                                                                                                                                                    |                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b>                                                                                                                        | <b>Revision Nr</b> |
| <input type="checkbox"/> Initial <input type="checkbox"/> Interim <input checked="" type="checkbox"/> Final <input type="checkbox"/> Resident      |                    |
| Inspection requested by: <b>VIVA &amp; CO GHANA LIMITED</b>                                                                                        |                    |
| Inspection performed as Recognised Authority: <input checked="" type="checkbox"/> Yes, GHANA STANDARDS AUTHORITY (GSA) <input type="checkbox"/> No |                    |
| BV Job Nr: 2023/121/INC/GHA                                                                                                                        |                    |

|                                                                                  |                                                                    |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------|
| <b>Project: GLASS FIBER REINFORCED POLYMER TEST APPLICATION</b>                  | <b>IPO Ref (If applicable): 2023/121/INC/GHA (BV internal P/o)</b> |
| <b>BV Client: VIVA &amp; CO GHANA LIMITED</b>                                    | <b>P/o nr: 2023/121 (client to BV)</b>                             |
| <b>Manufacturer/Vendor: VIVA &amp; CO GHANA LIMITED</b>                          | <b>P/o nr: (client to Manufacturer)</b>                            |
| <b>Sub-Vendor (If applicable):</b>                                               |                                                                    |
| <b>Inspection Location: GHANA STANDARD AUTHORITY (GSA)</b>                       | <b>Previous Inspection (If applicable): (Date)</b>                 |
| <b>Inspection performed on: GLASS FIBER REINFORCED POLYMER (Date) 11-08-2023</b> | <b>Next Inspection (If applicable): (Date)</b>                     |

| <b>MATERIAL / SUBJECT OF INSPECTION</b>                                                                                          | <b>ITEM / TAG Nr</b> | <b>QTY</b><br>As per P/O | <b>QTY</b><br>Offered for inspection |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------|--------------------------------------|
| <input type="checkbox"/> Refer to attachment section J instead<br>(Indicate if separate material list is provided in attachment) |                      |                          |                                      |
| Glass Fibre Reinforced Polymer 10MM                                                                                              | 246 / MEL2 / 23      | THREE (03)               | THREE (03)                           |

**A – INSPECTION RESULT**

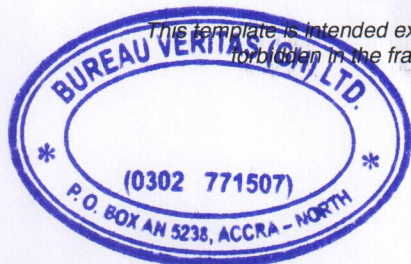
**Satisfactory** (Without comments)    
  **Satisfactory with comments** (Any of trailing Punch or Non Conformity items is still open)    
  **Not Satisfactory** (NCR raised during the inspection)

**Inspection Summary:** (for details refer to section D)

The tensile test conducted was a success as per standard ASTM D7205/D7205M, SPECIFICATION GS ACI 440.6-08. The standard tensile strength for 10mm is 760N/mm<sup>2</sup> min, results from the test were 1110N/mm<sup>2</sup> and 1341N/mm<sup>2</sup>, which is above the standard. This implies that the tensile strength from VIVA Co & GHANA has superior properties and of high quality.

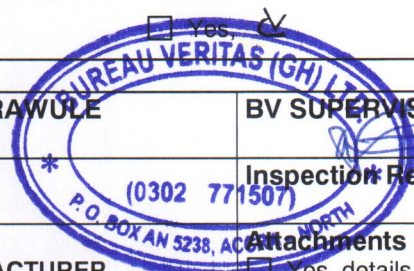
**Open Non Conformities:**    Yes, details in section G      No  
**Open Punch List Items:**    Yes, details in section H      No

This template is intended exclusively when BV is acting as 3° party inspection body. The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.





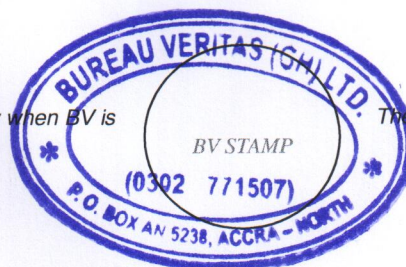
|                                                                                                                                                                        |  |                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------|--|
| INSPECTION REPORT Nr                                                                                                                                                   |  | Revision Nr                                                                                                      |  |
| Release Note Issued: <input type="checkbox"/> Yes, number(s): (Release Note number)                                                                                    |  | <input checked="" type="checkbox"/> No                                                                           |  |
| BV Traceability Stamping: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                          |  | <input type="checkbox"/> No                                                                                      |  |
| BV Inspector: RAFIAH YUSIF TRAWOLE                                                                                                                                     |  | BV SUPERVISOR : RICHARD ARTHUR                                                                                   |  |
| BV Office: TEMA OFFICE                                                                                                                                                 |  | Inspection Report Date: 11-08-2023                                                                               |  |
| Distribution:<br><input checked="" type="checkbox"/> CLIENT <input type="checkbox"/> BV <input type="checkbox"/> MANUFACTURER<br><input type="checkbox"/> OTHER: ..... |  | Attachments Report:<br><input type="checkbox"/> Yes, details in section J <input checked="" type="checkbox"/> No |  |



| B - ATTENDEES                             |                                     |                           |
|-------------------------------------------|-------------------------------------|---------------------------|
| Name                                      | Position                            | Representing              |
| BROLIN AMOAKO                             | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARDS AUTHORITY |
| DAVID OWUSU AGYARE                        | ASSISTANT SCIENTIFIC OFFICER        | GHANA STANDARD AUTHORITY  |
| IVAN ROMANOV                              | DIRECTOR OF VIVA & CO GHANA LIMITED | VIVA & CO GHANA LIMITED   |
| <i>(Add lines for additional records)</i> |                                     |                           |

| C - MEASURING & TESTING EQUIPMENT USED                                                                                            |                       |                       |                |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|----------------|
| <input type="checkbox"/> Refer to attachment section J instead<br>(Indicate if separate equipment list is provided in attachment) |                       |                       |                |
| Equipment Type                                                                                                                    | Equipment Identity n° | Last Calibration Date | Expiry Date    |
| UTM MACHINE                                                                                                                       | 20/10/D 943N          | (12-DEC-2022)         | (12-DEC -2023) |
|                                                                                                                                   |                       |                       |                |
|                                                                                                                                   |                       |                       |                |

| D - INSPECTION DETAILS                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D1 – Details of Witness (W) &amp; Hold (H) Inspection Points</b>                                                                                                                                                                                                                                                                                                   |
| <p>10MM SAMPLE 244 / MEL2 / 2023</p> <ul style="list-style-type: none"> <li>➤ The 10MM glass fibre is passed between the two jaws and clamped firmly</li> <li>➤ Once the sample is placed in right position , the jaws are pulled apart to apply tension on the sample</li> <li>➤ The tension is applied to the sample until it reaches the fracture point</li> </ul> |



|                             |                    |
|-----------------------------|--------------------|
| <b>INSPECTION REPORT Nr</b> | <b>Revision Nr</b> |
|-----------------------------|--------------------|

**D2 – Details of Monitoring and Surveillance Patrols**  Tick if conducted during the visit

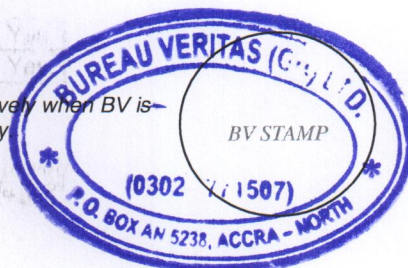
**NON-APPLICABLE**

**D3 – Details of Certificates Review**  Tick if conducted during the visit

**NON-APPLICABLE**

**E – HEALTH, SAFETY & ENVIRONMENT COMMENTS**

- Safety was observed ; operators were in their appropriate PPE
- The environment was safe and conducive for operation



|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

**F- NON CONFORMITIES**

Refer to attachment section J instead

(Indicate if separate punch list is provided in attachment)

| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
| NON  | NON         | NON    | NON       | NON        | NON       | NON        | NON      |
|      |             |        |           |            |           |            |          |

Conformity was observed , Inspection was a success as per Applicable Standards

**G – PUNCH LIST ITEMS**

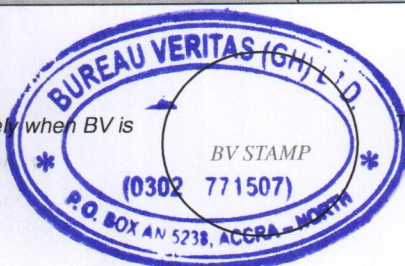
Refer to attachment section J instead

(Indicate if separate punch list is provided in attachment)

GM-SI-101 INSP002-En Rev. 3

Copyright Bureau Veritas 10/2019

This template is intended exclusively when BV is acting as 3° party inspection body.



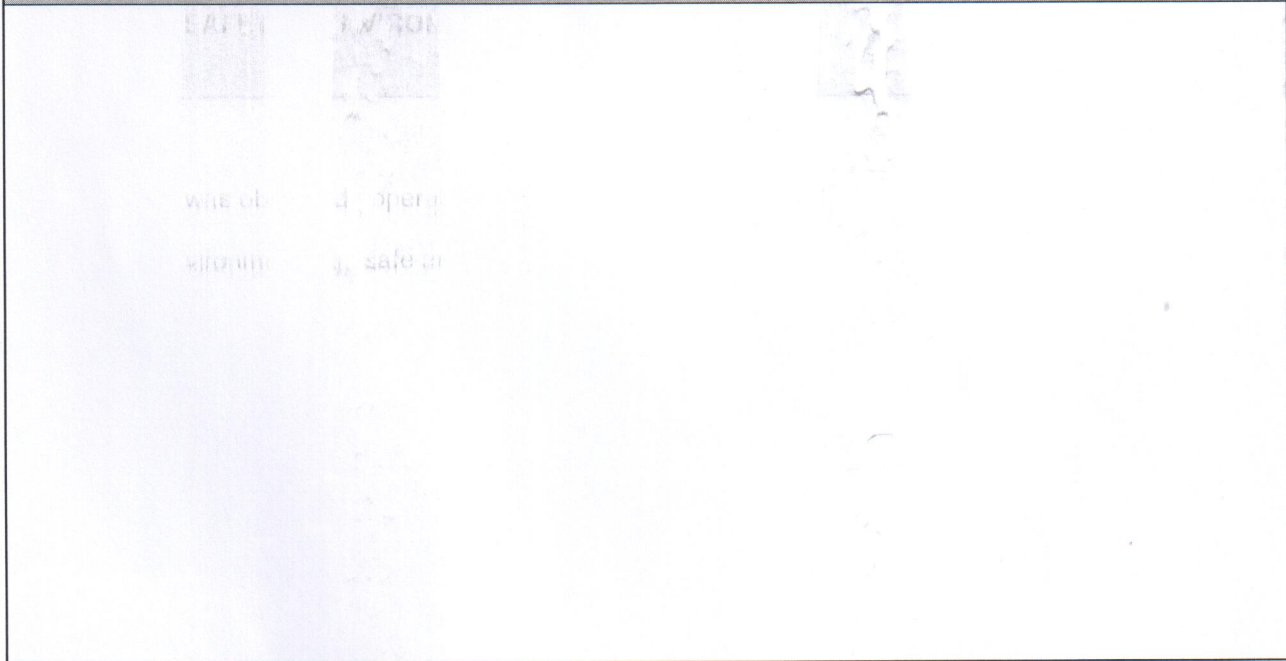
The use of present template is forbidden in the frame of 2° party services where Client specification and templates must be used.

|                      |             |
|----------------------|-------------|
| INSPECTION REPORT Nr | Revision Nr |
|----------------------|-------------|

| Item | Description | Status | Raised on | Report Nr. | Closed on | Report Nr. | Comments |
|------|-------------|--------|-----------|------------|-----------|------------|----------|
| NON  | NON         | NON    | NON       | NON        | NON       | NON        | NON      |
|      |             |        |           |            |           |            |          |

All items were intact and inspection was a success as per Applicable Standards

**H - DIGITAL PICTURES**



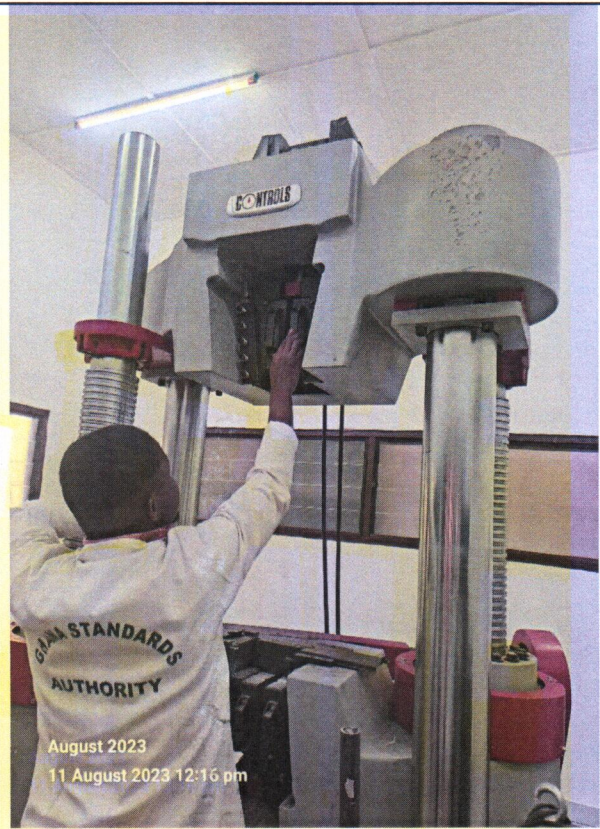
INSPECTION REPORT Nr

Revision Nr



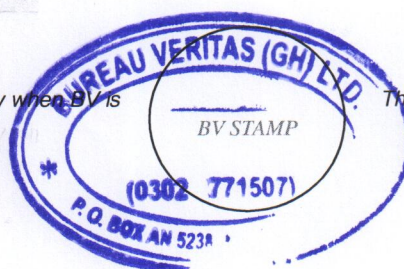
August 2023  
 11 August 2023 12:07 pm



Description: UNIVERSAL TESTING MACHINE

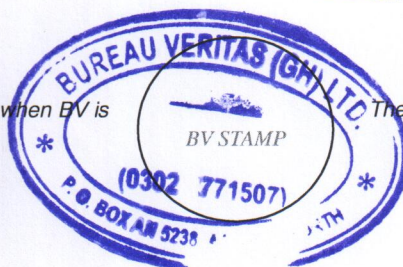


August 2023  
 11 August 2023 12:16 pm

Description: OPERATOR CHANGING THE JAWS OF THE MACHINE TO SUIT THE SIZE ;10MM

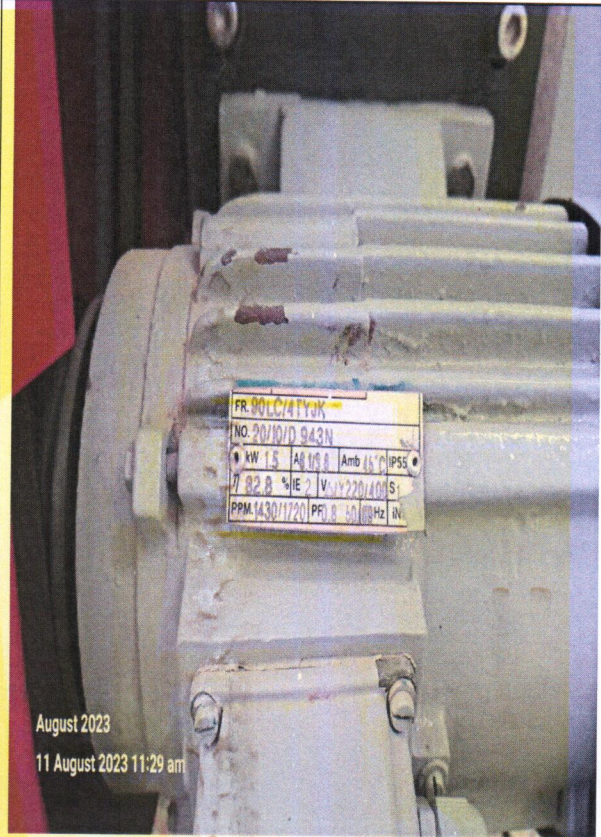


| INSPECTION REPORT Nr                                                                                                              | Revision Nr                                                                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|  <p>August 2023<br/>11 August 2023 11:54 am</p> |  <p>August 2023<br/>11 August 2023 12:27 pm</p> |
| Description: 10MM REBAR SAMPLES; BEFORE TEST                                                                                      | Description: 10MM REBAR SAMPLES; AFTER TEST                                                                                        |



INSPECTION REPORT Nr

Revision Nr



Description: *SAMPLE SURFACE*

Description: *SERIAL NUMBER OF UTM*

END OF REPORT

