GENERAL INTRODUCTION
Bahra Cables Company was established in 2008 to serve Saudi & GCC Markets. It is based in Bahra industrial city located 25km from Jeddah. Bahra Cables Factory occupies over 500,000 square meters of prime manufacturing space together with associated design offices, laboratories and storage area. It specializes in Manufacturing and Distributing Electric Cables.

Bahra Cables Company is committed to the production of the best product quality and service, utilizing cutting edge European Technology in its manufacturing. The core technologies in production processes, material applications and logistic procedures were provided by German experts with key functions being managed by German engineers. The organization has a core vertical management structure which is designed to integrate with a highly developed IT-based structure. This partnership allows the rapid flow of information through the management chain and facilitates timely response in the best traditions of ‘hands on’ management. Bahra Cables Company has the flexibility to provide a versatile product range to serve the construction, electric utilities, distribution, industrial, oil & gas and petrochemical sectors including lead sheathed cable. The cables produced comply with both North American standards (CSA, ANSI and ICEA) and European standards (IEC, BS, NF and VDE specifications.)

INTRODUCTION TO BAHRA BUSBARS
Bahra Busbars has started production of a variety of high conductivity copper busbars and rods. The company sources copper from international LME registered companies.

The factory built with the expertise is completely integrated and equipped with the latest technologies in the field.

CERTIFICATIONS AND TYPE TESTS
- Bahra Busbars has been certified with ISO 9001:2008 by American Systems Registrar (ASR).
- The products have been tested with the following Type Tests by Bureau Veritas Testing Services:
  - Copper Busbars:
    - 3mm(T) x 25mm(W), BAR 1/2H
    - 5mm(T) x 10mm(W), BAR 1/2H
    - 5mm(T) x 60mm(W), BAR 1/2H
    - 10mm(T) x 125mm(W), BAR 1/2H
    - 10mm(T) x 50mm(W), BAR 1/2H
    - 10mm(T) x 35mm(W), BAR 1/2H

PACKAGING
Wooden Boxes with one inspection opening at the side of the box which allows to take some of the samples without opening the whole box and Copper will be wrapped with special paper or plastic.

<table>
<thead>
<tr>
<th>Table 7</th>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Wooden Box</td>
<td>30cm x 27cm x 7cm</td>
<td>3 to 6 meters</td>
</tr>
</tbody>
</table>

TABLE 7

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Wooden Box</td>
<td>2000x2000x1500</td>
<td>750-1000</td>
</tr>
</tbody>
</table>

TABLE 8

PACKAGING
COPPER ROD - 8mm
Supplied in coils with the following dimensions:

<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Box</td>
<td>2000x2000x1500</td>
<td>750-1000</td>
</tr>
</tbody>
</table>
GENERAL INTRODUCTION

Bahra Cables Company was established in 2008 to serve Saudi & GCC Markets. It is based in Bahra industrial city located 25km from Jeddah. Bahra Cables Factory occupies over 500,000 square meters of prime manufacturing space together with associated design offices, laboratories and storage area. It specializes in Manufacturing and Distributing Electric Cables.

Bahra Cables Company is committed to the production of the best product quality and service, utilizing cutting edge European Technology in its manufacturing. The core technologies in production processes, material applications and logistic procedures were provided by German experts with key functions being managed by German engineers. The organization has a lean vertical management structure which is designed to integrate with a highly developed IT-based structure. This partnership allows the rapid flow of information through the management chain and facilitates timely response in the best traditions of ‘hands on’ management. Bahra Cables Company has the flexibility to provide a versatile product range to serve the construction, electric utilities, distribution, industrial, oil & gas and petrochemical sectors including lead sheathed cable. The cables produced comply with both North American standards (CSA, ANSI and ICEA) and European standards (IEC, BS, NF and VDE specifications.)

INTRODUCTION TO BAHRA BUSBARS

Bahra Busbars has started production of a variety of high conductivity copper busbars and rods. The company sources copper from international LME registered companies. The factory built with the european expertise is completely integrated and equipped with the latest technologies in the field.

CERTIFICATIONS AND TYPE TESTS

- Bahra Busbars has been certified with ISO 9001:2008 by American Systems Registrar (ASR).
- The products have been tested with the following Type Tests by Bureau Veritas Saudi Arabia Testing Services:
  - Copper Busbars:
    - 3mm(T) x 25mm(W), BAR 1/2H
    - 5mm(T) x 10mm(W), BAR 1/2H
    - 5mm(T) x 60mm(W), BAR 1/2H
    - 10mm(T) x 125mm(W), BAR 1/2H
    - 10mm(T) x 50mm(W), BAR 1/2H
    - 10mm(T) x 35mm(W), BAR 1/2H

PACKAGING

- Busbar
  - Wooden Boxes with one inspection opening at the side of the box, which allows the user to open the box and inspect the product. Copper will be wrapped with special paper or plastic.

- Copper Rods
  - 8mm
  - Supplied in coils with the following dimensions:
    - Packing Type: Wooden Box
    - Dimensions (mm): 30cm x 27cm x 7cm, 3 to 6 meters
    - Net Weight (kg): 1000 approx.

TABLE 7

<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Box</td>
<td>30cm x 27cm x 7cm, 3 to 6 meters</td>
<td>1000 approx.</td>
</tr>
</tbody>
</table>

TABLE 8

<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallet</td>
<td>2000x2000, 1500-1750, 750-1000, 500-600, 2500 approx.</td>
<td>2500 approx.</td>
</tr>
</tbody>
</table>
**BUSBAR PROPERTIES**

The raw material is pure copper cathodes of grade "A" with copper purity of 99.99%. This allows our high quality of copper busbars and rods to meet international standards.

1. Volume Resistivity at 20°C/68°F: 1.7241 &middot; &micro;Ohm mm²/m
2. Volume Conductivity at 20°C/68°F: 58.00 MS/m
3. Density: 8.91 g/cm³
4. Melting Point: 1083 °C
5. Excellent Corrosion Resistance

**BUSBAR APPLICATIONS**

- Switchgear
- Panel Boards
- Busway and Busduct Enclosures
- Earthing (safety grounding)

**GENERAL INFORMATION**

**MANUFACTURING RANGE OF PRODUCTS**

**QUALITY CONTROL**

To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements, our team is dedicated to achieving our performance objectives.

- Tests are performed in accordance with the international standards, stated methods, laboratory policies and procedures, and the clients’ requirements.
- A Quality System based on the concepts of ISO 9001 is utilized.
- The effectiveness of the management system is continually improved.
- A rigorous Quality Control Program is in place to monitor the quality of test results. This program includes analysis and evaluation of internal quality control samples with every batch. These samples include primary, duplicate samples, and standard reference.
- Laboratory personnel are familiar with the Quality Policy and implement it in the workplace. They are provided with the knowledge, training, and tools necessary to perform laboratory operations and procedures.

**SPECIFICATIONS**

**COPPER FLATS / COPPER BUSBARS**

Using excellent Oxygen-Free copper "OF" with different hardness grades and different tensile strength with the designations in Table 1 & 2, to produce Copper Busbars according to the Japanese International Standard "JIS H 3140:2012" and British Standards "BS EN 13601:2013".

**COPPER RODS (ROUND)**

Using excellent Oxygen-Free copper "OF" and hard temper grade, with designations as in Table 3 & 4, to produce Copper Rods according to the Japanese International Standard "JIS H 3140:2012" and British Standards "BS EN 13601:2013".

**COPPER FLATS / COPPER BUSBARS**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Designation</th>
<th>Tensile Strength</th>
<th>Elongation</th>
</tr>
</thead>
<tbody>
<tr>
<td>¼ Hard</td>
<td>C1020 BB-¼H</td>
<td>215 to 275 N/mm²</td>
<td>25 min</td>
</tr>
<tr>
<td>½ Hard</td>
<td>C1020 BB-½H</td>
<td>245 to 315 N/mm²</td>
<td>15 min</td>
</tr>
<tr>
<td>Hard</td>
<td>C1020 BB-H</td>
<td>275 min</td>
<td>---</td>
</tr>
</tbody>
</table>

**COPPER RODS (ROUND)**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Designation</th>
<th>Brinell Hardness</th>
<th>Tensile Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>R250</td>
<td>CW008A-R250</td>
<td>250</td>
<td>65-90</td>
</tr>
<tr>
<td>R300</td>
<td>CW008A-R300</td>
<td>300</td>
<td>75-100</td>
</tr>
<tr>
<td>R350</td>
<td>CW008A-R350</td>
<td>350</td>
<td>100 min</td>
</tr>
</tbody>
</table>

**BUSBAR EDGE SHAPES**

- Sharp Corners - SH
- Rounded Corners - RD
- Semi-Circular Edges - CE (Full Round Edges)

**BUSBAR EDGE SHAPES**

- Rough Cut - RC
- Round Cut - RC (Full Round Edges)

**COPPER RODS "ROUND"**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Cross Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 mm</td>
<td>30 mm²</td>
</tr>
<tr>
<td>15 mm</td>
<td>150 mm²</td>
</tr>
<tr>
<td>30 mm</td>
<td>600 mm²</td>
</tr>
<tr>
<td>40 mm</td>
<td>1200 mm²</td>
</tr>
<tr>
<td>50 mm</td>
<td>1800 mm²</td>
</tr>
</tbody>
</table>

**BUSHING APPLICATIONS**

- Electric Tapping Machines
- Earthing (safety grounding)
- Switchgear
**BUSBAR PROPERTIES**

The raw material is pure copper cathodes of grade “A” with copper purity of 99.99%. This allows our high quality of copper busbars and rods to meet international standards.

1. Volume Resistivity at 20°C/ 68°F: 1.7241 $\mu\Omega\cdot \text{mm}^2/\text{m}$
2. Volume Conductivity at 20°C/ 68°F: 58.00 MS/m
3. Density: 8.91 g/cm³
4. Melting Point: 1083 °C
5. Excellent Corrosion Resistance

**BUSBAR APPLICATIONS**

- Switchgear
- Panel Boards
- Busway and Busduct Enclosures
- Earthing (safety grounding)

**GENERAL INFORMATION**

**QUALITY CONTROL**

To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements, Bahra adheres to the following performance objectives:

1. Tests are performed in accordance with the international standards, stated methods, laboratory policies and procedures, and the clients’ requirements.
2. A Quality System based on the concepts of ISO 9001 is utilized.
3. The effectiveness of the management system is continually improved.
4. A rigorous Quality Control Program is in place to monitor the quality of test results. This program includes analysis and evaluation of internal quality control samples with every batch (these samples include primary, duplicate samples, standard reference).
5. Laboratory personnel are familiar with the Quality Policy and implement it in the workplace. They are provided with the knowledge, training, and tools necessary to perform laboratory operations and testing.
6. The testing lab is fully equipped with the state-of-the-art computer controlled testing equipment which are capable of achieving the accuracy and reliability of projects.

**COPPER FLATS / COPPER BUSBARS**

Using excellent Oxygen-Free copper “CU-OF” with different tensile grades and different tensile strengths with the designations in Table 1 & 2, to produce copper busbars according to the Japanese International Standard “JIS H 3140:2012” and British Standards “BS EN 13601:2013”.

**TABLE 1**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Tensile Strength (N/mm²)</th>
<th>Elongation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB-¼H</td>
<td>215 to 275</td>
<td>25</td>
</tr>
<tr>
<td>BB-½H</td>
<td>245 to 315</td>
<td>15</td>
</tr>
<tr>
<td>BB-H</td>
<td>275 +</td>
<td>---</td>
</tr>
</tbody>
</table>

**TABLE 2**

<table>
<thead>
<tr>
<th>Designation</th>
<th>Brinell Hardness</th>
<th>Brinell Hardness</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB-¼H</td>
<td>250</td>
<td>65-90</td>
</tr>
<tr>
<td>BB-½H</td>
<td>300</td>
<td>75-100</td>
</tr>
<tr>
<td>BB-H</td>
<td>350</td>
<td>100+</td>
</tr>
</tbody>
</table>

**COPPER ROADS (ROUND)**

Using excellent Oxygen-Free copper “CU-OF” and high tensile grade, with designations as in Table 3 & 4, to produce Copper Rods “round shape” according to Japanese International Standards “JIS H 3140:2012” and British Standards “BS EN 13601:2013”.

**TABLE 3**

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Tensile Strength (N/mm²)</th>
<th>Elongation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>215 to 275</td>
<td>25</td>
</tr>
<tr>
<td>20</td>
<td>245 to 315</td>
<td>15</td>
</tr>
<tr>
<td>25</td>
<td>275 +</td>
<td>---</td>
</tr>
</tbody>
</table>

**TABLE 4**

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Brinell Hardness</th>
<th>Brinell Hardness</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>250</td>
<td>65-90</td>
</tr>
<tr>
<td>20</td>
<td>300</td>
<td>75-100</td>
</tr>
<tr>
<td>25</td>
<td>350</td>
<td>100+</td>
</tr>
</tbody>
</table>

**BUSBAR EDGE SHAPES**

- Sharp Corners - SH
- Rounded Corners - RD
- Semi-Circular Edges - CE
- (Full Round Edges)

**RANGE OF PRODUCTS**

**MANUFACTURING**

**SURFACE TREATMENT**

Bahra Rods can be produced in range of:

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Cross Sectional Area (mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>78</td>
</tr>
<tr>
<td>33</td>
<td>2800</td>
</tr>
</tbody>
</table>

**BS EN 13601:2013**

COPPER FLATS / COPPER BUSBARS

**COPPER ROADS (ROUND)**

**COPPER FLATS / COPPER BUSBARS**

**COPPER ROADS (ROUND)**

**GENERAL INFORMATION**

**QUALITY CONTROL**

To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements, Bahra adheres to the following performance objectives:

1. Tests are performed in accordance with the international standards, stated methods, laboratory policies and procedures, and the clients’ requirements.
2. A Quality System based on the concepts of ISO 9001 is utilized.
3. The effectiveness of the management system is continually improved.
4. A rigorous Quality Control Program is in place to monitor the quality of test results. This program includes analysis and evaluation of internal quality control samples with every batch (these samples include primary, duplicate samples, standard reference).
5. Laboratory personnel are familiar with the Quality Policy and implement it in the workplace. They are provided with the knowledge, training, and tools necessary to perform laboratory operations and testing.
6. The testing lab is fully equipped with the state-of-the-art computer controlled testing equipment which are capable of achieving the accuracy and reliability of projects.

**bahra busbars**

**GENERAL INFORMATION**

**QUALITY CONTROL**

To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements, Bahra adheres to the following performance objectives:

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**bahra busbars**

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6. The testing lab is fully equipped with the state-of-the-art computer controlled testing equipment which are capable of achieving the accuracy and reliability of projects.
BUSBAR PROPERTIES

The raw material is pure copper cathodes of grade “A” with copper purity of 99.99%. This allows our high quality of copper busbars and rods to meet international standards.

1. Volume Resistivity at 20°C/68°F: 1.7241\(\mu\)\(\Omega\)mm\(^2\)/m
2. Volume Conductivity at 20°C/68°F: 58.00 MS/m
3. Density: 8.91 g/cm\(^3\)
4. Melting Point: 1083 °C
5. Excellent Corrosion Resistance

BUSBAR APPLICATIONS

Switchgear Panel Boards
Busway and Busduct Enclosures Earthing (safety grounding)

GENERAL INFORMATION

MANUFACTURING RANGE OF PRODUCTS

QUALITY CONTROL

To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements. Key elements essential in achieving our performance objectives:

- Tests are performed in accordance with the international standards, stated methods, laboratory policies and procedures, and the clients’ requirements.
- A Quality System based on the concepts of ISO 9001 is utilized.
- The effectiveness of the management system is continually improved.
- A rigorous Quality Control Program is in place to monitor the quality of test results. This program includes analysis and evaluation of internal quality control samples with every batch. (These samples include primary, duplicate samples, standard reference).
- Laboratory personnel are familiar with the Quality Policy and implement it in the workplace. They are provided with the knowledge, training, and tools necessary to perform laboratory operations and testing.
- The laboratory equipment is regularly calibrated and periodically inter-laboratory and inter-comparison tests are conducted to ensure accuracy.

COPPER FLATS / COPPER BUSBARS

Using excellent Oxygen-Free copper “CU-OF” with different tensile grades and different tensile strengths with the designations as in Table 1 & 2, to produce Copper Busbars according to the Japanese International Standard “JIS H 3140:2012” and British Standards “BS EN 13601:2013”.

SPECSIFICATION

Copper Flats (Alloys) Designation: Minimum Special rating figures can be internal

Tinned busbars are manufactured by means of an Electrolytic Tinning process, using a sophisticated system, which provides the best quality of tinned busbars to be used in Electrical Panels, Switchgears and Transformers.

COPPER FLATS / COPPER BUSBARS

TANKED COPPER BUSBARS

Tubular busbars, are manufactured by means of an Electrolytic Tinning process, using a sophisticated system, which provides the best quality of tinned busbars to be used in Electrical Panels, Switchgears and Transformers.

COPPER RODS “ROUND”

Using excellent Oxygen-Free copper “CU-OF” and high tensile grade, with designations as in Table 3 and 4, to produce Copper Rod “round shape” according to Japanese International Standards “JIS H 3140:2012” and British Standards “BS EN 13601:2013”.

Bahra Rods can be produced in range of:

- Diameter: 30 mm\(^2\) upto 3800 mm\(^2\)
- Cross section area: 6 mm\(^2\) upto 70 mm\(^2\)

TABLE 1

<table>
<thead>
<tr>
<th>Standard Alloy</th>
<th>No</th>
<th>Temperature</th>
<th>Grade</th>
<th>Tensile Strength [N/mm(^2)]</th>
<th>Elongation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>JIS H3140:2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1020</td>
<td>¼</td>
<td>Hard</td>
<td>275</td>
<td>215 to 255</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>½</td>
<td>Hard</td>
<td>315</td>
<td>245 to 305</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hard</td>
<td>355</td>
<td>275 to 325</td>
<td>--</td>
</tr>
</tbody>
</table>

TABLE 2

<table>
<thead>
<tr>
<th>Standard Alloy</th>
<th>No</th>
<th>Temperature</th>
<th>Grade</th>
<th>Brinell Hardness</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS EN 13601:2013</td>
<td>CW008A</td>
<td>R250</td>
<td>250</td>
<td>65-90</td>
<td>CW008A-R250</td>
</tr>
<tr>
<td></td>
<td>CW008A</td>
<td>R300</td>
<td>300</td>
<td>75-100</td>
<td>CW008A-R300</td>
</tr>
<tr>
<td></td>
<td>CW008A</td>
<td>R350</td>
<td>350</td>
<td>100 min</td>
<td>CW008A-R350</td>
</tr>
</tbody>
</table>

Bahra labs are capable of performing all required tests for tinned busbars, like:

- Tin thickness test
- Adhesion test

BUSBAR EDGE SHAPES

- Sharp Corners - SH
- Rounded Corners - RD
- Semi-Circular Edges - CE
- (Full Round Edges)

Bahra Busbars can be in the range of dimensions as described below:

- Width: from 10mm up to 240mm.
- Thickness: from 2mm up to 24mm.
- Cross section area: from 30 mm\(^2\) up to 3800 mm\(^2\).
BUSBAR PROPERTIES
The raw material is pure copper cathodes of grade “A” with copper purity of 99.99%. This allows our high quality of copper busbars and rods to meet international standards.

1. Volume Resistivity at 20°C/ 68°F 1.7241 \(\mu\Omega\) mm²/m
2. Volume Conductivity at 20°C/ 68°F 58.00 MS/m
3. Density 8.91 g/cm³
4. Melting Point 1083 °C
5. Excellent Corrosion Resistance

BUSBAR APPLICATIONS
- Switchgear
- Panel Boards
- Busway and Busduct Enclosures
- Earthing (safety grounding)

GENERAL INFORMATION
MANUFACTURING
RANGE OF PRODUCTS

COPPER FLATS / COPPER BUSBARS
Using excellent Oxygen-Free copper “CU-OF” with different hardness grade and different tensile strength with the designations as in Table 1 & 2, to produce Copper busbars according to the Japanese International Standard “JIS H3140:2012” and British Standards “BS EN 13601:2013”.

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>SPECIFICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Alloy No</td>
</tr>
<tr>
<td>Designation</td>
<td>Temple</td>
</tr>
<tr>
<td>JIS H3140:2012</td>
<td>C1020</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>DESIGNATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Alloy No</td>
</tr>
<tr>
<td>Designation</td>
<td>Temple</td>
</tr>
<tr>
<td>JIS H3140:2012</td>
<td>C1020</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BATCHED BUSBARS
Busbars can be produced in range of:
- Width: from 10mm up to 240mm.
- Thickness: from 2mm up to 24mm.
- Cross section area: from 30 mm² up to 3800 mm².

QUALITY CONTROL
To provide high quality and timely analysis of raw materials, semi-finished and finished products and to consistently meet our clients’ requirements. Key elements essential in achieving our performance objectives:

- Tests are performed in accordance with the international standards, stated methods, laboratory policies and procedures, and the clients’ requirements.
- A Quality System based on the concepts of ISO 9001 is utilized.
- The effectiveness of the management system is continually improved.
- A rigorous Quality Control Program is in place to monitor the quality of test results. This program includes analysis and evaluation of internal quality control samples with every batch. (These samples include primary, duplicate samples, standard reference)
- Laboratory personnel are familiar with the Quality Policy and implement it in the workplace. They are provided with the knowledge, training, and tools necessary to perform laboratory operations and testing.
- The laboratory is fully equipped with the state-of-the-art computer controlled testing equipment which are capable of achieving the accuracy required and complying with specifications relevant to the task concerned.
- Calibration and intermediate checks are periodically performed according to calibration procedures.
GENERAL INTRODUCTION

Bahra Cables Company was established in 2008 to serve Saudi & GCC Markets. It is based in Bahra industrial city located 25km from Jeddah. Bahra Cables Factory occupies over 500,000 square meters of prime manufacturing space together with associated design offices, laboratories and storage area. It specializes in Manufacturing and Distributing Electric Cables.

Bahra Cables Company is committed to the production of the best product quality and service, utilizing cutting edge European Technology in its manufacturing. The core technologies in production processes, material applications and logistic procedures were provided by German experts with key functions being managed by German engineers. The organization has a lean vertical management structure, which is designed to integrate with a highly developed IT-based structure. This partnership allows the rapid flow of information through the management chain and facilitates timely response in the best traditions of 'hands on' management. Bahra Cables Company has the flexibility to provide a versatile product range to serve the construction, electric utilities, distribution, industrial, oil & gas and petrochemical sectors including lead sheathed cable. The cables produced comply with both North American standards (CSA, ANSI and ICEA) and European standards (IEC, BS, NF and VDE specifications.)

AREA

Bahra Cables Company has a total land area of about 500,000 sqm at disposal.
The built-up area, including offices, plants and testing facilities is more than 129,000 sqm.
Total available warehouses and open storage area is about 211,500 sqm.


INTRODUCTION TO BAHRA BUSBARS

Bahra Busbars has started production of a variety of high conductivity copper busbars and rods. The company sources copper from international LME registered companies.

The factory built with the european expertise is completely integrated and equipped with the latest technologies in the field.

CERTIFICATIONS AND TYPE TESTS

- Bahra Busbars has been certified with ISO 9001:2008 by Bureau Veritas Saudi Arabia Testing Services.

PACKAGING

Busbar and Copper Rods are supplied in packs with the following dimensions:

<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Box</td>
<td>30cm x 27cm x 7cm</td>
<td>1000 approx.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pallet Pack</td>
<td>2000mm x 2000mm</td>
<td>1500-1750 approx.</td>
</tr>
</tbody>
</table>

TABLE 7

<table>
<thead>
<tr>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer Dia &quot;D&quot;</td>
<td>Inner Dia &quot;d&quot;</td>
</tr>
<tr>
<td>2000mm x 2000mm</td>
<td>1500-1750</td>
</tr>
<tr>
<td>2000mm x 2000mm</td>
<td>1500-1750</td>
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<td>1500-1750</td>
</tr>
</tbody>
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Bahra Cables Company has a total land area of about 500,000 sqm at disposal. The built-up area, including offices, plants and testing facilities is more than 129,000 sqm. Total available warehouses and open storage area is about 211,500 sqm.


INTRODUCTION TO BAHRA BUSBARS
Bahra Busbars has started production of a variety of high conductivity copper busbars and rods. The company sources copper from international LME registered companies.

The factory built with the european expertise is completely integrated and equipped with the latest technologies in the field.

CERTIFICATIONS AND TYPE TESTS
- Bahra Busbars has been certified with ISO 9001:2008 by American Systems Registrar (ASR).
- The products have been tested with the following Type Tests by Bureau Veritas Saudi Arabia Testing Services:
  - Copper Busbars:
    - 3mm(T) x 25mm(W), BAR 1/2H
    - 5mm(T) x 10mm(W), BAR 1/2H
    - 5mm(T) x 60mm(W), BAR 1/2H
    - 10mm(T) x 125mm(W), BAR 1/2H
    - 10mm(T) x 50mm(W), BAR 1/2H
    - 10mm(T) x 35mm(W), BAR 1/2H

PACKAGING
- Copper Rod - 8mm
  - Supplied in coils with the following dimensions:
    - Packing Type: Coils
    - Outer Dia (mm) "D": 2000
    - Inner Dia (mm) "d": 1500
    - Height (mm) "h": 750

PACKAGING
- Copper Rod - 8mm
  - Supplied in pallets with the following dimensions:
    - Packing Type: Pallets
    - Outer Dia (mm) "D": 2000
    - Inner Dia (mm) "d": 1500
    - Height (mm) "h": 750

Bahra Busbars has been certified with ISO 9001:2008 by American Systems Registrar (ASR).
- The products have been tested with the following Type Tests by Bureau Veritas Saudi Arabia Testing Services:
  - Copper Busbars:
    - 3mm(T) x 25mm(W), BAR 1/2H
    - 5mm(T) x 10mm(W), BAR 1/2H
    - 5mm(T) x 60mm(W), BAR 1/2H
    - 10mm(T) x 125mm(W), BAR 1/2H
    - 10mm(T) x 50mm(W), BAR 1/2H
    - 10mm(T) x 35mm(W), BAR 1/2H

Table 7
<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden Box</td>
<td>30cm 27cm 7cm</td>
<td>3 to 6 meters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 approx.</td>
</tr>
</tbody>
</table>

Table 8
<table>
<thead>
<tr>
<th>Packing Type</th>
<th>Dimensions (mm)</th>
<th>Net Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coils</td>
<td>2000x2000</td>
<td>1500-1750</td>
</tr>
<tr>
<td></td>
<td>750-1000</td>
<td>500-600</td>
</tr>
<tr>
<td></td>
<td>2500</td>
<td>2500 approx.</td>
</tr>
</tbody>
</table>