#### **DESCRIPTION**

CW606N is a material which has been successfully used in automotive industries. It has both good machining and good cold working properties.

#### **CHEMICAL COMPOSITION**

| ELL. PHULL   | Elements                           |              |                  | Min (9      | <b>%)</b>    |           |           | Max (%)  |  |
|--|------------------------------------|--------------|------------------|-------------|--------------|-----------|-----------|----------|--|
| 44   | Cu                                 | LS SHELL     | - C. J. H. H. J. | 61.00       | )            | \$ 2      | METAL HAR | 62.00    |  |
| A STATE OF THE STA | Pb                                 | D.B.JHATT    | 49               | 1.60        | , us ME      | To Hall   | , bly,    | 2.50     |  |
| : HANE MILE  | Sn                                 | c.           | ETH              | o ans mr.   | R.A.J.H.A.I. | 100       |           | © 0.20 s | A. A |
| Bry  | Fe                                 | METAL        | UNIE ME          | Harring -   |              |           | IS MENT   | 0.20     | 4  |
| . 15   | Al                                 | HINE,        | 6 B. J.          | .s-         | WE WITH      | . UANG MI | EUJH.     | 0.05     |  |
| JE WELL  | <sub>ALI</sub> H <sup>ARI</sup> Ni | d.           | als.             | C MEI AL    | HUNE,        | Bary      |           | 0.30     | S HANG MI                                |
| R.B.H.B.   | Total Other                        | 'S MIS       | JE MET           | - Califaria | 6h           | 5         | E METAL   | 0.20     | Blan                                     |
| Ca   | Zn                                 | ALE MIL. BIL | Har              | 40          | (RIC)        | Remaind   | er        | 67       | . N.S                                    |

# MECHANICAL PROPERTIES CW606N (AS PER TEMPER 400)

| Range (mm)   | From | То    | UTS Min<br>(N/mm²) | PS Min<br>(N/mm²) | Elongation<br>Min (%) | Hardness<br>Min | Hardness<br>Max |
|--------------|------|-------|--------------------|-------------------|-----------------------|-----------------|-----------------|
| Round (Dia)  | 2.00 | 20.00 | 400.00             | 200.00            | 12.00                 | - 25 -          | IETH - IHAND    |
| Hex (A/F)    | 2.00 | 25.00 | 400.00             | 200.00            | 12.00                 | ENET - SHAME    | _6/L            |
| Square (A/F) | 2.00 | 25.00 | 400.00             | 200.00            | 12.00                 | THUS - SHE      | - 5             |

## **PHYSICAL PROPERTIES**

| Melting Point   | 885°                        |
|---|-----------------------------|
| Density   | 8.50g/cm3                   |
| Electrical Resistivity                                | 0.066 x 10- <sup>6</sup> Ωm |
| Thermal Conductivity Btu/ sq ft/ ft hr/<br>°F at 68°F | 115 W/m.K                   |
| Modulus of Elasticity                                 | 105 Gpa                     |

## **FABRICATION PROPERTIES**

| Technique                                       | Suitability     |
|---|-----------------|
| Hot Formability                                 | Good            |
| Cold Formability                                | Good            |
| Cold Reduction Between anneals                  | 50%             |
| Machinability rating (free cutting brass = 100) | 75%             |
| Soldering                                       | Excellent       |
| Brazing   | Good            |
| Oxy-acetylene welding                           | Not recommended |
| Not recommended                                 | Not recommended |
| Resistance welding: Spot and Seam               | Not recommended |
| Butt Welding                                    | Fair            |

### TYPICAL USES

- Fasteners
- Rivets
- > Domestic appliances
- > Automotive engineering
- > Hose fittings
- Intricate parts such as clock components