

## ELMET TECHNOLOGIES

MOLYBDENUM POWDER METALLURGY PRODUCTS
PURE MOLYBDENUM
Plate PP-22-2
This specification covers rolled molybdenum plate produced from pressed and sintered powder metallurgy sheet bar.

## CHEMICAL CHARACTERISTICS ${ }^{1}$

(Mass fraction in \% [cg/g]; ppm [ $\mu \mathrm{g} / \mathrm{g}]$ )
The chemical composition of the molybdenum powder used in producing sheet bar shall conform to the following limits:

| Molybdenum <br> (By Difference) | min. | 99.95 \% |
| :---: | :---: | :---: |
| Mg | max. | 0.001 \% |
| Mn | max. | 0.001 \% |
| Ni | max. | 0.002 \% |
| AI | max. | 0.002 \% |
| Cu | max. | 0.002 \% |
| Pb | max. | 0.002 \% |
| Ti | max. | 0.002 \% |
| Ca | max. | 0.003 \% |
| Si | max. | 0.003 \% |
| Sn | max. | 0.003 \% |
| C | max. | 0.005 \% |
| Cr | max. | 0.005 \% |
| Fe | max. | 0.005 \% |



## STRUCTURE

Sheet will be supplied in a stress-relieved condition unless otherwise requested.

## MECHANICAL PROPERTIES

Tensile properties can be supplied on request when a Purchase Order is placed.

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## DIMENSIONAL TOLERANCES

| Thickness <br> (inches) | Thickness Tolerance <br> (\% of Thickness) | Width Tolerance <br> (inches) | Length Tolerance <br> (inches) | Flatness Deviation <br> (\% Maximum) |
| :---: | :---: | :---: | :---: | :---: |
| .1875 to .500 | $\pm 4$ | $+.125-0$ | $+.125-0$ | 3 |
| Over .500 to 1.000 | $\pm 5$ | $+.125-0$ | $+.125-0$ | 5 |
| Over 1.000 to 1.500 | $\pm 5$ | $+.1875-0$ | $+.1875-0$ | 6 |

Plate will be sheared, abrasive cut, band saw cut, or water jet cut to the tolerances shown.
The deviation from flatness is determined by the formula:


## SURFACE CONDITION

The plate will be supplied with a matte finish. It will be of uniform quality, clean and free from foreign matter. Major surface defects will be removed by grinding provided that such conditioning does not reduce dimensions below specified limits.

## IDENTIFICATION

The material will be identified with appropriate specification number, ingot or lot number, and nominal size. Shipping containers will be marked with the name of the customer and the purchase order number.

Hazards identification in Advertising (Directive 67/548/EEC Article 26, Directive 1999/45/ EC Article 13 and REGULATION (EC) No 1272/2008 Article 48) none.

## REJECTION

Elmet Technologies must receive written notification of rejected material with the reason for rejection. Elmet Technologies reserves the right to inspect rejected material at the customer's plant for claim validation. The material may be returned only after proper authorization.

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[^0]:    ${ }^{1}$ Information on testing methods on request.

