

## Insulmat<sup>™</sup> 2300 – High Temperature Insulation

Thermal Conductivity

ASTMC177

Worbo *Insulmat*<sup>™</sup> is an effective low cost alternative replacement for asbestos mats, millboard or refractory mineral fiber boards. It is used as a thermal insulation and gasket material in many heavy duty industrial applications including furnace and kiln linings, boiler installations, heat treatment temperature control, glass furnace crown installations, furnace door seals, duct linings, steam and gas turbines insulations, nuclear insulation applications, etc.

Worbo Technology Insulmat<sup>™</sup> 2300 offers very good fire resistance with low heat storage and is an effective insulator even when exposed to extremely hot temperatures. Offers very good chemical resilience and is unaffected by most chemicals except hydrofluoric and phosphoric acids and strong alkalies. Excellent thermal stability: fibers have good resistance to devitrification.  $\bullet$  For some applications, it is possible to use Insulmat<sup>TM</sup> 2300 above its classifications temperature (shrinkage is 5% at 1500°C). The combination of long spun fibres and the needling operation produce tough resilient and strong blankets which resist tearing both before and after heating. Good resistance to thermal shock. Insulmat<sup>TM</sup> 2300 has excellent strength before and after heating. Exhibits superior acoustic as well as thermal insulation characteristics **Dimensional Data** Available in 24" wide with thicknesses varying between  $\frac{1}{2}$ " and 2" thick and in continuous roll lengths up to 60' (depending on thickness) Temperature classification up to 2300°F (1260°C) continuous depending on the Temperature application 64 kg/m<sup>3</sup> up to 160 kg/m<sup>3</sup> (4 densities available) Density

> Density (kg/m3) Temperature 65 96 128 160 (°C) 0.07 W/m<sup>.</sup>K 200 0.06 W/m<sup>.</sup>K 0.06 W/m<sup>.</sup>K 0.09 W/m<sup>·</sup>K 400 0.12 W/m<sup>·</sup>K 0.11 W/m<sup>·</sup>K 0.10 W/m K0.13 W/m<sup>.</sup>K 600 0.20 W/m<sup>.</sup>K 0.16 W/m<sup>.</sup>K 0.15 W/m<sup>·</sup>K 0.23 W/m<sup>·</sup>K 800 0.30 W/m<sup>·</sup>K 0.20 W/m<sup>·</sup>K 0.18 W/m<sup>·</sup>K 1000 0.43 W/m<sup>.</sup>K 0.32 W/m<sup>·</sup>K 0.27 W/m<sup>·</sup>K 0.25 W/m<sup>.</sup>K