

## MECHANICAL AND PHYSICAL CHARACTERISTICS

TSC-bourgeois lamination standards for all applicable mechanical and physical characteristics meet or exceed the recognized industry standards. The most important of these are:

### Tolerances

By maintaining the below listed tolerances, TSC-bourgeois laminations have a mechanical consistency that ensures good stacking characteristics and low gap losses.

Gauge No.	Gauge Thickness	Gauge Tolerance + or -	Burr Tolerance Max	Dimension Tolerances + or -	Flatness* Tolerances
29	.0140	.001	.0020**	.005	.022
26	.0185	.002	.0025	.005	.028
24	.0250	.003	.0030	.005	.035

\* 1½" center leg and under measured with a bridge type gauge

\*\* Nickel is .0010

### Surface Insulation

The normal surface oxide on both silicon and nickel flat rolled steels provides some degree of interlamination resistance, which may be adequate for many applications. However, as additional interlamination resistance is generally desired, TSC-bourgeois laminations are coated with one of the following inorganic coatings:

MATERIAL	COATING TYPE	AISI TYPE
Grain Oriented	C-10	C-4
Non-Oriented	C-5	C-5
Nickel (High & Low)	Magnesium Oxide or Magnesium Methylate (Type 2)	- -

### Packaging

Various methods of packaging, depending on the part number, are used for the maximum protection of the laminations in transit. Regardless of the method employed, all have the following standards:

E and I laminations must be packed together as stamped to insure equal thickness and quantities.

The thickness variation between E and I laminations in any one carton cannot exceed  $\pm 2\%$ .

A layer of rust inhibiting paper (V.C.I. or equivalent) shall be packed between lamination layers.