For use in Diaphragm Cell Technology, the latest version of the new Mark III HB Grid Protector incorporates a new Hot Bond process of laminating the Special F230LP Fluoroplastic film to the Panacea® 6962 Special EPDM Rubber. The HB Bond is significantly stronger than the prior “cold bonded” system.

**Panacea® 6962 EPDM**

Panacea® 6962 Special EPDM compound is formulated for use in very difficult chemical environments where it’s outstanding temperature resistance, chemical resistance, and compression set make it very suitable for Grid Protector use.

**Special F230LP Fluoroplastic**

Prince Special F230LP Fluoroplastic is a less permeable PTFE with a high upper and lower temperature limit than other Fluoroplastic choices. The F230LP Fluoroplastic film is the most durable and best chemical resistant material possible for large production parts.

The new Mark III HB Grid Protector was developed to be used with synthetic diaphragms. These synthetic diaphragms are being used more regularly in chlor-alkali diaphragm cells and are exhibiting a 3+ year service life.

In order to best utilize this new diaphragm technology, Prince developed an improved seal system for the cathode, cell head and anode posts in the **Mark III HB Grid Protector Series**.

**Prince Mark III HB Series**

- 6055/35 Long Life Special EPDM Seal, Hot Bonded Joints
- 1/4” or 3/16” Thick Version Only
- 6962 Anode Post Gaskets w 3/16” Thick Version Only
- F230LP Bonded Fluoroplastic Face
- 1/4” or 3/16” Thick 6962 Special EPDM
- Bottom Seal laminated to grid protector
Mark III HB Advantages

**The Prince Mark III HB Grid Protectors** have the following advantages when compared to using a titanium grid cover with individual anode post gaskets.

- Fluoroplastic face of Prince’s Mark III HB grid protector protects the rubber from chlorination versus, only using individual anode post gaskets constructed of rubber which tend to have a more limited life less than 3 years.

- Lower cost comparison to titanium grid covers.

- The Mark III HB grid protector protects from electrical shorts from the cathode to the bottom grid when leakage occurs, versus perimeter gaskets used with titanium grids that leave the titanium grid exposed to leaks allowing for electrical short circuits and damage.

- The Mark III HB grid protector is not subject to “blow-outs” of the bottom seal as the bottom seal is laminated to the grid protector material, versus users of perimeter gaskets having experienced bottom seal “blow-out” problems.