## N NAC maGNATRAN Thansport Cask



NAC International's MAGNATRAN transport cask system is based on the licensed NAC-STC and NAC-UMS transport casks. The cask body length and internal diameter were increased to accommodate the higher capacity MAGNASTOR TSC. The outside diameter of the cask has been maintained, allowing the use of the existing NAC-STC impact limiter design, thereby avoiding any additional drop testing of MAGNATRAN. The system is designed to more efficiently deal with higher heat loads associated with the MAGNASTOR TSC without excessively long cooling times. The MAGNATRAN cask is also designed (and will be certified) for the transport of GTCC waste.

The major components of the MAGNATRAN transport cask system include a multi-walled construction consisting of shells of stainless steel/ lead/ stainless steel with a single closure lid. Attached to the body is a series of thermal fins and encapsulated NS-4-FR neutron shield material, a patented design for improved shielding and thermal performance of the neutron shield.

The body of the MAGNATRAN is a smooth right-circular cylinder of multi-walled construction consisting of a stainless steel inner shell, lead layer, and an outer stainless steel shell. Mechanically attached to the cask body are 15 thermal fins captured by 30 encapsulated neutron shield components.

MAGNATRAN is currently under NRC review, and also meets all of

| Capacity <br> (lbs) | Empty: 205,000 <br> Loaded: 320,000 <br> Loaded (with <br> impact limiters): <br> 350,000 |
| :--- | :--- |
| Cask <br> Body | Stainless Steele |
| Overall <br> Length | (with Impact <br> Limiters): 326 in. <br> (without Impact <br> Limiters): 236 in. |
| Impact <br> Limiters | Redwood and <br> balsa wood |
| Calculated <br> Total Dose <br> Rates <br> (mrem/hr) | $<200$ (contact) <br> $<10$ (at 2m) | 10CFR71 requirements.

