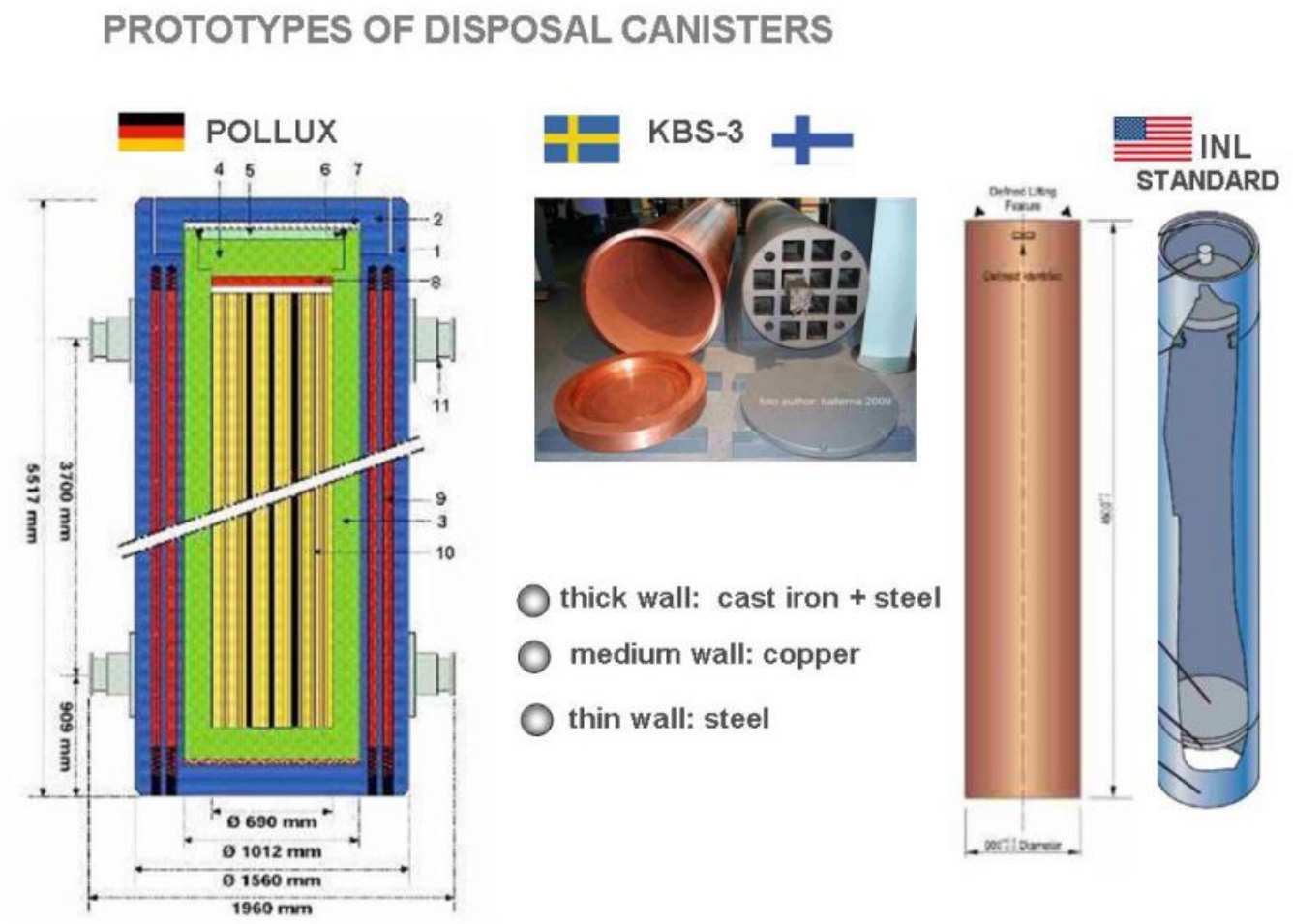
DISPOSAL CANISTERS



Presently, most of the international waste management programs include **metallic canisters** as part of the engineered barriers.
Prototypes developed in different countries show a similar design.
As representative of the **thick-walled cast iron- steel canisters** the German POLLUX is shown on the left, a very heavy construction with a wall of about 20 cm thickness.
Maybe Sweden and Finland have the most advanced disposal projects for commercial nuclear waste. Foreseen are **copper canisters with medium wall thickness of 50 to 60 mm**, known as KBS-3 type. A heavy cast iron insert holds the fuel elements in proper position and thus contributes to the overall stability.
On the right, the INL STANDARD is shown as representative of **the thin-walled steel** canisters. The German BSK 3 canister has a very similar design. Its wall thickness is about 40 mm.
To understand **the challenges for ceramic components** as part of disposal systems, some **safety requirements and some conditions in the repository** must be mentioned.