

High Power Targets for Spallation Sources,
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Spallation, the bombardment of a heavy metal target by
an intense beam of protons, has become an established
technique for the production of high intensity fluxes of
neutrons. There are, currently, proposals and design
studies for a variety of high power sources covering an
increasing range of applications such as energy
production, transmutation of radioactive waste and
tritium production facilities as well as the second
generation of neutron sources for condensed matter
research. Design of the targets for high power
spallation sources, with a beam power of several
megawatts, presents a formidable technical challenge
both in terms of heat removal and materials selection.
The requirements and concepts for such targets are
reviewed.