IDENTIFYING THE REGULATION LANDSCAPE AND TECHNOLOGICAL ALTERNATIVES TO CHROME VI PLATING



A Major Tool Manufacturer

The Client wanted to understand the regulations on safer alternatives to hexavalent chromium coating such as trivalent chromium (Cr(III)), which is the most commonly used coating for tool manufacturing.



CHALLENGE

For this segment of an ongoing Research Support Service license, the Client tasked PreScouter with learning more about the regional regulations that applied to Cr(III) as well as looking into potential alternatives that were environmentally and health friendly, legally compliant, and corrosion and scratch resistant. They also needed to be processed in house and at low cost.



APPROACH

PreScouter divided the work to focus on the regulatory environment and on scouting for solutions that could meet all the requirements. For both channels, PreScouter leveraged its network of Advanced Degree Researchers along with Subject Matter Experts who discussed the options at meetings with the Client.



OUTCOME

PreScouter presented the requested regulatory scenario to the Client and, over the course of 4 weeks, presented 28 alternatives to chrome plating, identified the 10 most promising coatings, and singled out 1 that fulfilled all of the Client's requirements.



Impact of PreScouter's Work: PreScouter's regulatory landscaping revealed that the Client's operations could run for one year more than they expected, which enabled them to develop the identified solution for their products.