

**POWERFUL POLYMERS
PAINLESS PROCEDURES
RAPID RESULTS**

Floors Sinking in Seed Sorting Plant with Harvest Deadline Fast Approaching

Just outside Saskatoon, Saskatchewan is a 12,000 square foot cement manufacturing plant that was being re-purposed for use as an agricultural seed sorting facility. Built in the 1960s, the plant's 10" thick, double rebar, 8000 psi concrete floors had settled. An undetected broken water main on an adjoining property had been pumping thousands of gallons into the soil for years causing the floors to become independent of the footings which had sunk as much as 7 inches. The new owner's plan to demo the slabs – including some as large as 52 feet by 25 feet – and replace them came to a screeching halt when they proved to be too tough for even a track hoe mounted jackhammer. All of the high tech seed sorting equipment was still sitting on pallets and couldn't be installed until the floor problem was resolved. With harvest season fast approaching, a mudjacker was hired to lift the slabs with cement grout. This effort proved unsuccessful in that the final levels were not accurate enough, leaving the property owner in dire circumstances.



POWERFUL POLYMER

Among the most dependable products for leveling concrete slabs, AP Lift 440, provides an exceptional DOT grade solution for these types of situations. This 4 lb. density, high-strength, hydro-insensitive structural polyurethane foam is perfect for lifting and supporting heavy concrete floors that have settled due to water infiltration.

Physical Properties - Cured

AP LIFT 440			
Compressive Strength	(ASTM D-1621)	80 p.s.i. or 11,520 p.s.f	5,516 millibar
Tensile Strength	(ASTM D-638)	88 p.s.i.	5,516 millibar
Expansion	(Unconfined)	17-19 times	-
Density	(ASTM-D 1622)	3.75 to 4.25 lb/ft3	60.07 to 68.08 kg/m3
Shrinkage	(ASTM D-1042/D-756)	Negligible	Negligible

Properties will vary depending on application conditions.

PAINLESS PROCEDURE

An Alchemy-Spetec certified contractor lifted 5 slabs and fine-tuned 3 others that the mudjackers had unsuccessfully attempted with cement grout. Overall, nearly 900,000 pounds of sunken slab were lifted with only twelve 100 gallon sets of 440; all in less than a week.

RAPID RESULT

The level of precision achieved with polymer foam was not only far greater than anything the mudjackers were able to deliver but the rapid results allowed for the heavy seed sorting equipment to be installed on stable floors just in time for the fall harvest. The floors are still perfectly level to this day.

About Alchemy-Spetec

The Leak Seal Division

The Alchemy-Spetec Leak Seal Product Line combines a full-system offering of polymer chemical grouts and equipment with perhaps the most experienced technical team in the industry. For any concrete leak seal application, lean on the Alchemy-Spetec team for phone, field, or engineering support. Our growing network of Regional Managers, Independent Representation, and Nationwide Distribution offers industry professionals many levels of opportunity worth discussing with our team. Consultants at Alchemy-Spetec pride themselves on rapid, powerful, and painless scheduling of field and technical support. We invite you to inquire about our bi-annual factory training held at the Tucker, GA-based manufacturing facility where they can learn from the 20+ year average industry experience of our Regional Management and Technical Team.

The Geotech Division

The Alchemy-Spetec Geotech Product Line offers industry-leading quality, full chemical grout lifting rig training and support, and unmatched contractor support in the field and with sales and marketing. Contact us today to learn about the tangible benefits of joining the Alchemy-Spetec network of geotech contractors. The Alchemy-Spetec MixMaster Pro Gun is a maintenance and production cost-saver for any lifting contractor, while the flagship lifting foams have helped many contractors reduce volume usage while eliminating call-backs. From the Polybadger machine that fits into a pickup truck, to custom boxtruck and trailer rig buildouts, Alchemy-Spetec is widely considered the premier geotechnical chemical grout & equipment supplier. With the additions of ground penetrating radar and penetrometer equipment and support, Alchemy-Spetec is truly on the cutting-edge of the chemical grouting industry.