The Rotary Inground Advantage: Rotary® Lift vs. Challenger Lift

Rotary invented the environmentally friendly inground Smartlift® over 15 years ago. Since then it’s become the number one choice for inground lifts worldwide with over 50,000 units installed.

When you choose Smartlift, you choose:

**The Industry Leader**

1. Rotary Lift’s more than 85 years of experience designing & building inground lifts
2. Experience of over 50,000 installed units
3. The BEST network of sales and service support in the industry. Period.

**Testing and Certification**

4. Internally tested lifts to 20,000 cycles at capacity load
5. Third-party ALI/ETL tested and certified lifts

**Superior by Design**

6. **PATENTED** faster serviceability vs. the competition
   - Easy Access™ cylinders (reduce downtime by up to 75% and save up to $557)
   - Patented Stainless steel and polymer internal air lock cylinder
   - Easily accessible grease fittings for easy and quick routine lubrication
7. Exclusive Smartguard® plungers vs. chrome plated (see reverse side for more)

**More choices to suit your shop’s needs**

8. The ability to customize your lift to fit your shop’s needs:
   - exclusive TRIO™ superstructure with choice of adapters
   - versatile Movable Pad for quick service on unibody vehicles
   - Wall, pedestal or bench mounted controls
   - Earth shattering speed with Shockwave™ equipped lifts

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**Your Choice of Capacity and Superstructure**

- 10k w/ TRIO and RA Adapters
- 12k w/ TA Truck Adapters
- 8k w/ Movable Pad

**TRIO™ gives Your Choice of Adapters with**

- Flip-Up Frame Adapter
- Rubber Round Adapter
- TA Truck Adapter
Rotary Smartguard® vs. Challenger’s Chrome Plated Plungers

With the recent introduction of Challenger Lift’s EV Series inground lift with chrome plated plungers, claims have been made, by the competition, that this coating is superior to Rotary Lift’s exclusive Smartguard treated plungers. The following information offers proof from third-party validation that this is not true. In fact, Smartguard is and remains the preferred plunger material on the market today.

Experts in the field of metal surface preparation disagree that chrome is superior to Smartguard. When compared, Smartguard outperforms chrome plating with the following characteristics:

- Excellent corrosion protection
- Superior adhesive wear resistance thanks to the ceramic characteristics of the surface.
- No peeling or flaking since the layer is formed directly from the base material.
- No micro cracks.
- Low coefficient of friction.
- Higher environmental favorability; no hex chrome exposure.

Furthermore, data shows that despite what the competitor claims, chrome plated parts corrode at a rate that’s nearly 10X greater than comparable parts treated with Smartguard in a typical “salt spray” corrosion test:

**SALT SPRAY TEST**

**CASS salt spray test in accordance with DIN EN ISO 9227 on hard chrom plated and Smartguard treated piston rods made from SAE 1045**

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<tr>
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<th>HARD CHROME</th>
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After just 8 hrs in the salt spray, hard chrome is 100% corroded!

What will happen in a harsh automotive shop environment?

After 8 hrs, Smartguard is less than 10% corroded!

That’s performance you can count on for years to come!

Source: www.hefusa.net
The Environmental Effect

The process which produces Smartguard plungers is environmentally sound, posing no toxic threats to humans or the environment.

- The process produces no harmful gas emissions
- A non-toxic sludge is produced as solid waste and can be disposed of in a landfill
- No carcinogenic materials or by-products are produced

The same cannot be said for the Challenger’s chrome plating. In fact, the process required to hard chrome plate is hazardous to humans and the environment. Consider the following –

“...the chrome plate itself is not toxic, but most chrome plating, and all hard chrome plating, is done out of baths of hexavalent chromic acid. This material is considered carcinogenic by the U.S. Government, and has been known to be toxic and the cause of chrome sores, chrome ulcers, and perforated septums since 1928.”

“In the USA there are many environmental issues surrounding chrome plating. In general, the solution itself is considered hazardous under OSHA and the Superfund Amendments and Reauthorization Act due to acute (corrosive) and chronic (carcinogenic) health hazards.”

Source: www.finishing.com
### Rotary Lift Specifications

- **Rated Capacity**: 10,000 lbs
- **PSL** required for W capacity load: 60 psi (required for lock release only)
- **CFM Requirements (per lift)**: 3.5 cfs @ 300 psi
- **Compressor Requirements**: standard shop compressor
- **Electrical Consumption**: 0.1 kWh per cycle
- **Energy Consumption**: 2.0 hp (150 psi @ 200 cfm - 50 psi)
- **Operation Temperature Range**: -32°F - 200°F (w/ R134A) (with AC) (RA and M-pad available)
- **System Fluid Capacity**: 19 qts
- **Fluid Type**: ATF, BG20 Hydraulic Oil or BioFluid
- **Lower in lock function**: Yes
- **Plunger material**: 8 1/2" Smartguard™ steel
- **Speed of Rise**: 17 seconds

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### Comparison

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