# KOLENE® DENAMEL™

# Porcelain Enamel Stripping Process

- Fast, economical method for removing porcelain enamel from reject production parts, as well as racks and fixtures.
- Strip single or multiple coats of porcelain in as little as 5 minutes.
- Batch-type systems are compact and selfcontained.
- Strip multiple pieces at once to maximize part turnaround rate.
- Free sample part processing and feasibility study available.

Kolene Corporation developed the Denamel process in response to industry's need for an alternative to mechanical salvage methods, such as blasting. The Kolene process cleans salvage parts quickly, unlike alternate chemical methods that require lengthy soak times and secondary cleaning operations.

#### Simple Process Chemistry

Denamel dissolves porcelain by thermochemically digesting it. Using proprietary process chemicals and purposespecific salt bath equipment, the molten Denamel bath can operate at temperatures of about 900°F safely and dependably. The combination of chemistry and temperature provides the thorough and rapid cleaning unavailable from any other cleaning method.

#### Simple Process Parameters

The unique characteristics of molten salt cleaning systems — self-regulating, high stability, and longevity — allow process parameters to be determined once and then simply repeated to produce 100% clean parts day after day. After the porcelain has been digested in the Denamel bath, the parts are removed from the bath and allowed to drain. The workload is then water rinsed, neutralized in a dilute acid dip, and final water rinsed. Depending on workload size and coating thickness, cycle times from start to finish range from 5 to 15 minutes.

# **Recoating Efficiency**

The unique Denamel process chemistry attacks only the vitreous coatings – not the base metal. Tests performed by Kolene have shown that stripped parts can effectively be recoated. In fact, the reject rate for recoated stripped parts is no higher than with first pass components. Adherence and surface finish are identical.

#### Flexible, Scalable Parts Processing

A Kolene Denamel process line can be sized to process any part size and throughput requirement. Parts handling can be as simple as a hook or hanger arrangement, or a more sophisticated programmed hoist and basket system. The process may be scaled up with confidence, allowing small prototype sample results and process parameters to be used to design production-scale equipment.

# Turnkey, Integrated Technology

For more than 70 years, Kolene has been supplying integrated process technologies to industry. We design and build the process equipment, formulate and supply the process chemicals, and provide after-the-sale technical service and support from our in-house laboratories, service group, and engineering department. We can manage the complete installation and start-up of your Kolene system, whether simple or complex.

# Experience-Based Technology

In addition to removing porcelain enamel, we specialize in process technologies for sand and investment casting cleaning, stainless and superalloy scale conditioning, and paint & polymer removal; other specialized metal cleaning technologies can be evaluated for your particular needs.

To learn more about Denamel or to arrange sample processing, contact:



