



**NEW**



**ELECTRONIC CARBIDE METAL IMPREGNATOR APPLIES A HARD AND WEAR RESISTANT SURFACE**



**ROCKLINIZER INCREASE PRODUCTIVITY AND REDUCE COSTS**

THE PORTABLE ROCKLINIZER ALLOWS WEAR PREVENTION AND MAINTENANCE TO BE EASILY PERFORMED IN YOUR PLANT.

<p>MODEL/ WEIGHT DESCRIPTION Rocklinizer Model 950E with ROTARY APPLICATOR - Deposits up to 200µm (Tungsten-Carbid up to 80-100µm ) (approx. 16 kg)</p>	<p>Model 950E Rotary Applicator is automatically triggered when electrode is placed in contact with workpiece, or manually triggered by the operator. •Fastest deposit speed •Rotary Applicator •Widest deposit range</p>	
<p>MODEL / WEIGHT DESCRIPTION Rocklinizer Model 850E with ROTARY APPLICATOR - Deposits up to 175µm( Tungsten-Carbid up to 60-70µm ) (approx. 16 kg)</p>	<p>•Faster Application •Rotary Applicator •Digital Readout •Touch Panel Controls •Portable</p>	
<p>MODEL / WEIGHT DESCRIPTION 600/600E - Deposits up to 100µm Tungsten-Carbid up to 40-50µm (approx. 22.3 kg)</p>	<p>Model 600E Applicator Gun is automatically triggered when electrode is placed in contact with workpiece, or manually triggered by the operator.</p>	
<p>MODEL / WEIGHT DESCRIPTION 500/500E - Deposits up to 40µm (approx. 14.5 kg)</p>	<p>Model 500E Applicator Gun is automatically triggered when electrode is placed in contact with workpiece, or manually triggered by the operator.</p>	
<p>MODEL / WEIGHT DESCRIPTION 380AE/380E - Deposits up to .25-30µm with Tungsten carbide (approx. 11.8 kg)</p>	<p>Model 380E has variable discharge positions. manually use. Model 380AE automatic and manual use.</p>	

**Soldering** of the aluminum, magnesium or zinc casting material to the die surface is also a cause for rejection of many castings. Treatment with carbide prior to a production run has eliminated soldering at gates, vents, parting lines, and the die cavity where molten metal has a tendency to solder to the cavity.

**Less Lubrication** is needed resulting in a much better finish on the die casting.

These are some of the successful uses of the Rocklinizer (Carbide Metal Impregnator) especially in the die casting industry. There are hundreds of die casters throughout the world who regularly use the Rocklinizer equipment for both preventive and regular die maintenance.

Your company can enjoy the cost savings generated from using this equipment.

**ROCKLINIZER APPLICATION EQUIPMENT GIVE SOLUTIONS FOR DIE CASTING AND GRAVITY CASTING**



ROCKLINIZER Models (220-240 volt) 50-60 Hz. single phase A.C.  
Each model includes: Power supply, applicator gun, electrode package, and operating instructions

**Rocklinizer Europe**  
**Hans - Georg Feldhaus**  
Machines & Tools  
Farwickstraße 20  
D-33428 Marienfeld /Germany  
Phone: +49(0)5247-78145  
Fax: +49(0)5247-984 984  
E-mail: H.G.Feldhaus@t-online.de

[www.microwelding.de](http://www.microwelding.de)



## IMPROVING WEAR AND THERMAL FATIGUE OF DIE CASTING DIES

The patented ROCKLINIZER process has been successfully used for many years to improve die casting technology, especially for aluminum, magnesium and zinc. The ROCKLINIZING technique protects wear areas of dies with tungsten carbide / titanium carbide electrode material.

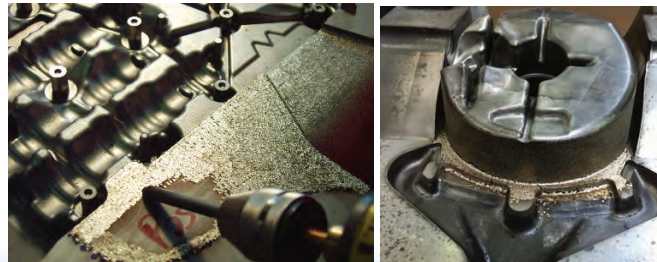
The ROCKLINIZER electronically applies wear resistant electrode materials by spark deposition process. Material is impregnated both underneath and on top of the workpiece surface metals, tools and dies. **Tungsten Carbide** electrode is applied to prolong useful life and reduce wear. Solid carbide tooling is given a sealant coating with the **titanium carbide** electrode. The "Rockhard" or build-up electrode is used to restore undersized dimensions, and for maintenance. Deposit capabilities range from (.0025 mm) to approximately (0.178 mm) in a single application controllable within (.0025 mm) by machine dial setting.

### Specific advantageous applications for die casting include:

**Heat check** (thermal fatigue which results from the stresses created by alternative heating and cooling of the die surface during the casting process) Rocklinizing reduces the tendency for heat checking to occur on a new die by treating all dies with tungsten carbide / titanium carbide on a preventive maintenance basis. Also, dies can have extended overall life as well as longer runs without maintenance if Rocklinizing is applied before heat checking exceeds the limit of acceptable quality standards.



**Runners, Overflows, and Vents** - The vents on a die stay much cleaner when they have received a carbide coating. Minor cracks in the die can be Rocklinized as long as they haven't gotten too wide.



**Galling and Seizing of Cores** - The thermal expansion of aluminum, magnesium and zinc die cast metals is much greater than that of the steel core. The metal shrinks onto the cores, thus resulting in extreme pressure at the core section. When applying Rocklinizing to the cores, it will appear that the core is too rough for releasing the casting. However, this roughness is so shallow that the core actually makes the casting smoother as the aluminum, magnesium or zinc will not adhere to the core as it does to a core that has been stoned to a high polish. The cores with the carbided surface make the lubricant or die releasing agent adhere better to the steel thereby providing a nice finish on the cast parts.

**Fits on Slides** - Carbide has been successfully applied to rework areas of fits on slides and has reduced galling.

**Ejector Pin Flash** can be eliminated if the die is in fair condition before treatment.

APPLIES TUNGSTEN CARBIDE , TITANIUM CARBIDE AND ROCKHARD ELECTRODE MATERIAL TO METALS, TOOLS AND DIES

