# Electro-Plated Diamond Wire

## RTD Series

<table>
<thead>
<tr>
<th>Application</th>
<th>Core Diameter (microns)</th>
<th>Diamond Size</th>
<th>Concentration</th>
<th>Outer Diameter (microns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sapphire &amp; Alternate Material Wafering</td>
<td>120</td>
<td>10 / 20</td>
<td>Standard / High</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 / 25</td>
<td>Standard / High</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22 / 36</td>
<td>Standard / High</td>
<td>169</td>
</tr>
<tr>
<td></td>
<td>140</td>
<td>12 / 25</td>
<td>Standard / High</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22 / 36</td>
<td>Standard / High</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>160</td>
<td>22 / 36</td>
<td>Standard / High</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 / 40</td>
<td>Standard</td>
<td>211</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 / 50</td>
<td>Standard</td>
<td>224</td>
</tr>
<tr>
<td></td>
<td>175</td>
<td>22 / 36</td>
<td>Standard / High</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 / 40</td>
<td>Standard / High</td>
<td>235</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 / 50</td>
<td>Standard</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>22 / 36</td>
<td>Standard</td>
<td>246</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 / 40</td>
<td>Standard</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40 / 50</td>
<td>Standard</td>
<td>279</td>
</tr>
</tbody>
</table>

## Additional Consumable Offerings*

**Saw Cleaners**
- SawKleen
- SAG 2001

**Adhesives**
- DELO Adhesives

**Beams**
- DMT 710 beam
- custom sizes available

**Anti-Foam**
- Grindex

## Questions | Request for Quote

To facilitate your order, please provide the following information:

**Required Information:**
- Diamond wire
- Wire outer diameter or kerf
- Type of spool

**Useful Information, if known:**
- Wire core diameter
- Wire speed
- Wire tension at slicing
- Diamond grit size
- Process time

*Detailed consumable product information can be provided upon request.

## Point of Contact:

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Meyer Burger Global AG, sales@meyerburger.com, www.meyerburger.com

Designed and manufactured by Diamond Materials Tech, Inc.

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**Low Cost of Ownership and High Yield**

- Yield increase resulting from minimally destructive low-kerf cutting method
- Versatile equipment for multi-use cutting
- Increased wafer quality, consistency, and quantity over single-cut technology
- Low consumable costs offer increased savings
- Simplified maintenance for increased availability
- Cost-effective cutting method reduces or eliminates secondary processes
- Increased throughput versus blade saws
- Optimized wire management reduces costs and wire usage

## Quality Guarantee due to Process Management

- Lowest set-up time on the market for a multi-wire production saw
- Flexible software for a variety of materials
- Recipe management: 32 programmable cutting programs provide increased throughput
- Reproducible high-quality cuts
- Collection and data logging standard on the RTD Series

## Maintenance and environment friendly

- Simple to maintain due to accessibility and minimal parts
- Quiet operation benefits the operator and the environment
- Ecological use of all substances and media
- Small footprint - compact, maintenance-friendly design
- Compliance with relevant environment and safety standards (CE)
Features | Options | Data

**Features**
- 15 inch LCD touchscreen
- PLC control
- Flexible graphic user interface
- Splash guards to fully enclose the wire reels, reduces maintenance and extends machine life
- Fully CE compliant safety controls
- Password protected calibration and hardware setting screen
- Password protection for saved parameters
- Accommodates a variety of wire diameters
- 3-color light tower to indicate saw status
- Multiple wire break detection systems
- 32 programmable cutting programs

**Options**
- Extended web option, extends web to 225mm (pitch dependent)
- Application Engineering Assistance available for process development
- Precision table with two dovetails, eases mounting of the crystal and maintains perfect orientation
- Remote set-up and monitoring software for Ethernet
- Ingot Mounting Station, a stand-alone unit allows precise mounting of sample to sacrificial beam and dovetail.
- Development and design consultation / Custom fixturing
- Accumount Dovetail System for improved accuracy
- Manual 90° dicing table

**Technical**

<table>
<thead>
<tr>
<th>Technical data at a glance</th>
<th>RTD 6400</th>
<th>RTD 6800</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workpiece Dimensions (l x w x h)</strong></td>
<td>150 mm x 100 mm x 200 mm</td>
<td>150 mm x 250 mm x 200 mm</td>
</tr>
<tr>
<td><strong>Loading Length</strong></td>
<td>150 mm</td>
<td></td>
</tr>
<tr>
<td><strong>Workpiece Weight - max.</strong></td>
<td>180 kg</td>
<td></td>
</tr>
<tr>
<td><strong>Yoke Feed - max. / min.</strong></td>
<td>.0005 - 1.5 mm/s</td>
<td></td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>30 amp, 3-phase, 220 volt, 50/60 Hz</td>
<td></td>
</tr>
<tr>
<td><strong>Compressed Air</strong></td>
<td>Pressure: 207 kPa (80 psi)</td>
<td>Volume: 0.14 m³/min (5 cfm)</td>
</tr>
<tr>
<td><strong>Cutting Fluid Tank Capacity</strong></td>
<td>110 l</td>
<td></td>
</tr>
</tbody>
</table>

**Summary of Benefits**

**Summary**
- Smallest footprint available in a multi-wire saw (1.3 m²)
- Ideal for cutting hard and brittle materials such as: silicon, silicon carbide, quartz, fused silica glass, ceramics, graphite, germanium, etc.
- 32 programmable cutting programs
- Processes ingots up to 225 mm long and up to 200 mm diameter
- Low kerf loss
- High throughput

**Tangential Cutting**
- 0° - 6° rock
- Faster cuts
- Lower TTV
- Higher precision
- Reduced bow and warp

RTD Series Footprint

**RTD 6400 - 6800**

*Front View* *Top View*