Jota Kit 1926 & 1927

Shaping and finalising of sintered metals
by DT Knut Miller

Characterize of sintered metals in the green state and final polishing of the sintered restoration.

› Safe removal of the restoration from the blank with a specially developed cutter
› Unique fissure shaping by means of a new special tool
› Optimally designed polishing sequence for a perfect shine
"Soft metal" as Ceramill Sintron® is revolutionising the production process for dental restorations based on non-noble metals. The blanks are made of a pressed alloy of chromium, cobalt and molybdenum, which is kept in shape by means of binder. Dental restorations are milled in the preform state. Because of the "waxy" consistency of the sintered metal this can be worked effortlessly and quickly in-house with a desktop milling unit. Here CNC dry working of the sintered metal has clear advantages over a traditional, labour-intensive casting process or external milling from a CoCr blank. After the sintering process the material acquires a very homogeneous, dense and bend-resistant microstructure with a final density of > 98% and a manufacturer-dependent shrinkage rate of 7 - 8.5%. The low shrinkage factor guarantees high torsional stability during the sintering process. The subsequent facing of the material can be carried out with any conventional non-noble-metal framework ceramic.

- No error-prone casting process
- Reproducible and plannable framework quality and fitting
- No waiting for parts delivered from outside
- Easy working and finishing of milled restorations in the waxy preform state
- Low tool wear of the milling unit on account of the waxy nature of the blanks
- Results in outstanding material quality

JOTA offers two Kits developed and assembled by the „high esthetic“ dental technician Knut Miller to realize a perfect restoration made of sintered metal. Especially for characterizing the unsintered material the „Green State Refining Kit“ has been created. It contains an extra slim carbide cutter with an extended shank to separate the restoration from the blank without tearing or vibrations. With the new scissure shaping tool highly esthetic occlusal surface could be achieved. The new „Sintered metal finishing Kit“ completed by the new Jota Swivel technology allows perfect high gloss polishing of all metal alloy restorations in just a few steps.
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The **C31RL**, a thin, parallel instrument with special cutting geometry, was developed specially to remove the restoration from the blank. The instrument glides through the material without any tearing and without any build-up of pressure. The extended shaft provides optimised access, even in the case of very thick blanks.

**Recommended speed:**

The speed should be set at about 25'000 rpm.

With the carbide cutter **CX486** it is possible to finish the support bar and carry out minor corrections.

**Recommended speed:**

The speed should be set at about 5'000 rpm.

Highly aesthetic fissures in the occlusion can be created with the specially made 4-edge instrument **515L** according to Knut Miller.

**Recommended speed:**

The speed should be set at about 3’000 rpm.

Depending on the desired surface texture, the fissures are finished by means of carbide bur **CX23MF** ...

**Recommended speed:**

The speed should be set at about 3’000 rpm.

... or the diamond **863**.

**Recommended speed:**

The speed should be set at about 3’000 rpm.

The diamond **882** is suitable for labial shaping of the texture.

**Recommended speed:**

The speed should be set at about 3’000 rpm.
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After the sintering process the fissures should be worked over again with the carbide bur **CX23MF**.

**Recommended speed:**
The speed should be set at about 7’000 rpm.

The very coarse and hard polisher **9669M** is ideally suited as the first polishing stage to smoothen the labial and occlusal surfaces. This polisher must be trimmed to the required shape prior to initial use.

**Recommended speed:**
The speed should be set at about 10’000 rpm.

The second polishing step of the occlusion is done with the flame-shaped polisher **9315M**, the wheel **9301M** is recommended for larger surfaces.

**Recommended speed:**
The speed should be set at about 7’000 rpm.

The last polishing stage with rubber polishers is performed with the fine brown polishers **9315F** and **9301F**.

**Recommended speed:**
The speed should be set at about 7’000 rpm.

With the new Jota **Swivel 9160** it is also possible to polish deeper fissures optimally to a high-gloss finish.

**Recommended speed:**
The speed should be set at about 7’000 rpm.
Finally the degree of gloss of the restoration is adjusted with the horsehair brush 1123 or the goat hair brush 1121 in combination with a polishing paste or the Jota polishing emulsion 1150.

**Accessories:**

Jota polishing emulsion 1150 adds the final touch to the perfectly executed preparation and ensures an excellent high-gloss finish.

Clearer working – attractive design. The instruments are always to hand and can be sorted individually according to requirements.

1152. HP.060 for shaping chewing surfaces and other concave places.
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### 1926 - Green state refining Kit

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<th>Code</th>
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