

MITSUBISHI MATERIALS CORPORATION
ADVANCED MATERIALS & TOOLS COMPANY
WEAR RESISTANT TOOLS GROUP

Cemented Carbide Slot Die Instructional Manual

Thank you for patronizing Mitsubishi Materials Corporation with your order. Our super precision mirror finished products are widely accepted by our customers enthusiastically. In order to attain superior performance sufficiently, please note the following:

◎ Beware (General precautions)

Cemented carbide products possess superior wear corrosion resistance compared with other materials. When you use the mirror finished surface, however, please follow the handling instructions strictly because moisture (water content etc), oil, acid, etc are likely to cause corrosion to cobalt layer and a haze will occur and progress below the surface layer.

In order to maintain an ideal mirror finished surface, please avoid leaving this product dusty or moist places. Also, strictly avoid contact with water, oil, acid, etc.

1. Handling method

- ① In order to avoid corrosion, this product is coated with a protective film. Please remove the coat while wearing clean cloth gloves.
- ② Do not touch the mirror finished surface directly with your hands. (If you touch it directly, fingerprint corrosion will be likely to occur and cause an extreme decrease in the performance of the product.)
- ③ In order to clean the mirror finished surface, wipe it with a paper towel or a clean soft cloth soaked in n-hexane or MEK (Methyl Ethyl Ketone).
- ④ Do not speak when you are close to this product. (Saliva causes corrosion.)
- ⑤ Never use rust prevention oil. (General rust prevention oil is likely to cause corrosion on the mirror surface.)
- ⑥ If you touch the mirror surface directly with your hands, please wipe off the handprint with n-hexane or MEK (Methyl Ethyl Ketone) immediately.
- ⑦ When leaving this product unattended temporarily, please maintain the edges by covering them with attached edge protection pipe or clean cloth. Please store the product in a good environment which has an appropriate temperature and humidity.

2. Safekeeping method

- ① In case of safekeeping, please handle after receiving inspections as follows:
- ② Please wipe any fouling substances on the main body off using a paper towel or clean and soft cloth which has been soaked in n-hexane or MEK (Methyl Ethyl Ketone).
- ③ Secondly, please put a protection film on the mirror surface. When you keep the Dies which are assembled, please put a protection film on the edges after assembling. (Please make sure that no mirror surfaces remain exposed.)
- ④ After putting the film, please attach the edge protection pipe which is provided.
- ⑤ Regarding the storage location, please make sure that the location is air-conditioned, has low humidity and is dust free.
- ⑥ Please avoid following: a place with high temperature changes; a place with an acid atmosphere, whether or not due to the wind direction; a place with any dust.
- ⑦ If you store it for a long time, please unpack and check it every two months, and repeat the above procedures(2-1).

3. Products set up:

- ① Remove any fouling substances and dust from the main body when assembling.
- ② About the Clamping Torque, please refer to the list below.
(If there were appointments of the torque from your company, we had made them according to your ones.)
- ③ Please be careful not do impact (strike, hit, etc) the products in order avoid edge chipping; the edges are extremely finely machined.
- ④ Please be careful not to strike the base metal. In cases in which using a hammer is unavoidably, please use a plastic hammer, and do not strike the edges in all cases.

Stainless Steel Bolts' Clamping Torque list

size	M16	M12	M10	M8	M6	M5	M4	M3
clamping torque (Nm)	140.0	53.0	35.0	17.8	7.4	4.2	2.2	1.4