

SUPPLYING THE CORRECT TECHNOLOGY



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OKAMOTO MACHINE TOOL WORKS, LTD
SEMICONDUCTOR EQUIPMENT DIVISION

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“OKAMOTO 300MM FINAL POLISHER VS.
STANDARD CMP TOOLS”,
BY TAKERU INOUE

300MM FINAL POLISHER PNX332C

11TH APRIL, 2019

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ABOUT OKAMOTO MACHINE TOOL WORKS



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PRG3329 GRIND-X
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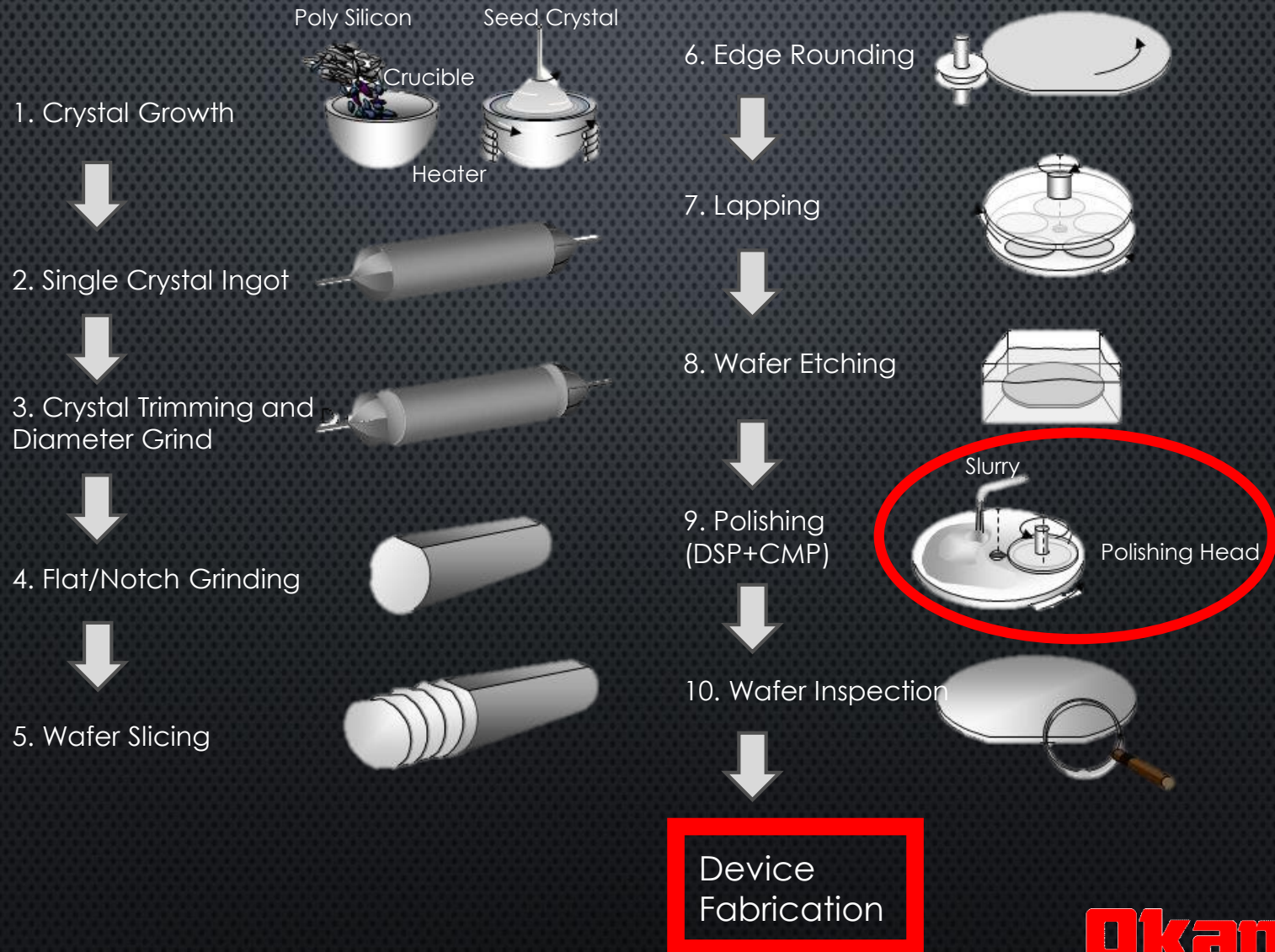
OUTLINE

1. PURPOSE OF THE 300MM WAFER CMP (PNX332C)
2. MACHINE FEATURES OF THE 300MM WAFER CMP (PNX332C)
3. TARGET ACCURACY OF THE 300MM WAFER CMP (PNX332C)
4. FEATURES FOR HIGHER ACCURACY
5. 300MM WAFER CMP (PNX332C) VS DEVICE CMP (PROS/CONS)

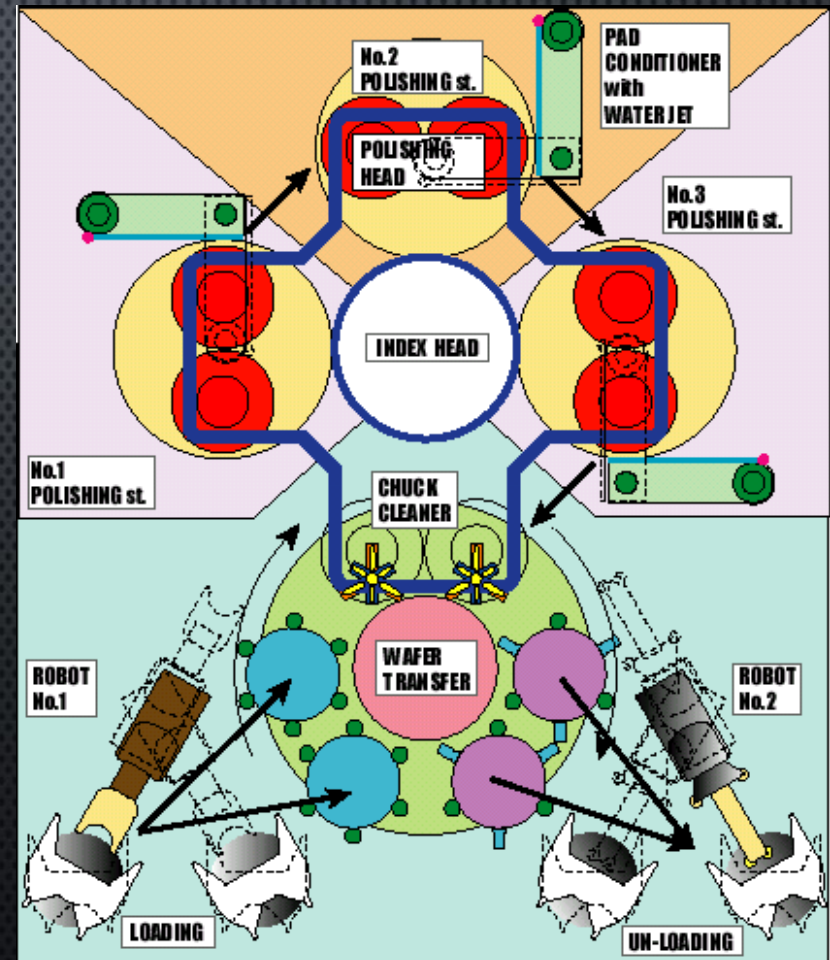


POSSIBILITY TO USE 300MM WAFER CMP FOR DEVICE CMP

1. PURPOSE OF THE 300MM WAFER CMP (PNX332C)

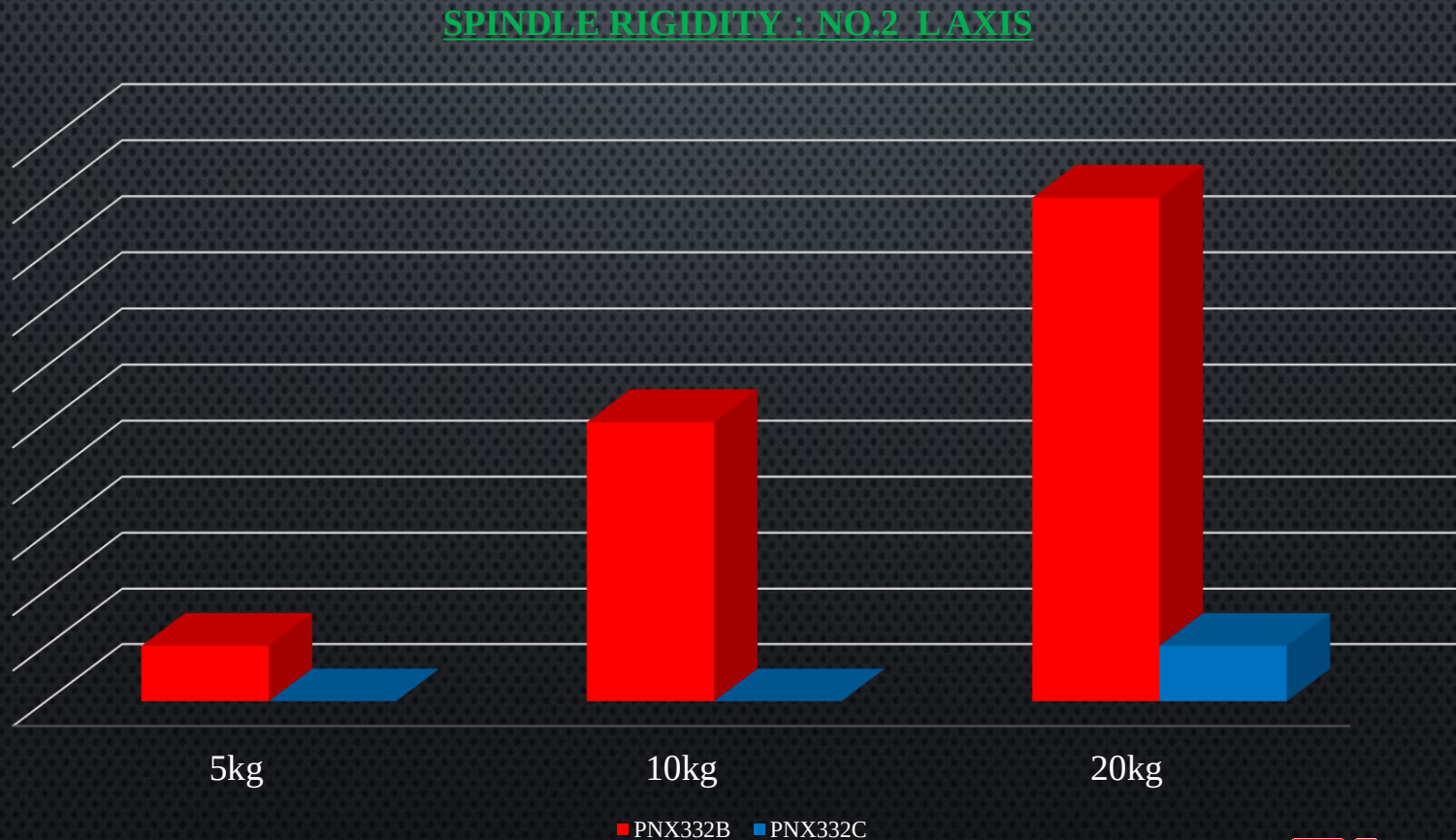


2. MACHINE FEATURES OF THE 300MM WAFER CMP (PNX332C)



4. FEATURES FOR HIGHER ACCURACY

Polishing Head Spindle Rigidity



5. 300MM WAFER CMP VS DEVICE CMP (PROS/CONS)

➤ WAFER CMP (CONS)

- ✓ NO EPD : EXPERIENCED FOR R&D PURPOSE BUT NOT FOR MASS PRODUCTION.
- ✓ NO ZONE CONTROL HEAD : EXPERIENCED FOR R&D PURPOSE BUT NOT FOR MASS PRODUCTION.
- ✓ STEP RESOLUTION : DEPENDING ON PROCESS AND PAD CONDITION

➤ WAFER CMP (PROS)

- ✓ NON-UNIFORMITY : EXCELLENT
- ✓ INEXPENSIVE : 8 HEADS X 3 TABLES (W/O CLEANING UNIT)
- ✓ PRODUCTIVITY : 2 HEADS FOR 1 TABLE = HIGH PRODUCTIVITY

DOUBLE THE PRODUCTION

6. SUMMARY



Thank you very much

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