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Productivity Inc®

**PIC Nakamura SC-300M Pre-Installation Checklist – Rev 06/2009**

Installation of your new Nakamura SC-300M can be smooth and rapid if preparations are made prior to the delivery of your machine. Any questions regarding machine installation should be directed to our service department for clarification. We hope this checklist will aid in a rapid installation of your new machine. **The following must be completed prior to our service technician arriving to install the machine.**

- Power Requirements for your machine: \*208-220v/3 phase/45 kVa Amperage: 108 Amps at 220v Proper voltage per machine specifications should be ready at machine site. **Do NOT power up the machine. \*NOTE: 220v minimum, 240v maximum. Voltage in excess of 240v may cause extensive damage to the machine’s electrical system and will void the machine’s warranty. All Methods Slant Turning enters require a minimum of 6’ copper earth ground located as close as possible to the machine grounding terminal.**
- Customer should furnish and have available the proper supply and types of lubricants required for machine operation.

| ITEM          | CAPACITY | FLUID TYPE                |
|---------------|----------|---------------------------|
| Coolant       | 40 Gal   | Water Soluable, Synthetic |
| Way Lube      | 1 Gal    | Mobil Vactra #2           |
| Hydraulic Oil | 12 Gal   | Mobil DTE 24              |

**You will need to have these lubricants on hand at time of installation. Contact our Service Department with any questions or concerns regarding Power and/or Lubrication Requirements.**

- Air lines should be routed to the machine location and operational for proper air pressure.

Environment: Temperature 50-95 degrees, with 75% Maximum Relative Humidity.

- Machine location should be planned to allow enough room for access panels to be opened and serviced with ease. *Allow an extra 36” behind the machine for maintenance, and an additional 48” to the right side of the machine if optional Chip Conveyor is purchased.*
- Weight requirements should be checked to insure that the surface below the machine will have sufficient strength for support and stability. The machine must be set on a solid, sound and stable, steel bar-reinforced concrete slab poured directly on the grade. In general, the 6-12” concrete floor on industrial buildings is suitable for machine placement. Bolting the machine to the floor is not required.
- **The Nakamura SC300 Lathe is best moved with a forklift.** Upon *Upon arrival of your machine, unpack and immediately check for visible damage. Call Hope immediately – you will need to take pictures and email to [hriska@productivity.com](mailto:hriska@productivity.com). Make sure you note on BOL BEFORE the driver leaves.*

| SHIPPING WEIGHT  | SHIPPING DIMENSIONS OF MACHINE   |
|--|--|
| 10,445# (Machine & Accessory Crate)<br>1,500# (Opt Chip Conveyor)  | 10’6” L x 5’8” W x 6’5” H (2 pieces – Machine and Accessory Crate)<br>124” L x 36” W x 68” H (Optional Chip Conveyor, skidded) |
| <i>Operational Dimensions (Floor Space): 153” L x 145” W (w/out Chip Conveyor) Add an additional 48” to the right side of the machine length for optional Chip Conveyor.</i> |  |

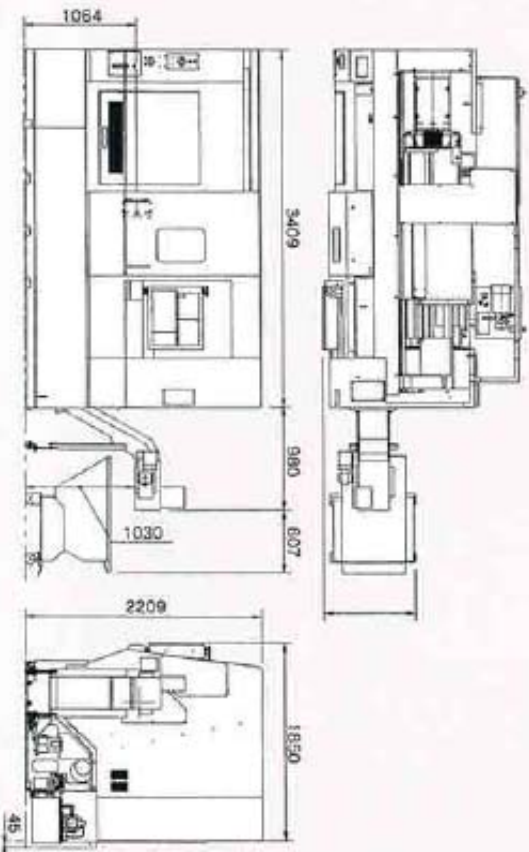
- **Remove as much preservative from the machine as possible without having to power up (tables – slides, pulleys, etc.). We recommend mineral spirits to clean. Apply oil when finished to prevent rust.**

**PLEASE FORWARD THIS TO THE APPROPRIATE PERSON. THANK YOU.**

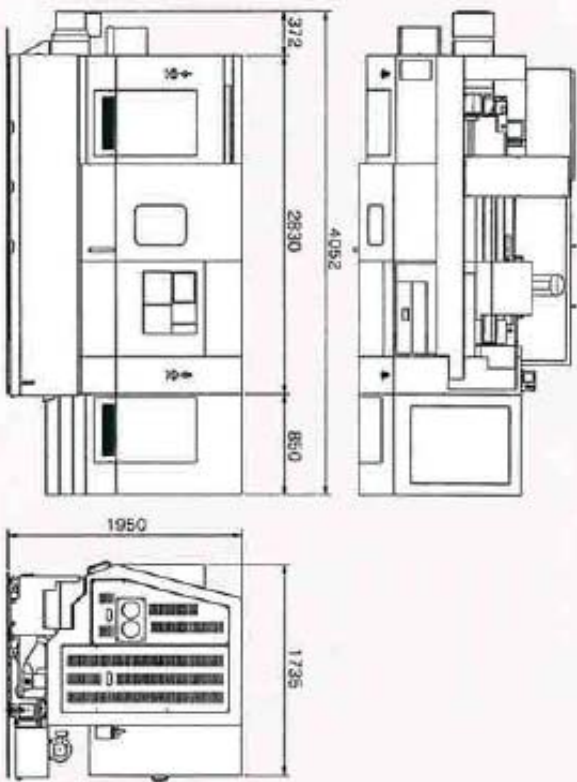
■ Standard specification



■ Y-axis specification



■ Sub spindle specification



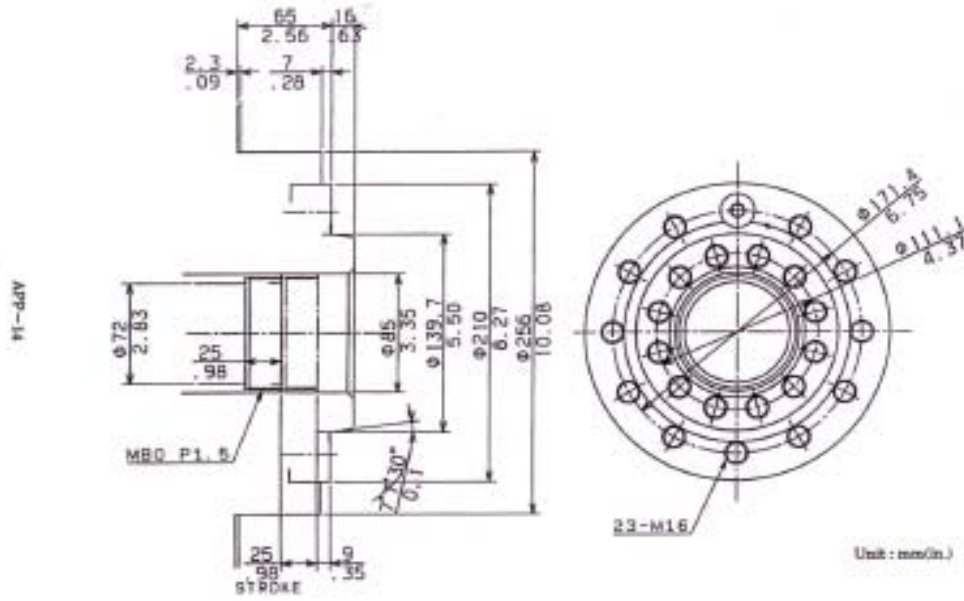
● The dimension is subject to change depending on the specifications.

(Unit: mm)

Table 4-9 Recommended Oil Table

| Maker                       | Lubricating Oil                  | Hydraulic Oil                | Grease                             |                                       | Lubricating Oil                |
|-----------------------------|----------------------------------|------------------------------|------------------------------------|---------------------------------------|--------------------------------|
|                             | VG68                             | VG32                         |                                    |                                       | VG320                          |
| Idemitsu                    | Daphne Super Multi Oil 68        | Daphne Super Multi Oil 32    | Daphne Molybdenum grease           | Daphne Super Coronex No.2             | Daphne Super Gear Oil 320      |
| Shell                       | Tonna Oil T68 or A-R Oil 68      | Tellus Oil C32 or J-H Oil 32 | Lethinax AM or Sunlight grease MB2 | Alvania Grease 2 or Sunlight Grease 2 | Omala Oil 320 or G-C Oil 320SE |
| Mobil                       | Mobil Vactra Oil No. 2           | Mobil DTE Oil Light          | Mobil Grease Special               | Mobil Mobilux 2                       | Mobil Gear 632                 |
| Mitsubishi                  | Diamond slide-way 68             | Diamond Lub RO32             | Diamond Multi purpose M grease 2   | Diamond Multi Purpose grease No.2     | Diamond gear Lub 320           |
| Fuji                        | Lubmulti 68                      | Lubmulti 32                  |                                    | Mighty grease No.2                    | Mild EP Gear 320               |
| Nisseki                     | Uniway 68                        | FBK Oil R032                 | Molynoc grease 2                   | Multinoc grease 2                     | Bonnoc SP320                   |
| Cosmo                       | Mightyway 68                     | Hydro RO32                   | Molybdenum grease                  | Grease Dynamax Super No.2             | Cosmo gear SE320               |
| Exxon                       | Febis K68                        | Terreso 32                   | Beacon Q2                          | Lithtan 2                             | Spartan EP320                  |
| Kygnus                      | Waylubricant 80                  | Unit Oil P32                 | M-5 Grease No. 2                   | MP Grease No. 2                       |                                |
| Kyodo                       | Slidus 68                        | RIX turbine 32               | Lisonix grease M-2                 | Lisonix grease 2                      | Reductus 320                   |
| General                     | Slideoil 68                      | General panol 32             | Gemico grease AD-2                 | Gemico grease MP-2                    | SP GEAROL 320                  |
| Mitsui                      | Slideway E68                     | Hydic oil 32                 |                                    | Multi grease EP-2                     | Mild gear EP320                |
| NOK Fleuber                 |                                  |                              | Multemp Q NB50                     |                                       |                                |
| Three bond                  |                                  |                              | Three bond 1901                    |                                       |                                |
| Castrol                     | Magnaglide BD68                  | Hyspin AWS32                 | Spheerol LMM                       | Spheerol AP2                          | Alpha SP320                    |
| Remark (Oiling drive Point) | Centralized lubricating oil tank | Hydraulic oil tank           | Jaw chuck                          | Rotary tool holder<br>C-axis spline   | C-axis harmonic drive          |

5. TOOLING  
5-1 Spindle Nose Dimensions (A1-8)



APPENDIX

3-2 Foundation Plan

