

<b>STATE OF OHIO (DAS) CLASSIFICATION SPECIFICATION</b>	<b><u>CLASSIFICATION SERIES:</u></b> Lab Machinist	<b><u>SERIES NO.:</u></b> 5234
	<b><u>MAJOR AGENCIES:</u></b> Transportation only	<b><u>EFFECTIVE DATE:</u></b> 01/09/2005

**SERIES PURPOSE:**

The purpose of the lab machinist occupation is to independently design, develop, build and modify testing equipment using software packages (e.g., MicroStation) and other applications (e.g., manual design) and serve as team leader and provide work direction and training to assigned staff (e.g., Materials Controllers) on a project basis.

At the full performance level, incumbents perform the full range of lab machine operations.

At the supervisory level, incumbents supervise the work of lab machinists & perform the full range of lab machine operations.

**GLOSSARY:**

MICROSTATION SOFTWARE – software packages used for the creation of computer generated designs (e.g., blue prints, plans, etc.).

CADD -computer Aided Design.

CADD -computer Aided Design & Drafting.

SMAW B Shielded Metal Arc Welding.

QAR=s BQuality Assurance Reviews conducted on an annual basis.

This series specializes in machining related to laboratory equipment. Specialization in adaptive equipment is reflected in the Adaptive Equipment Technician series. General machining is reflected in the Machinist series.

<b><u>CLASS TITLE</u></b>	<b><u>CLASS NUMBER</u></b>	<b><u>PAY RANGE</u></b>	<b><u>EFFECTIVE</u></b>
Lab Machinist	52341	11	01/09/2005

**CLASS CONCEPT:**

The full performance level class works under general direction & requires considerable knowledge of the repair & maintenance of laboratory & field testing equipment in order to independently design, develop, build & modify testing equipment using computer software packages (e.g., MicroStation) & other applications (e.g., manual design) & serve as team leader & provide work direction & training to assigned staff (e.g., materials controllers) on a project basis.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Lab Machinist	52341	06	01/09/2005	11

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Independently designs, develops, builds & modifies testing equipment using computer software packages (e.g., MicroStation) & other applications (e.g., manual design) & serves as team leader & provides work direction & training to assigned staff (e.g., materials controllers) on a project basis (e.g., develops & applies power sources, electrical motors or hydraulics, to powers testing equipment as necessary; motor set up, electrical wiring, power source, appropriate engine type, RPM; independently responsible for technical material methodology records; designs & develops precision jigs & fixtures incorporated in building various testing equipment manufacturer special samples by operating various hand & machine shop tools & equipment to include lathe, milling machine, shaper, drill press, surface grinder, electric & acetylene welding equipment; modifies, designs & tests prototypes).

Repairs & maintains laboratory & field precision testing equipment (e.g., concrete air meters, scales, soil rammers, soil molds, penetration resistance devices, electric hot plates, gasoline stoves, electric & air operated centrifuges, hydraulic beam brakers, density cones, mechanical liquid limit devices, volumeters, profilometers; cross-trained to assist in repair & calibration of nuclear density gauges including measuring radiation emitted & received back from nuclear gauge to calibrate device for proper readings; rebuild equipment; replace computer chips & boards, resistors, transistors, solders as needed ); performs quality assurance reviews annually for district nuclear gage operations in order to validate, conform to policy & safety regulations; performs SMAW & other welding processes as needed for equipment construction & repair.

Designs, develops, repairs & calibrates various equipment for other divisions & bureaus within state government (e.g., Research & Development, District offices, Aerial Engineering, Central Garage, Highway Patrol) & repairs & maintains lab machine shop equipment; performs building maintenance tied to lab equipment including maintenance of lab equipment to specification, different water systems, electrical drops & coordinates activities with routine maintenance.

Repairs test equipment, performs routine maintenance, operates forklifts to unload materials & equipment, documents & accepts samples in the test laboratory receiving area.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of budgeting; employee training & development (e.g., QAR=s, radiography)\*; laboratory machine shop procedures & equipment operation; blueprint reading; state & federal regulations, policies, procedures (e.g., American Association of State Highway & Transportation Officials, American Society of Testing & Materials, Ohio Department of Construction & Materials Specifications)\*; addition, subtraction, multiplication, division, fractions & percentages. Skill in use of personal computer; machine shop equipment operation (e.g., lathe, milling machine, shaper, drill press, surface grinder, electric & acetylene welding equipment, small motors, electrical equipment) & hand & power tool operation. Ability to define problems, collect data, establish fact & draw valid conclusions; maintain accurate records; interpret variety of technical material in books, manuals or journals; handle sensitive inquiries from & contacts with officials & general public; lift up to 100 lbs. repeatedly & move limbs/fingers easily to perform manual functions repeatedly.

**(\*)Developed after employment.**

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

3 mos. trg. or 3 mos. exp. in hand & power tool operation, blueprint reading, arc welding; formal education in arithmetic that includes addition, subtraction, multiplication, division, fractions & percentages; 12 mos. trg. or 12 mos. exp. in design development of equipment for testing purposes; 24 mos. trg. or 24 mos. exp. in machine shop procedures & equipment operation or laboratory machine shop.

-Or equivalent of Minimum Class Qualification For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Subject to exposure to dirt, dust, fumes & noise & dangerous machinery.