

**STATE OF OHIO (DAS)**CLASSIFICATION  
SPECIFICATION**CLASSIFICATION SERIES:**

Meat Inspector

**SERIES NO.:**

2123

**MAJOR AGENCIES:**

Ohio Department of Agriculture Only

**EFFECTIVE DATE:**

05/04/2014

**SERIES PURPOSE:**

The purpose of the meat inspector occupation is to protect & assure meat & poultry product wholesomeness by inspecting facilities & operations therein for sanitary & safe slaughtering & processing of meat, poultry &/or exotic.

At the developmental level, incumbents receive training & mentoring from higher level meat inspectors to learn procedures & to assist in conducting inspections of registered meat plants, commercial slaughtering plants & custom-exempt red meat, poultry &/or exotic processing facilities.

At the full performance level, incumbents conduct inspections of registered meat plants, private, commercial slaughtering plants & custom-exempt red meat, poultry &/or exotic processing facilities.

At the supervisory level, incumbents serve as supervisors over meat inspectors.

At the administrative level, incumbents administer overall comprehensive statewide meat & poultry inspection program & supervise veterinarian administrators, veterinarians & meat inspection supervisors.

**GLOSSARY:**

BSE = Bovine Spongiform Encephalopathy or Mad Cow Disease

HACCP = Hazard Analysis &amp; Critical Control Points

SSOP = Sanitary Standard Operation Procedure

This classification is to be utilized at the Ohio Department of Agriculture only.

**CLASS TITLE**

Meat Inspector Trainee

**CLASS NUMBER**

21230

**PAY RANGE**

28

**EFFECTIVE**

08/29/2010

**CLASS CONCEPT:**

The developmental level class works under close supervision & requires some knowledge of animal science & state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspection in order to receive training & mentoring from higher level meat inspectors to learn procedures & to assist in conducting inspections of registered meat plants, private, commercial slaughtering plants & custom-exempt red meat, poultry &/or exotic processing facilities & receive training & learn to perform ante mortem & postmortem inspections of carcasses & enforce state & federal sanitation, humane slaughter, meat processing & food safety policies, procedures & guidelines.

**CLASS TITLE**

Meat Inspector

**CLASS NUMBER**

21231

**PAY RANGE**

30

**EFFECTIVE**

08/29/2010

**CLASS CONCEPT:**

The full performance level class works under direction & requires considerable knowledge of animal science & state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspection in order to conduct inspections of registered meat plants, private, commercial slaughtering plants & custom-exempt red meat, poultry &/or exotic processing facilities to perform ante mortem & postmortem inspections of carcasses & enforce state & federal sanitation, humane slaughter, meat processing & food safety policies, procedures & guidelines.

**CLASS TITLE**

Meat Inspection Supervisor

**CLASS NUMBER**

21235

**PAY RANGE**

11

**EFFECTIVE**

06/05/2011

**CLASS CONCEPT:**

The supervisory level class works under general direction & requires thorough knowledge of animal & meat science & state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspections in order to supervise lower-level meat inspectors.

**CLASS TITLE**

Meat Inspection Administrator

**CLASS NUMBER**

21237

**PAY RANGE**

46

**EFFECTIVE**

05/04/2014

**CLASS CONCEPT:**

The administrative level class works under administrative direction & requires extensive knowledge of animal & meat science & state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspections in order to administer overall comprehensive statewide meat, poultry &/or exotic inspection program & supervise veterinarian administrators, veterinarians & meat inspection supervisors.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Meat Inspector Trainee	21230	07	08/29/2010	28

**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.)**

Receives training & mentoring from higher level meat inspector to learn procedures & assists in conducting inspections of registered meat plants, private, commercial slaughtering plants & custom-exempt red meat, poultry &/or exotic processing facilities & learns to perform ante mortem & postmortem inspections of carcasses & enforces state & federal sanitation, humane slaughter, meat processing & food safety policies, procedures & guidelines (e.g., conducts visual examination of live animal &/or poultry prior to slaughter while looking for abnormalities in appearance & behavior such as sick, hurt &/or non-ambulatory; determines if veterinarian is required for disposition of unhealthy animal & records results; makes determination of age of beef through dentition of cattle 30 months or older for removal of backbone due to concerns of BSE; visual, tactile &/or incisory inspection of head, lymph nodes, viscera, carcass & offal to include liver, heart, brain & tripe to determine no pathological conditions are present & carcass is in clean & wholesome condition; inspects all equipment, facilities & personnel to ensure acceptable sanitation levels & prohibiting use of unsanitary, unsafe &/or unapproved equipment & facilities until cleaned &/or corrected to include pest & rodent control, use of pesticides & chemicals, condition & use of potable water supply & waste & sewage systems; halts production for poor sanitation &/or non-compliance), assures proper disposition of unfit & condemned products, enforces sanitary dressing procedures & controls carcass branding.

Learns labeling requirements & assists in reviewing labeling materials (e.g., proposed labels, product formulations, production procedures, quality control programs, quality control records & laboratory reports) for state inspected meat, poultry &/or exotic establishments; checks formulations of all types of meat food products for compliance with federal regulations & periodically monitors inspection procedures for maintaining compliance in production of meat products; learns sampling procedures & assists higher level inspector with submission of product samples of products for analysis for microbiological adulterants & for consumer protection; requires meat slaughter plants to conduct microbial testing for generic E. coli to verify adequacy of process controls for prevention of fecal contamination.

Assists higher level inspector with re-inspection of meat &/or poultry products & non-meat ingredients for such products intended for further processing or distribution; inspects critical control points in preparation & handling of meat, poultry &/or exotic products (i.e., monitors formulation, temperature controls, preparation procedures, use of restricted ingredients & sampling) to ensure compliance.

Prepares, maintains & monitors required records, reports & formulations concerning product condemnations & retentions; controls all sanitation discrepancies & corrective actions; assists in industry quality control programs; analyzes report deviations, travel & pay reports & submits such through proper channels; attends training courses (e.g., Incidence Command Systems training courses; Inspection System Procedures including Homeland Security); refresher seminars & on-job training activities.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of Agribusiness, Food Business Management or Animal Science (e.g., Meat Animal & Carcass Evaluation; Fundamentals of Poultry Science; Principles of Animal Systems Physiology; Meat Science; Global Food & Agriculture; Meat Processing); HACCP methodology\*; SSOP\*; Humane Slaughter Act\*; Agricultural Bioterrorism Protection Act\* (Possession, Use & Transfer of Biological Agents & Toxins); symptoms of animal disease (e.g., Bovine Spongiform Encephalopathy/BSE/Mad Cow Disease; Salmonella, Escherichia coli/E. coli or other bacteria that live in lower intestines of warm-blooded animals)\*; safety practices (e.g., Occupational Standards & Hazards Act); public relations; meat, poultry &/or exotic slaughter & processing equipment; state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspections\*; fractions & percentages. Skill in use of knives, steel & hook to slice lymph nodes & inspect viscera; use of fingers to palpate lymph nodes; operation of laptop &/or personal computer & related software to create, edit/revise, store & purge documents.\* Ability to differentiate between a variety of color hues; define problems, collect data, establish facts & draw valid conclusions; prepare meaningful, concise & accurate reports; use proper research methods in gathering data; use sense of smell to detect poor sanitation &/or contaminated product; lift up to 40 pounds; bend &/or stoop freely; reach above shoulder height; position &/or reposition carcasses for examination; demonstrate dexterity to climb ladders or steps &/or work from catwalk or power lift platform; use hands & fingers to inspect, incise & palpate animal lymph nodes using sharp knife; resolve complaints from irate/hostile meat facility management in cases of repetitive non-compliance or in delivery of unpleasant news such as carcass &/or live animal retention/condemnation/processing delays.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

1 course in animal science, agribusiness &/or food business management or 3 mos. exp. in livestock industry/industrial meat & poultry processing; 1 course in biological sciences or chemistry; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications for Employment noted above.

Probationary period is 365 days.

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

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Work flexible hours &/or shifts; work weekends; exposure to extreme temperature changes; work on surface slippery from fluids & grease; required to climb steps or ladders & work from catwalks or power lift platforms; exposed to possible injury from animals in holding pen; must stand for extended periods of time in confined work area; work around machinery with moving parts while standing on raised expanded metal platform; exposure to inmates with knives &/or sharp weapons; exposed to animal waste &/or infectious disease, loud equipment such as splitting saw, captive bolt pistol &/or firearms.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Meat Inspector	21231	07	08/29/2010	30

**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.)**

Conducts inspections of registered meat plants, private, commercial slaughtering plants & custom-exempt red meat , poultry &/or exotic processing facilities to perform ante mortem & postmortem inspections of carcasses & enforces state & federal sanitation, humane slaughter, meat processing & food safety policies, procedures & guidelines (e.g., conducts visual examination of live animal &/or poultry prior to slaughter while looking for abnormalities in appearance & behavior such as sick, hurt &/or non-ambulatory; determines if veterinarian is required for disposition of unhealthy animal & records results; makes determination of age of beef through dentition of cattle 30 months or older for removal of backbone due to concerns of BSE; visual, tactile &/or incisory inspection of head, lymph nodes, viscera, carcass & offal to include liver, heart, brain & tripe to determine no pathological conditions are present & carcass is in clean & wholesome condition; inspects all equipment, facilities & personnel to ensure acceptable sanitation levels & prohibiting use of unsanitary, unsafe &/or unapproved equipment & facilities until cleaned &/or corrected to include pest & rodent control, use of pesticides & chemicals, condition & use of potable water supply & waste & sewage systems; halts production for poor sanitation &/or non-compliance), assures proper disposition of unfit & condemned products, enforces sanitary dressing procedures & controls carcass branding.

Reviews labeling materials (e.g., proposed labels, product formulations, production procedures, quality control programs, quality control records & laboratory reports) for state inspected meat , poultry &/or exotic establishments; checks formulations of all types of meat food products for compliance with federal regulations & periodically monitors inspection procedures for maintaining compliance in production of meat products; submits samples of products for analysis for microbiological adulterants & for consumer protection; requires meat slaughter plants to conduct microbial testing for generic E. coli to verify adequacy of process controls for prevention of fecal contamination.

Re-inspects meat, poultry &/or exotic products & non-meat ingredients for such products intended for further processing or distribution; inspects critical control points in preparation & handling of meat, poultry &/or exotic products (i.e., monitors formulation, temperature controls, preparation procedures, use of restricted ingredients & sampling) to ensure compliance; controls disposition of adulterated & mislabeled product.

Prepares, maintains & monitors required records, reports & formulations concerning product condemnations & retentions; controls all sanitation discrepancies & corrective actions; assists in industry quality control programs; analyzes report deviations, travel & pay reports & submits such through proper channels; attends training courses (e.g., Incidence Command Systems training courses; Inspection System Procedures including Homeland Security); refresher seminars & on-job training activities; provides work direction &/or training/orientation for new inspectors.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of Agribusiness, Food Business Management or Animal Science (e.g., Meat Animal & Carcass Evaluation; Fundamentals of Poultry Science; Principles of Animal Systems Physiology; Meat Science; Global Food & Agriculture; Meat Processing); HACCP methodology\*; SSOP\*; Humane Slaughter Act\*; Agricultural Bioterrorism Protection Act\* (Possession, Use & Transfer of Biological Agents & Toxins); symptoms of animal disease (e.g., Bovine Spongiform Encephalopathy/BSE/Mad Cow Disease; Salmonella, Escherichia coli/E. coli or other bacteria that live in lower intestines of warm-blooded animals)\*; safety practices (e.g., Occupational Standards & Hazards Act); public relations; meat, poultry &/or exotic slaughter & processing equipment; state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspections\*; fractions & percentages. Skill in use of knives, steel & hook to slice lymph nodes & inspect viscera; use of fingers to palpate lymph nodes; operation of laptop &/or personal computer & related software to create, edit/revise, store & purge documents. Ability to differentiate between a variety of color hues; define problems, collect data, establish facts & draw valid conclusions; prepare meaningful, concise & accurate reports; use proper research methods in gathering data; use sense of smell to detect poor sanitation &/or contaminated product; lift up to 40 pounds; bend &/or stoop freely; reach above shoulder height; position &/or reposition carcasses for examination; demonstrate dexterity to climb ladders or steps &/or work from catwalk or power lift platform; use hands & fingers to inspect, incise & palpate animal lymph nodes using sharp knife; resolve complaints from irate/hostile meat facility management in cases of repetitive non-compliance or in delivery of unpleasant news such as carcass &/or live animal retention/condemnation/processing delays.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

3 courses in animal science, agribusiness &/or food business management or 1 yr. exp. in livestock industry/industrial

meat & poultry processing; 1 course or 3 mos. exp. in public relations; 2 courses or 6 mos. exp. in operation of laptop &/or personal computer & related software to create, edit/revise, store & purge documents; 2 courses in biological sciences or chemistry; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications for Employment noted above.

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

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Work flexible hours &/or shifts; work weekends; exposure to extreme temperature changes; work on surface slippery from fluids & grease; required to climb steps or ladders & work from catwalks or power lift platforms; exposed to possible injury from animals in holding pen; must stand for extended periods of time in confined work area; work around machinery with moving parts while standing on raised expanded metal platform; exposure to inmates with knives &/or sharp weapons; exposed to animal waste &/or infectious disease, loud equipment such as splitting saw, captive bolt pistol &/or firearms.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Meat Inspection Supervisor	21235	EX	06/05/2011	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.)**

Supervises lower-level meat inspectors, prepares & distributes schedules & makes modifications as needed to assure all inspection requirements are met & interprets & clarifies laws, rules, regulations & policies, evaluates job performance of assigned staff, initiates corrective action including discipline for violation of established work rules in accordance with the established disciplinary grid.

Reviews & recommends registration of all meat/poultry/exotic slaughter houses & processing plants as assigned annually; conducts inspector evaluations to ensure compliance of assigned establishments; counsels & enforces corrections when negative conditions are found; reviews & implements corrective actions defined by quarterly reports under PBIS.

Reviews reports, correspondence & forms before forwarding to central office; writes quality control system & plans of inspection; requisitions, picks up & distributes supplies; responds to consumer complaints; assigns inspectors to staff cooperative programs for other government agencies or ODA sections as needed.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of animal, poultry & meat science (i.e., livestock/poultry/exotic classifications, meat/poultry/exotic cut identifications, animal production & carcass processing); state & federal laws, rules & regulations regarding meat, poultry &/or exotic inspections; employee training & development; supervisory principles/techniques\*; meat, poultry &/or exotic processing & slaughter equipment. Skill in meat/poultry/exotic processing techniques. Ability to differentiate between a variety of color hues; define problems, collect data, establish facts & draw valid conclusions; handle routine & sensitive contacts with representatives of industry; proofread technical materials, recognize errors & make corrections; answer complaints from public; gather, collate & classify information about data; use mathematical procedures to monitor formulations; write routine letters & reports.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

4 yrs. exp. as Meat Inspector, 21231; 1 yr. trg. in employee training & development or 1 yr. exp. as lead worker.

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

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

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

May work unusual hours; may be exposed to extreme temperature changes; may work on surfaces slippery from fluids & grease; may be exposed to possible injury from animals in barn area; may work around machinery with moving parts; may require travel; may be required to climb steps or ladders & work from catwalks or elevated platforms; must provide own transportation.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Meat Inspection Administrator	21237	EX	05/04/2014	46

**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.)**

Serves as Chief of the Division of Meat Inspection & plans, implements, evaluates, organizes & administers Division of Meat Inspection statutory/regulatory programs, meat, poultry and non-amenable exotic species inspection and meat, poultry and exotic species processed products inspection, serves as the Ohio representative and participates in meat industry activities and regulatory public health food safety programs at the national level, serves as the Ohio counterpart to the United States Department of Agriculture (USDA), Food Safety and Inspection Services' (FSIS) District Manager and oversees a staff of agriculture managers, regional veterinarians, district supervisors and meat inspectors performing daily inspection activities of meat and poultry slaughter and processing establishments in protecting the consumer by assuring that meat, poultry and exotic products are safe, wholesome and truthfully labeled, responsible for the effective implementation and execution of cooperative agreements with the USDA, FSIS for compliance investigations, "equal to" and "same as" inspection programs.

Plans, organizes & administers overall comprehensive statewide meat, poultry & exotic inspection program to include registration of facilities that slaughter & process red meat, poultry & exotic, regulation of construction, maintenance & hygiene/ sanitation of facilities, ante mortem & post mortem inspection of livestock & poultry at slaughter, humane handling procedures, proper marking of carcasses & labeling of products, proper control of restricted ingredients, process of approval/disapproval for products that are consumed without further cooking) & supervises, veterinarian administrators, Agriculture Inspection Managers & meat inspection staff.

Communicates and interacts with all levels of field staff and plant management; coordinates activities with federal officials, enforcement, food safety, local health, and other governmental agencies, including policy where there is mutual jurisdictional concern & supervises personnel (e.g., veterinarian administrators, Agriculture Inspection Managers & meat inspection staff) in all areas of livestock inspection programs for prevention, control & eradication of diseases & protection of public health from food borne illness of animal origin; administer relevant rules and regulations; develops and maintains working knowledge of relevant state and federal regulations impacting the meat processing industry.

Develops, implements & reviews meat, poultry & exotic inspection division policies & procedures to include facility meat/poultry condemnation, facility standards of deviation & employee training & development; prepares, submits & monitors divisional budget & budget requests; drafts bills & regulations to correct/ clarify existing legislation; interprets & implements federal & state laws, rules & regulations; serves as chairman of the division's Technical Staff for the purpose review matters of technical and legal nature.

Assists the Assistant Chief of the division review reports sent in by field veterinarians (e.g. Food Safety Assessments (FSA), In Plant Performance System (IPPS) evaluations, annual evaluations, humane handling verification visits, special reports on final dispositions, weekly itineraries; enforcement reports, regulatory control actions, etc.); provides feedback and guidance on such reports; gives input on annual evaluations on field veterinarians and may help to create performance improvement plans when warranted in conjunction with the Assistant Chief.

Has the authority to assign work, review work, train staff, evaluate staff performance and sign as rater; has the authority to authorize leave; and recommends/authorizes disciplinary action.

Performs quarterly and annual self-assessments of the Division of Meat Inspection (DMI) "same as" program for submission to Food Safety and Inspection Services (FSIS) for continued justification for funding of state program by FSIS;. reviews issuances published by FSIS and determines their role in the implementation of the state meat inspection program; determines how the issuances are to be adopted; submits supporting documentation to prove the program is following the said implementation.

Serves as a liaison with USDA, FSIS Washington D.C. headquarters, district manager and FSIS's "selected establishment official" for continued implementation and maintenance of the "same as" interstate cooperative agreement.

Plays a key role as head of the Central Office technical staff; has the overall authority on all decisions made in administering the program; is the subject matter expert on areas related to veterinary medicine, pathology, microbiology, food safety and humane handling.

Administers & enforces rules & regulations, prepares affidavits for prosecution; serves as mediator between members of regulated industry & field inspectors to resolve disputes & problems; serves as liaison between higher level

administrators, federal officials & inspection staff concerning field operations; represents DMI on multiple levels, serves on special task forces as assigned (e.g., state disaster services team, state food emergency task force, pathogen positive investigations, recall team); consults with Enforcement, Legal, and Human Resources on issues needing their expertise and guidance; communicates and works with enforcement during investigations of inspected establishments, alleged illegal activities and internal affairs.

Organizes & conducts educational training programs for veterinarians, inspection staff & technical personnel; consults with students & general public on fundamentals of state & federal disease control & food protection programs; attends seminars, meetings & conferences; researches, reviews & compiles reports; composes technical correspondence regarding program activities & prepares & delivers speeches before groups; holds advisory committee meetings with industry representatives.

Acts as liaison with meat, poultry & exotic inspection programs of other states, USDA-FSIS, United States Food & Drug Administration, Ohio Department of Health, Ohio State University & Ohio Veterinary Medical Association; attends seminars & conferences to represent division &/or agency in matters pertaining to meat & poultry inspection; maintains professional competence by reading journals, attending seminars & conferences & by personal contacts with other professionals; acts as the Hazard Analysis Critical Control Point Coordinator for the state of Ohio.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of veterinary medicine; microbiology; animal pathology; epidemiology; agriculture (i.e., livestock, meats); management; state & federal regulations applicable to practice of veterinary medicine & to regulation of livestock, poultry & meat industries; implementation of programs to inspect & control infectious & contagious diseases of livestock; livestock inspection & animal disease detection techniques; supervisory principles/techniques; meat, poultry & exotic inspection procedures; public relations; employee training & development. Skill in conducting animal autopsies & laboratory analyses; use of associated surgical & laboratory instruments. Ability to differentiate between a variety of color hues; write instructions & specifications concerning medical & inspection procedures; develop good rapport with various segments of livestock & meat industry, government officials & general public; write technical reports & conduct correspondence regarding programs; prepare & deliver speeches before specialized audiences & general public; handle sensitive inquiries from & contacts with officials & general public.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

License to practice veterinary medicine issued by Ohio Veterinary Medical Licensing Board; accreditation under CFR, Title 9, Part 161 issued by United States Department of Agriculture; 36 mos. trg. or 36 mos. exp. in meat & poultry inspection; 24 mos. trg. or 24 mos. exp. in supervisory principles & techniques; must provide own transportation.

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

Biannual renewal of license to practice veterinary medicine issued by Ohio Veterinary Medical Licensing Board; retention of USDA accreditation.

**UNUSUAL WORKING CONDITIONS:**

Travel required with some overnight stays; exposed to diseased animals & carcasses; non-standard work weeks which may include evenings and weekends.