

Mid-Atlantic Region Technician Certification Program (MARTCP)

Hot Mix Asphalt Plant Technician – Level 1

Technician Certification Process

Test Methods Performed at the Plant Site Supported by the MARTCP

Delaware

District of Columbia

Maryland

New Jersey

Pennsylvania

Virginia

West Virginia

Technician Certification Process

Hot Mix Asphalt Plant Technician - Level I

Hot Mix Asphalt Plant Technician Level I

The Hot Mix Asphalt Plant Level I Technician certification is designed to “qualify” those individuals responsible for performing quality control or quality assurance testing on plant produced Hot Mix Asphalt material.

The process for “qualifying” as a Hot Mix Asphalt Plant Technician Level I:
Pass the written and hands-on proficiency exams under MARTCP

Course length: 2 ½ days minimum

Course instruction manuals: MARTCP “Hot Mix Asphalt Plant Technician Level 1 Study Guide”.

Topics of instruction:

1	Technician Certification Process & Test Methods	Required		6	Asphalt Cement Supply Systems	Required
2	Introduction & HMA Terminology	Required		7	Surge Storage & Truck Loading	Required
3	Modern HMA Production Facilities	Required		8	Sampling & Testing at the Plant Site	Required
4	Aggregate Storage & Feeding Systems	Required		9	Hot Mix Asphalt Volumetric Properties	Required
5	Aggregate Drying & Heating Systems	Required		10	Hot Mix Asphalt Volumetric Properties Using Phase Diagrams	Optional

Class size: as determined by agency conducting training

Prerequisites for being certified as a Hot Mix Asphalt Plant Technician Level I:
Completion of one construction season of experience in HMA activities or work.

Recommendations:

Participant should have some knowledge and experience in the daily sampling and testing activities required in a Hot Mix Asphalt production facility. In addition, participant should exhibit basic mathematics and reading comprehension skills.

Meet the following requirements:

- Pass the written examination.
- Exhibit hands-on proficiency in the MARTCP core test procedures designated in the “HMA Plant Technician Level 1 Study Guide” for level 1
- Meet any additional requirements by State regarding State Specifications

HMA Test Methods Performed at the Plant Site
Supported by the
Mid-Atlantic Region Technician Certification Program

Test Method	Description	Level 1	Level 2
AASHTO T2	Sampling of Aggregates	X	X
AASHTO T11	Material Finer than #200 Sieve in Mineral Aggregates	X	X
AASHTO T27	Sieve Analysis of Fine and Coarse Aggregate	X	X
AASHTO T30	Mechanical Analysis of Extracted Aggregates	X	X
AASHTO T40	Sampling Bituminous Materials	X	X
AASHTO T84	Specific Gravity and Absorption of Fine Aggregates		X
AASHTO T85	Specific Gravity and Absorption of Coarse Aggregates		X
AASHTO T166	Bulk Specific Gravity of Compacted Bituminous Mixtures	X	X
AASHTO T168	Sampling Bituminous Paving Mixtures	X	X
AASHTO T176	Plastic Fines in Graded Aggregates and Soils by Use of Sand Equivalent Test		X
AASHTO T209	Maximum Specific Gravity of Bituminous Paving Mixtures	X	X
AASHTO T248	Reducing Samples of Aggregates to Testing Size	X	X
AASHTO T269	Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures	X	X
AASHTO T283	Resistance of Compacted Bituminous Mixtures to Moisture Induced Damage		X
AASHTO T304	Uncompacted Void Content of Fine Aggregate		X
AASHTO T312	Method of Preparing and Determining Density by Means of Gyratory Compactor	X	X
AASHTO T308	Test method for Determining Asphalt Content of HMA by Ignition Method	X	X
ASTM D4791	Flat and/or Elongated Particles in Coarse Aggregate		X
ASTM D5821	Determining the Percentage of Fractured Particles in Coarse Aggregate		X