

FINAL
 JUL 07 1976
 DESIGN SUBDIVISION
 CIRC. FILE DESIGN

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

TO:

Director, FILE
 Preliminary Plan Review Bureau
SUPERSEDED BY EI 77-049
EFFECTIVE 10/26/1977

SUBJECT: APPROVED EQUIPMENT LIST
 BITUMINOUS CONCRETE VIBRATORY
 COMPACTION EQUIPMENT
 Subject Code: 7.42

Distribution:

Main Office Regions Special

Code: 76-46

Date: 6/21/76

Supersedes:
 EI 74-48

APPROVED:

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 Deputy Chief Engineer, Technical Services

The following vibratory rollers are approved and are in conformance with the requirements of the New York State Department of Transportation Specifications pertaining to vibratory compaction of bituminous concrete pavements. A "No" listed in any frequency column indicates that an acceptable frequency - amplitude combination does not exist at that amplitude setting and the equipment should not be used to compact that pavement course.

APPROVED EQUIPMENT LIST

A. Pneumatic Drive Wheel Vibratory Rollers

| MAKE | MODEL | AMPLITUDE SETTING | MINIMUM ALLOWABLE OPERATING FREQUENCY PAVEMENT COURSE | | |
|----------------|-----------------------------|-------------------|---|--------|------|
| | | | TOP | BINDER | BASE |
| BROS | SPV-735-VA | 1/4 | No | No | No |
| | | 1/2 | 1600 | No | No |
| | | 3/4 | 1500 | 1500 | 1700 |
| | | Full | No | No | 1500 |
| BUFFALO-BOMAG | BW-210A (Pneumatic tire) | 1/4 | No | No | No |
| | | 1/2 | 1800 | 2000 | No |
| | | 3/4 | 1500 | 1600 | 2000 |
| | | Full | No | 1500 | 1700 |
| FERGUSON | SP 75B | Fixed | 1500 | 1500 | 1600 |
| FERGUSON | SP 75B (modified) | Fixed | 1500 | 2000 | 2000 |
| GALION | VOS-84 | Fixed | 1500 | 1500 | 1600 |
| INGERSALL-RAND | SPA-54 | Fixed | 1700 | 1800 | 2200 |
| RAYGO | 404B | Low | 1900 | 2000 | 2300 |
| | | High | No | 1500 | 1700 |
| REX | SP-900 | Fixed | 1500 | 1600 | 1900 |

A. Pneumatic Drive Wheel Vibratory Rollers (cont.)

| <u>MAKE</u> | <u>MODEL</u> | <u>AMPLITUDE SETTING</u> | <u>MINIMUM ALLOWABLE OPERATING FREQUENCY PAVEMENT COURSE</u> | | |
|-------------------------|--------------|--------------------------|--|---------------|-------------|
| | | | <u>TOP</u> | <u>BINDER</u> | <u>BASE</u> |
| TAMPO | RS-28A | Low | 1700 | No | No |
| | | Medium | No | 1700 | 1700 |
| | | High | No | No | 1500 |
| TAMPO | RS-288A | Low | 1700 | No | No |
| | | Medium | No | 1700 | 1700 |
| | | High | No | No | 1500 |
| DYNAPAC (Vibro-Plus) | CA-25A | Low | 2300 | 2400 | No |
| | | High | 1600 | 1800 | 2100 |

B. Dual Drum Vibratory Rollers

| <u>MAKE</u> | <u>MODEL</u> | <u>AMPLITUDE SETTING</u> | <u>MINIMUM ALLOWABLE OPERATING FREQUENCY PAVEMENT COURSE</u> | | |
|-------------|--------------|--------------------------|--|---------------|-------------|
| | | | <u>TOP</u> | <u>BINDER</u> | <u>BASE</u> |
| DYNAPAC | CC42A | Low | 2400 | 2500 | No |
| | | High | 1700 | 1900 | 2400 |
| DYNAPAC | CC50A | Low | 2000 | 2200 | No |
| | | High | 1500 | 1600 | 2000 |
| TAMPO | RS-166A | Low | 2400 | No | No |
| | | Medium | 2200 | 2200 | No |
| | | High | No | 2200 | 2200 |
| RAYGO | 2-84 | Low | 1700 | 1800 | 2300 |
| | | High | No | 1500 | 1700 |

In general, for vibratory rollers with variable amplitudes, it is recommended that the higher amplitude settings be used on base course and the lower amplitude settings be used on top and binder courses.

All specification requirements, especially the 2.5 mph maximum speed, must be strictly enforced in order to obtain satisfactory pavement compaction.

Other rollers meeting the requirements of the specifications will be tested as outlined in NYSDOT Test Method 76 on an individual basis. If acceptable, these additional rollers will be approved and added to this list.

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| Subject: APPROVED EQUIPMENT LIST - BITUMINOUS CONCRETE VIBRATORY COMPACTION EQUIPMENT | | | |

All questions regarding this "Approved Equipment List" and requests for evaluation should be addressed to:

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