


TO: Director, Preliminary Plan Review Bureau SUPERSEDED BY EI 81-026 EFFECTIVE 5/21/1981	<h2 style="margin: 0;">ENGINEERING INSTRUCTION</h2> <p style="margin: 0;">NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
Distribution: <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	SUBJECT: APPROVED EQUIPMENT LIST-BITUMINOUS CONCRETE VIBRATORY COMPACTION EQUIPMENT Subject Code: 7.42
APPROVED:  <u>Deputy Chief Engineer, Technical Services</u>	Code: EI 77-49 Date: 10/26/77 Supersedes: 76-46

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*

<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>
BROS	SPV-735-VA	1/4	No	No	No
		1/2	1600	No	No
		3/4	1500	1500	1700
		Full	No	No	1500
KOEHRING-BOMAG	BW-210A	1/4	No	No	No
		1/2	1800	2000	No
		3/4	1500	1600	2000
		Full	No	1500	1700
GALION	VOS-84	Fixed	1500	1500	1600
GALION	VOS-84A	Low	1800	2100	No
		High	1500	1500	1800

*If approved by the Engineer, steel drive wheels may be substituted for pneumatic drive wheels when used to compact top pavement courses.

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A. Pneumatic Drive Wheel Vibratory Rollers (Cont'd)

<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>
INGERSOLL-RAND	SPA-54	Fixed	1700	1800	2200
RAYGO	404B	Low	1900	2000	2300
		High	No	1500	1700
REX	SP-900	Fixed	1500	1600	1900
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	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

B. Dual Drum Vibratory Rollers (Cont'd)

<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-188A	Low	No	No	No
		Medium	2100	2100	2100
		High	No	No	2100
RAYGO	2-66	Low	1700	1800	2200
		High	No	No	1700
RAYGO	2-84	Low	1700	1800	2300
		High	No	1500	1700

C. The following pneumatic drive wheel vibratory rollers are approved for use only on Department Contracts let before October 21, 1976.

<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>
FERGUSON	SP 75B	Fixed	1500	1500	1600
FERGUSON	SP 75B (modified)	Fixed	1500	2000	2000

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

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