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LEP Note 293 -REV



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A SUMMARY OF RECENT WORK ON BEAM DYNAMICS AND COLLECTIVE PHENOMENA
IN LEP VERSIONS 8 AND 9

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C O R R E C T I O N S

Will you please replace page 6 in the above LEP Note by the attached page.

Will you please also append the two attached figures to the LEP Note.

Table 2. Directory of longitudinal parameter tables

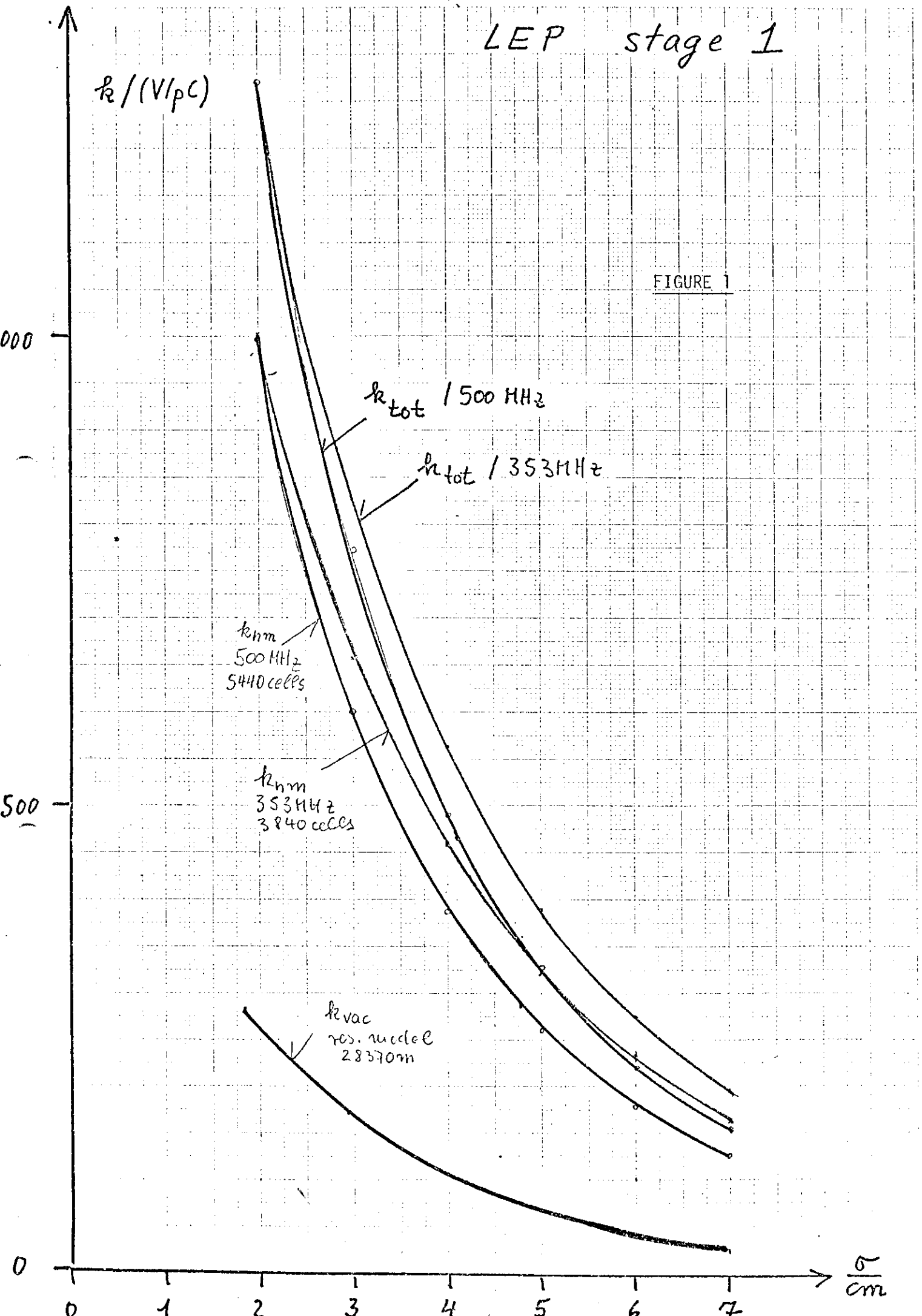
Table No.	LEP Version	RF	MHz	Q_s
3	8	1/6	353	min
4	9	1/6	353	min
5	8	1	353	min
6	9	1	353	min
7	8	1	500	min
8	9	1	500	min
9	8	1/6	353	const
10	9	1/6	353	const
11	8	1	500	const
12	9	1	500	const
13	8	1	353	const
14	9	1	353	const

The notation in the tables is as follows:

- V_{rf} Peak RF voltage
- ϕ_s stable RF phase angle
- σ_s rms bunch length
- σ_e/E rms bunch width
- $\Delta E/E$ half height of RF bucket
- Q_s synchrotron tune
- U_{vc} higher-order mode losses into vacuum chamber
- U_{rf} higher-order mode losses into RF cavities

It may be necessary to keep Q_s constant while accelerating the beam from injection energy upwards in LEP, e.g. to avoid crossing synchro-betatron resonances. The resulting longitudinal parameters are also shown in the tables.

LEP stage 1



LEP phase 1

