

Summary of MD's

THIRD TURN FE 16 AT 22 GeV/c

On the 27th March a first attempt was made to eject in ss 16 on the 3rd revolution. With the same settings as for 1st turn ejection, high losses take place in ss 19. After correcting the closed orbit at high energy by means of dipoles 4 -7 +55 it was possible to achieve as good an efficiency as on the 1st turn.

This test was repeated on the 10th May and both 1st and 3rd turn FE yielded the same efficiency.

Conclusion: provided the closed orbit can be corrected at will, 3rd turn ejection at 22 GeV/c is the same as normal FE.

Values used

$$Q_H = 6.25$$

- a) 1st turn FE 20 b. at 22 GeV/c M 209  $I_p = 1.5 \times 10^{12}$  p/p  
bumpers 16 = 709 A KM 97 = 53 kV  
efficiency 95% losses on AIC 16 = 20 mV
- b) 3rd turn FE 20 b. at 22 GeV/c M 209  $I_p = 1.5 \times 10^{12}$  p/p  
bumpers 16 = 750 A dipoles 3 -7 +55 = -80 A KM 97 = 53 kV  
efficiency 95% losses on AIC 16 = 20 mV
- c) 3rd turn FE 20 b. at 22 GeV/c M 209  $I_p = 1.5 \times 10^{12}$  p/p  
bumpers 16 = 870 A dipoles 35 +95 +99 = -160 A KM 97 = 53 kV  
efficiency 95% losses on AIC 16 = 20 mV
- d) 1st turn FE same conditions as c)  
efficiency 95% losses on AIC 16 = 20 mV

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