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K^0_S Production at the Main Injector Particle Production Experiment at Fermilab AMANDEEP SINGH, Fermi National Accelerator Laboratory, MAIN INJECTOR PARTICLE PRODUCTION EXPERIMENT COLLABORATION — The Main Injector Particle Production (MIPP) experiment at Fermilab is a full acceptance spectrometer to measure hadronic particle production using beams of $\pi^{\pm}$, $K^{\pm}$, p and $\bar{p}$ ranging in momentum from 5 to 120 GeV/c incident on Liquid-Hydrogen, Beryllium, Carbon, Bismuth, Uranium and NuMI targets. The experiment is capable of excellent charged particle identification using Time Projection Chamber (TPC), Time of Flight (ToF), multicell Cherenkov, RICH detector and Calorimeters. A technique to reconstruct K^0_S has been developed and will be described. We present the result of inclusive cross-section measurement of K^0_S from the interaction of 84 GeV/c protons with Liquid-Hydrogen target and 120 GeV/c protons with Carbon, Beryllium, Bismuth and Uranium targets.

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