CAPSUGEL®

Description

The Self-Guided Vehicle System (SGVS) provides efficient handling of GFTs (Gelatin Filled Tanks) through out the production facility.

The SGVS is responsible for transporting full GFTs from the mixing area to one of the capsule producing machines located through out the facility. Full GFT's are positioned at one of five pick up locations located in the gelatin mixing room. Once an order is generated through the host computer, the host then assigns one of the four SGV's to the order. The SGV proceeds to the location, picks up the full GFT scans the bar code(which confirms product) and delivers it to one of the HCM (Hard Capsule Machine). Once the unit arrives at the predetermined HCM machine, the SGV positions the full GFT in a queuing lane associated with this machine.

Once the full GFT has been dropped, the SGV will proceed to pick–up an empty GFT and transport it to the GFT wash room where the GFTs are sterilized for the process to begin again. Once the tanks have cleaned they are transported from the wash area back to the mixing room where the tanks are again filled and the process is repeated.

Features

Date Installed	March 2002
Vehicle Type:	Modified Fork
Number of Vehicles:	4
Application Description:	Capsule production
Industry Description:	Pharmaceutical WIP
Guidance Method:	Laser
Load Description:	GFT
SGV Host Controls:	Windows NT®
Path Length:	Approximately 1500 feet

Benefits:

Prior to the installation of the SGV system, all GFT's were manually pulled throughout the facility by operators. The weight of full GFTs ranges between 800 and 1200 pounds.

The SGV system reduced work-related injuries associated with transporting of these tanks between the filling / mixing room to the production machines.

The SGVs also increase the operation's efficiency by allowing the operator to concentrate efforts on primary job functions rather than moving of GFTs throughout the facility.

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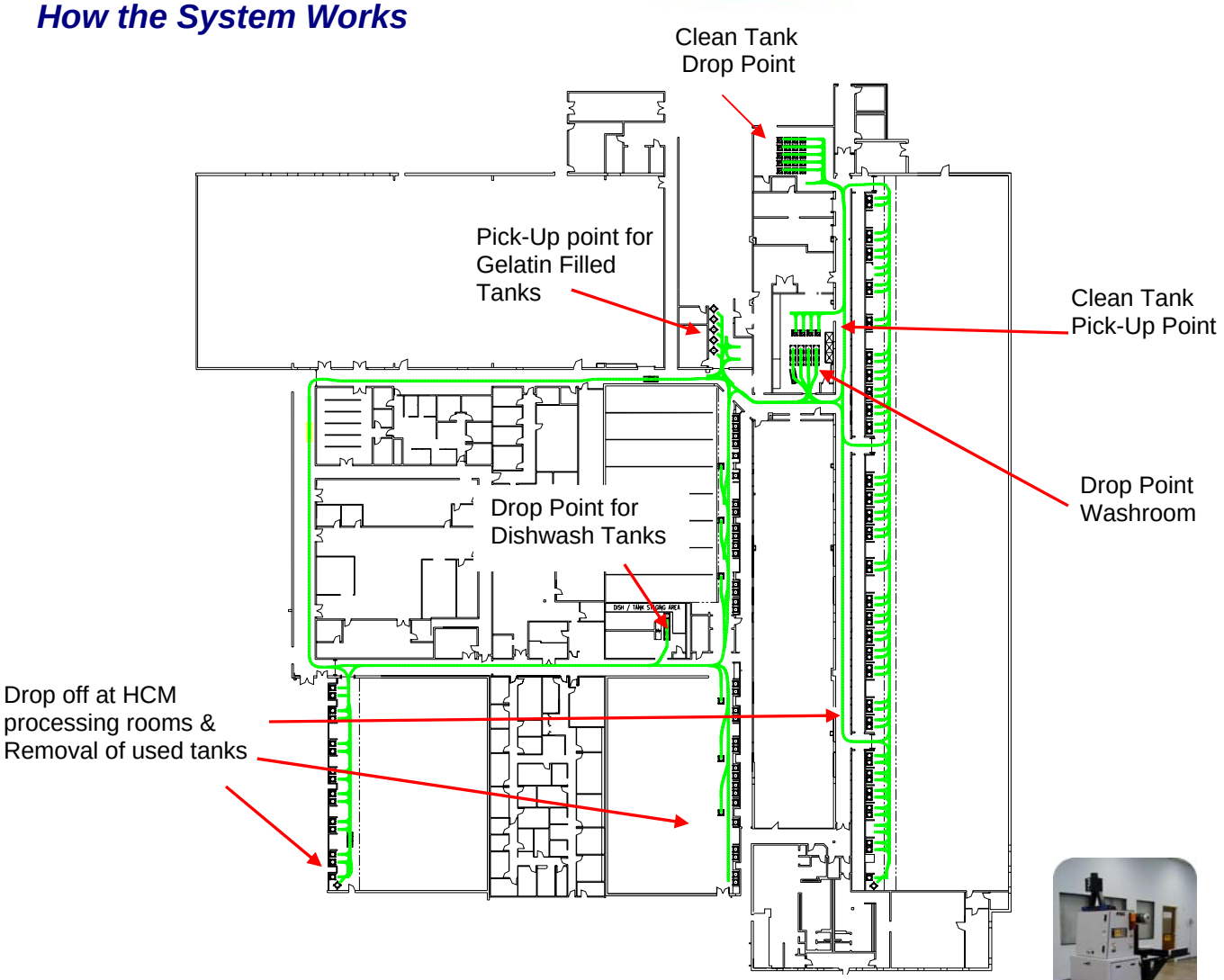
How the System Works



SGV Manager (Server)

- Automatically Receives Work Request from Work Stations
- Assigns Work to SGVs
- Interfaces with Plant Equipment
- Traffic Control for SGVs

RF Modem

- Communicates Work Order to SGV
- Communicates with Handheld Terminal to receive orders

SGV Self-Guided Vehicle

- Receives Work Order from RF Modem
- Moves Load per instructions from SGV Manager
- Navigates through plant via Laser Guidance

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