## **BLENDER UPGRADES**



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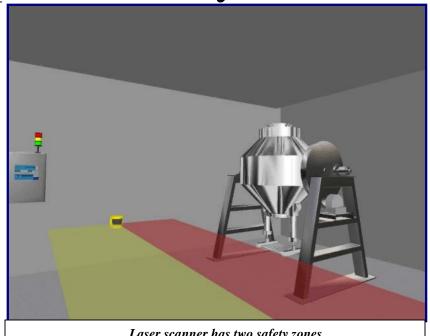
#### PERSONNEL PROTECTION BARRIERS

# Increase productivity with the new Laser Scanner protection system

## **Operator Safety**

Personnel protection is the first concern of process manufacturers. Meeting O.S.H.A., CE or C.S.A specifications for personnel protection are a challenge. Barrier protection changes for each machine and it's processing environment. GEMCO and OMRON have a solution for our rotating blenders and dryers.

GEMCO uses the latest OMRON Laser Scanning Technology to monitor an entire area, not just a line in the room. The laser sweep also makes sure that an operator is not in the processing area at start up. The small laser scanner eliminates fences and railings. It keeps the production area open and makes



Laser scanner has two safety zones.

the operators movement faster. The scanner is based on reflective laser scanning of the perimeter to allow safe interruption of the blending process upon entry of personnel into the scanning field.

A warning range scan is also programmed into the room to let operators know when they are too close to a danger zone. No more false interruptions of a process. The warning range will illuminate a beacon light and give an audible alarm. This will alert the operator prior to shutting down of equipment.

### **Product Protection**

Accidental tripping of safety interlocks will stop a process. If no alarm is available, an operator can mistake the condition for "Blend Complete". He could then discharge the product and send unblended material out, which would create rework, or worse. The GEMCO system incorporates alarms and the added protection of supervisory key switches that would be required to over-ride a fault alarm. Upon entry into the protective area, the equipment will shut down and require a key switch to resume blending.

The electrical components will be integrated into the existing relay logic control system wiring and not require a PLC to operate.

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#### PERSONNEL PROTECTION BARRIERS

Laser scanner protective ranges start at 4 meters. The warning range is up to 15 meters. The exact profile of the scanning area is programmable. Areas can be blocked out so auxially equipment can be left in safe areas within the blending room.

## Safety engineering challenges are:

- Provide a barrier the operator cannot get through
- Make a barrier that is ergonomic for the operator
- Make a barrier that will not get in the way of auxiliary process equipment
- The barrier must be acceptable to MY safety staff and MY local laws
- The barrier should be operator intuitive, not slow the operator down

