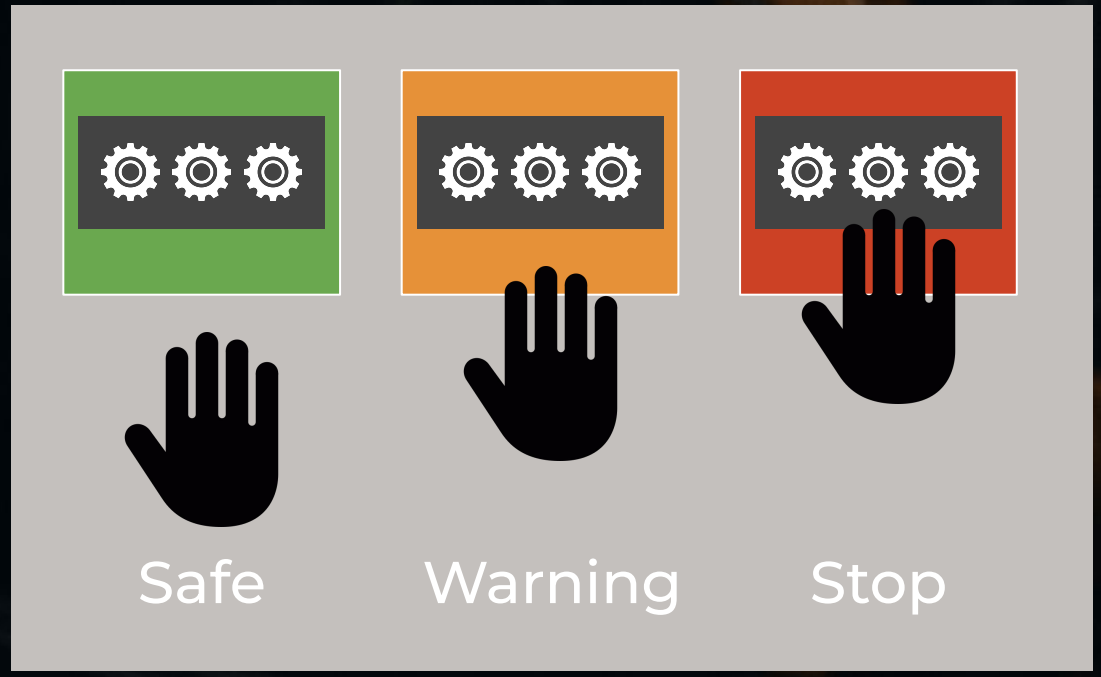
MANOMOTION

SAFERHANDS™

Vision-Based Predictive Safety for Industrial Machines





Generic System Design and Functionality

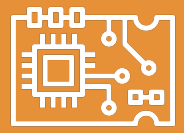
Real-time Hand Interaction System

Input



Industry Standard Camera

Processing



Computing Board (ManoMotion Software)

Output

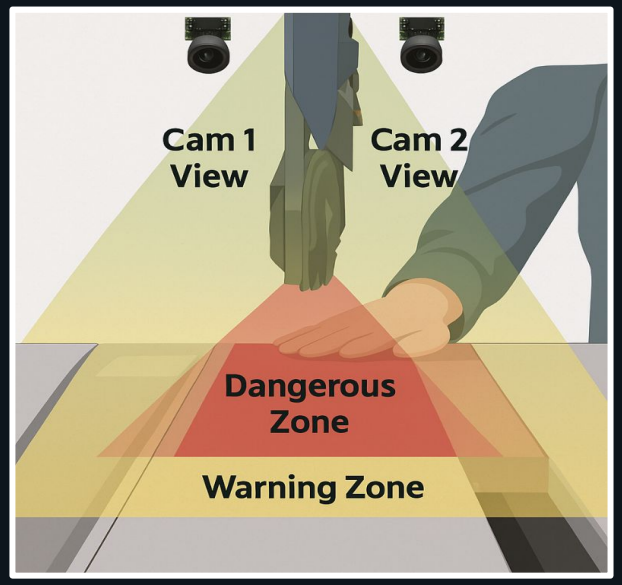


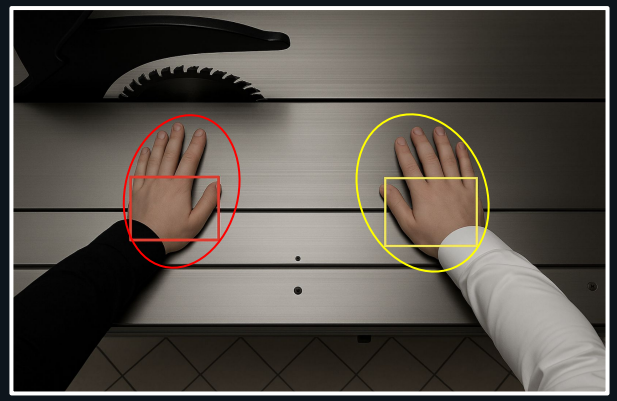
GPIO
Safety Signals

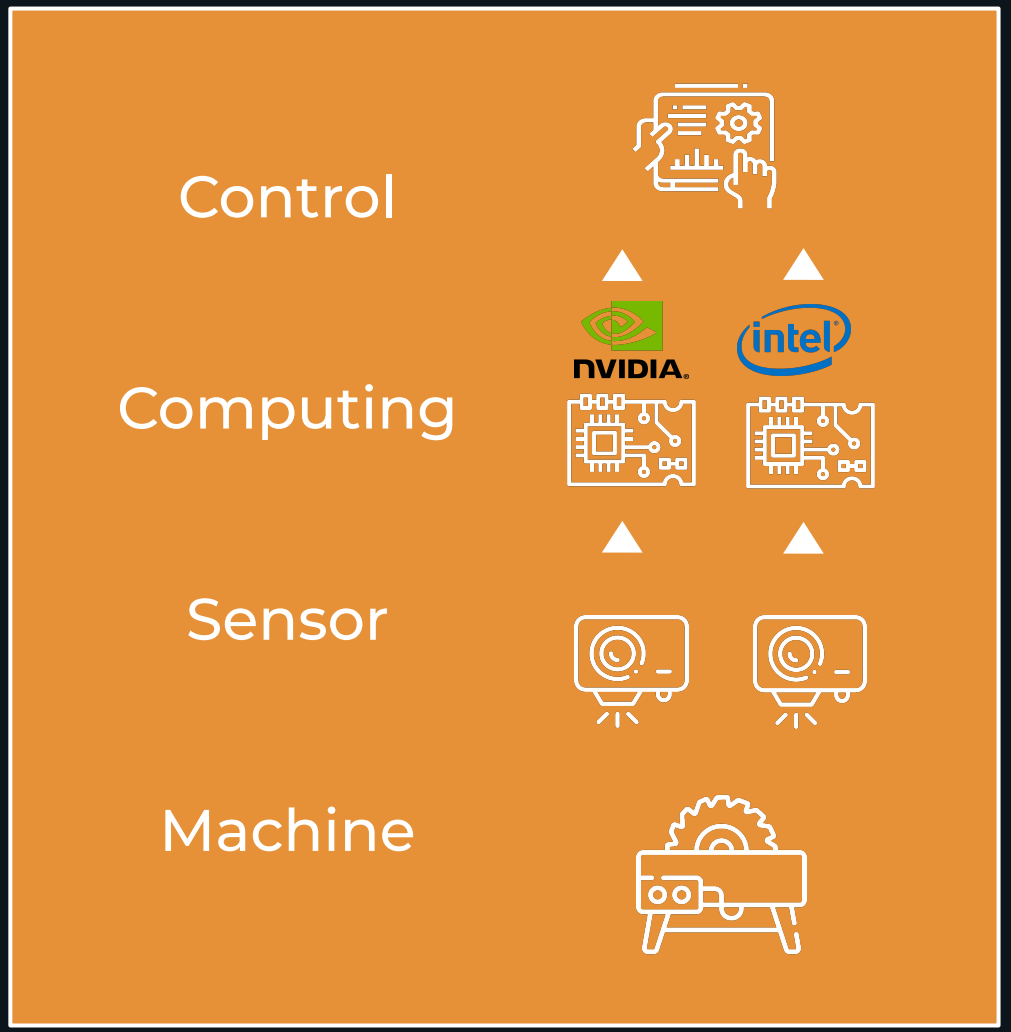
Capabilities

- Multi-hand detection
- Hand/No-hand classification
- Glove detection
- Skeleton detection
- Hand Tracking
- Predictive signals
- Safety signals
- Camera diagnosis (no signal, noise, low light, camera blocked or obscured...

Flexible, Customizable Safety Solutions







SAFERHANDS™

Retrofit for existing machines
(manufacturing industries)

Standard Package

- Industrial Processing Unit
- Industry standard camera/s
- Safety Signal Light / Standard IO
- Industrial Gloves
- ManoMotion SaferHands Software (Customizable)









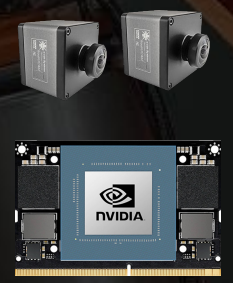


SAFERHANDS™

Custom integration for OEMs (machine manufacturers)

Customizable design

- Hardware (based on customer requirements)
- Software and safety signals (customizable)
- Gloves (based on customer requirements)
- Certification (process supported by ManoMotion)





SAFERHANDS™

Compatible with Industrial Automation Standards
Compliant with New AI Regulations in industry

ManoMotion Predictive Safety Industry Standard Computing Platform and Cameras

MANOMOTION

NVIDIA



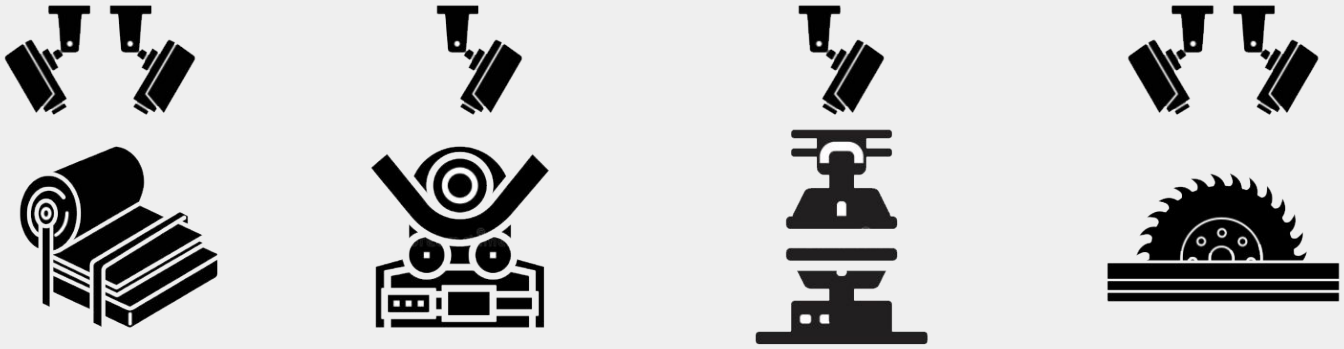


PROFIsafe Layer

PROFIsafe

PROFINET
Standard Protocol

PROFINET



Applicability

ManoMotion SaferHands is applicable for a wide range of machinery

Machine types

Table saws, Band saws

Roller mills

Drills, Lathes, Presses

Banding machines

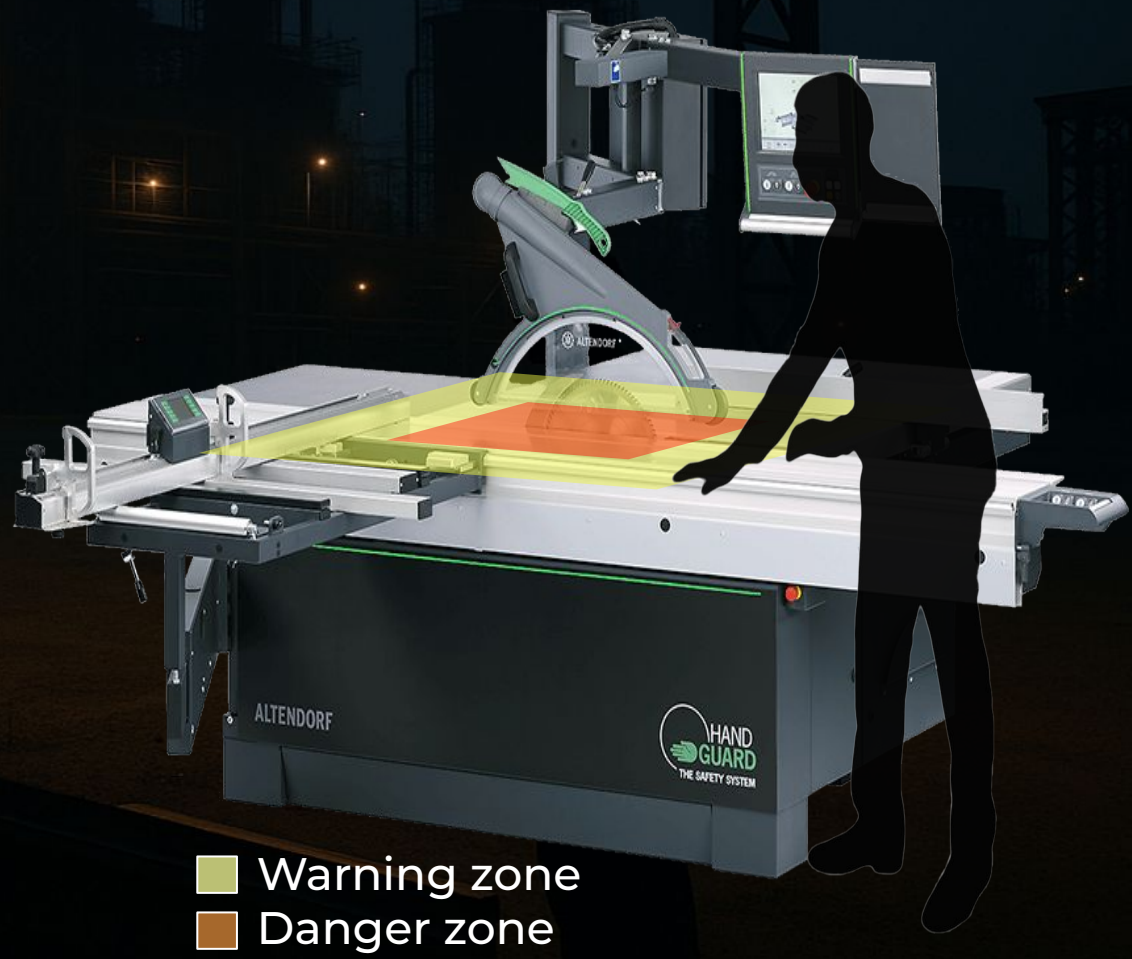
Accident scenarios

Close-range interaction

Slip and fall scenarios

Glove entrapment

Object kick-back



Success Story

ALTENDORF®

“Yesterday, one of the pilot customers of our new Hand Guard Safety System called me and said that we had saved our first hand! He had slipped, and was falling towards the saw - but the machine stopped in time, thanks to the Hand Guard system, developed together with Altendorf and ManoMotion”
K F Schröder, Head of R&D, ***Altendorf, Germany***



intertek

“Based on the research conducted and the documentation reviewed, Intertek Assurance has determined that Manomotion’s goal, achieving compliance to ISO 13849, ISO 10218-2, and IEC 61508-3, is feasible for the SaferHands product. No significant modifications to the product’s underlying software architecture or core design are anticipated. The compliance pathway to EU Machinery Regulation and EU AI Act is considered practical and achievable within the ManoMotion’s intended timelines.”, ***Intertek, US***


MANOMOTION
SAFERHANDS™
Empowering AI to Predict Human Intent
Enabling smart, predictive safety solutions and unlocking a multi-billion dollar market
www.manomotion.com
AI