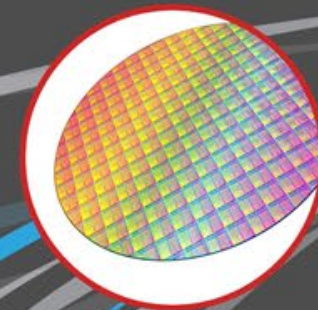




# SMART SAFETY

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The Ultimate Servo, with the Best of Safety



# Smart Safety | Platinum Drive

## Integrated Functional Safety

IEC 61800-5-2

## Safety Feedback

3 ports for in/out, dual absolute encoder support

## Safety I/O

SIL-3 PL-e, Safe brake output



***THE ULTIMATE  
SERVO WITH THE  
BEST OF SAFETY***



Safety over  
**EtherCAT®**



In compliance with:

**SIL-3** : (IEC-61800-5-2, Functional safety of electrical safety related systems)

IEC-61800-5-2 Adjustable speed electrical power drive systems)

**PL-e , CAT-4** : (ISO 13849, Safety of machinery, safety related parts of control systems)

\*certificated pending



**Functional Safety** goes beyond the safety of human-machine collaboration and is extremely useful for the protection of the manufacturing goods or equipment itself.

Functional Safety defines how servo drives can **reliably monitor safe motion processes**, as main source of system safety



### **Added Machine Functionality**

Through innovative safety features



### **Simplified Machine**

Replace Safety Hardware for motion Software



### **Less Expensive**

Replace Power Components for Logic Level



**‘Functional Safety’** shift the safety responsibility, now **relying on the servo drive** for reliably monitoring motion processes, and managing critical safety functions.

**This shift creates a huge advantage for manufacturing:**



Added Machine Functionality  
Through Innovative Safety Features

**Less Hardware**



Simplified Design  
Replace Safety Hardware for motion Software

**Less Price**



Less Expensive  
Replace Power Components for Logic Level

**Less Time to Market**

Doing all of that,  
with this.... And much more



That, is **SMART SAFETY.**



Added Machine Functionality  
**Less Hardware**  
Through Innovative Safety Features



Simplified Design  
**Less Price**  
Replace Safety Hardware for motion Software



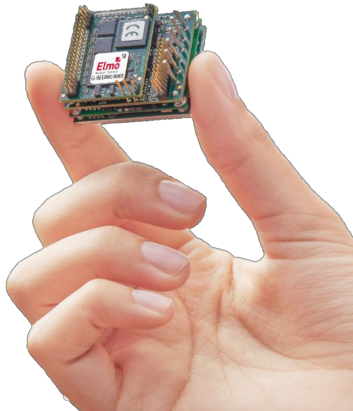
Less Expensive  
**Less Time to Market**  
Replace Power Components for Logic Level

# Why Elmo for Functional Safety?

We didn't invent Functional Safety, simply embedded the Elmo DNA into it

## Ultimate Servo, with Best of Safety

**Smallest, most powerful, most servo,** now also includes the **industry's most advanced safety functionality.**



## Highest Certification of Safety

Platinum drive with redundant architecture will obtain **highest level of functional safety certification by TÜV (IEC 61800-5-2 SIL-3, Cat4 PL-e)**



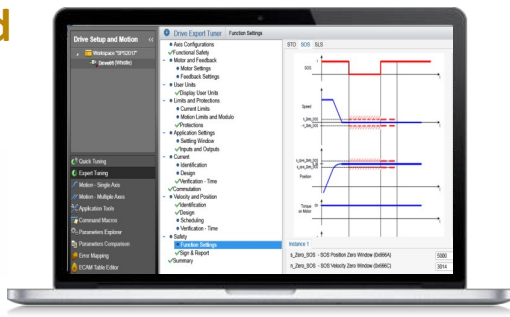
## Safety over EtherCAT (FSoE)

Customers can choose to engage **Safety over EtherCAT - FSoE** (Fail/Safe over EtherCAT) or with **standalone safe digital I/O**



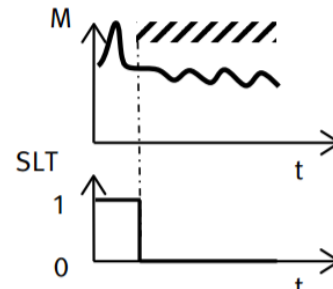
## Fast & Simple Safety Implementation

Elmo Application Studio is where all **safety functions can be easily customized**



## Safe Limited Torque (SLT)

Elmo is one of the only drive manufacturers to offer this function



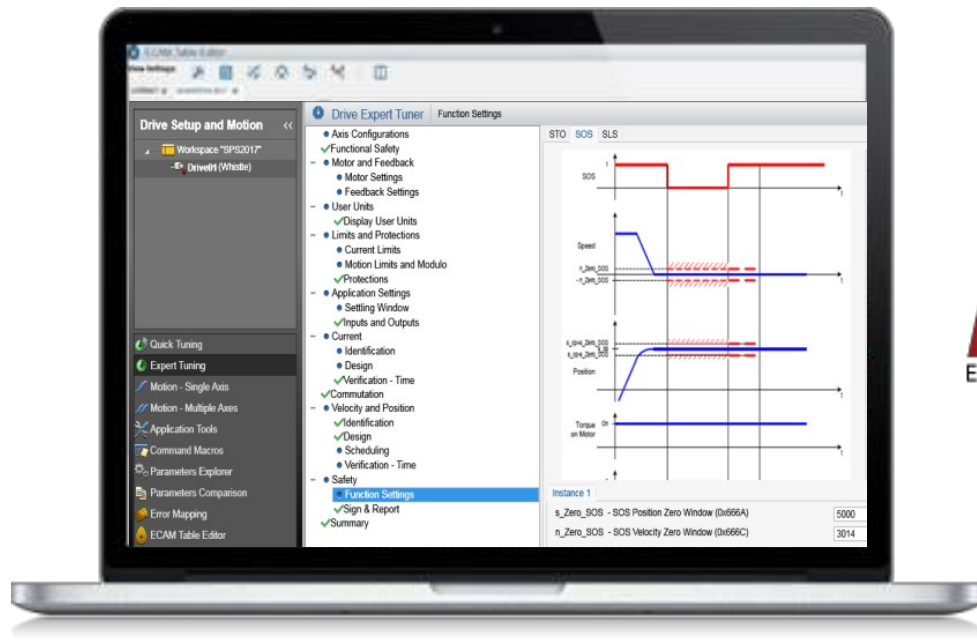
# Next Generation Platinum Core



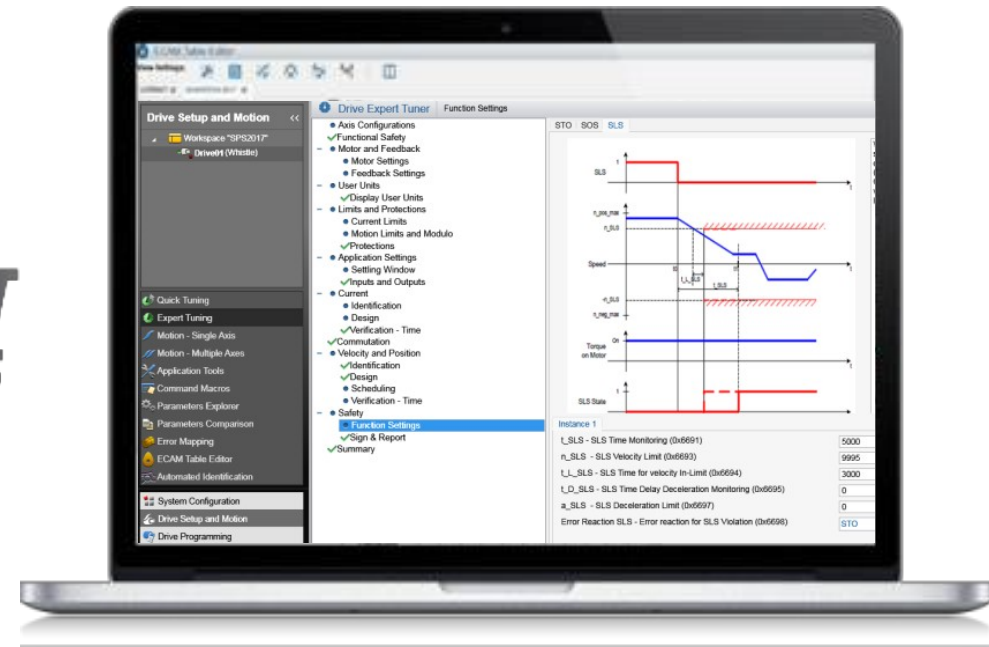
- ❑ Improved **Servo Performance**
- ❑ Faster **Processing**
- ❑ Enhancing System Capabilities:  
Faster Communications, Larger  
Memory, Enhanced Interfaces
- ❑ **FFS – Full Functional Safety**
- ❑ **Over EtherCAT network Safety (FSOE)**

## Fast & Simple Safety Implementation

The world's most advanced motion implementations software is now where you can **easily customize machine functional safety**.



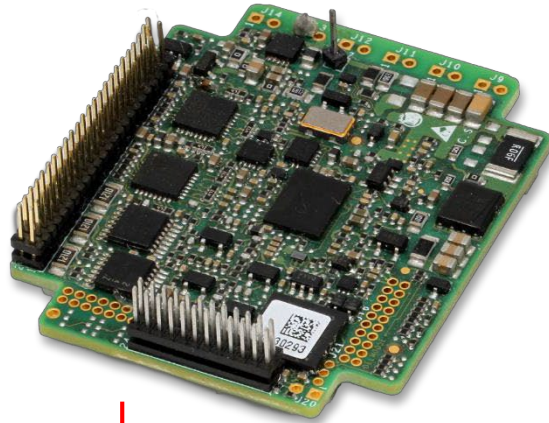
SOS (Safe Operating Stop) Implementation



SLS (Safely Limited Speed) Implementation



## The Ultimate Servo with the Best of Safety



Gold  
Whistle



**NEW**  
Platinum  
Whistle

Same Size.  
Exponentially Safer.  
Fully Redundant .  
Faster Processing.  
Better Networking.  
Improved Servo  
Performance.

**Elmo Platinum.**