Safety Standards – An overview

ISO 12100 (TYPE-A STANDARD)

GENERAL PRINCIPLES FOR DESIGN - RISK ASSESSMENT AND RISK REDUCTION

TYPE-B STANDARDSRELATED TO HAZARDS

NOISE

Determination of emission sound pressure levels at a workstation ISO 11200, ISO 11201 to ISO 11205

Determination of sound power and energy levels ISO 3741, ISO 3743-1, ISO 3744, ISO 3745, ISO 3746, ISO 3747

Determination of sound power levels by sound intensity ISO 9614 series

Insulation performances of enclosures ISO 11546 series

Insulation performances of cabins ISO 11957

Declaration and verification of noise emission ISO 4871

SUBSTANCES

Evaluation of emission of airborne hazardous substances

Reduction of risks to health from hazardous substances ISO 14123-1, ISO 14123-2

Hygiene requirements ISO 14159

THERMAL HAZARDS

Human responses to contact with hot surfaces ISO 13732-1

FIRE HAZARDS

Fire prevention and protection ISO 19353

ELECTRICAL HAZARDS

Protection against electric shock IEC 60204-1

VIBRATION & SHOCK

Whole body vibration ISO 2631 series

Hand-arm vibration ISO 13753

Hand-held and hand-guided machinery ISO 20643

ERGONOMICS

Access openings ISO 15534

Anthropometric requirements for workstations ISO 14738

Computer manikins and body templates
ISO 15536-1

RADIATION HAZARDS

Lasers and laser-related equipment – Generals ISO 11145

TYPE-B STANDARDS RELATED TO ASPECTS AND TECHNOLOGY

DIMENSIONS & DISTANCES

Gaps to avoid crushing ISO 13854

Minimum distances

Safety distances ISO 13857

Permanent means of access ISO 14122 series

ALARMS & WARNINGS

Design principles for safety signs ISO 3864-1

Registered safety signs ISO 7010

Auditory danger signals ISO 7731

Visual, acoustic and tactile signals IEC 61310-1

POWER SOURCE

Electrical equipment IEC 60204-1

Pneumatic equipment ISO 4414

Hydraulic equipment ISO 4413

CONTROL SYSTEMS

Avoidance of unexpected start-up
ISO 14118

Design of safety-related parts of control systems ISO 13849-1

Validation of safety-related parts of control systems ISO 13849-2

Emergency stop function ISO 13850

SAFETY DEVICES

Guards ISO 14120

Interlocking devices ISO 14119

Two-hand control devices ISO 13851

Electro-sensitive protective equipment IEC 61496 series

Pressure-sensitive protective devices ISO 13856 series

ASSEMBLY OF MACHINERY

Integrated manufacturing systems
ISO 11161

TYPE-C STANDARDS

THERE ARE MANY STANDARDS THAT ARE CREATED FOR SPECIFIC MACHINERY OR EQUIPMENT TYPES.

THESE ARE TYPE-C STANDARDS. A LIST OF THESE SPECIFIC STANDARDS CAN BE FOUND ON:
ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/machinery/index_en.htm

For more safety information, guidance and resources visit:

www.machinesafetysolutions.com



