

Improving Equipment Design through Industry-OEM Engagement



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'Improving health and safety in challenging times'

The Earth Moving Equipment Safety Round Table (EMESRT)

Objectives

- Reduce risk related to equipment operation and maintenance
- Help OEMs understand the site needs
- Work together toward a common goal



Engagement Process

A different approach - understanding each other

- Establishing communication
- Providing information
- Asking for input
- Looking for change
- Communicating success

Executive-Level Engagement

- Atlas Copco*
- Caterpillar / Bucyrus / Terex*
- Hitachi*
- Liebherr*
- Komatsu*
- P&H / Joy / LeTourneau*
- Sandvik*



Key Messages from EMESRT



- Designing beyond standards
- Balancing both design & behaviour
- Recognising the value of task based design review
- Appreciating that the OEM will do its best with the end user involved



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EMESRT Design Philosophies (DP's)

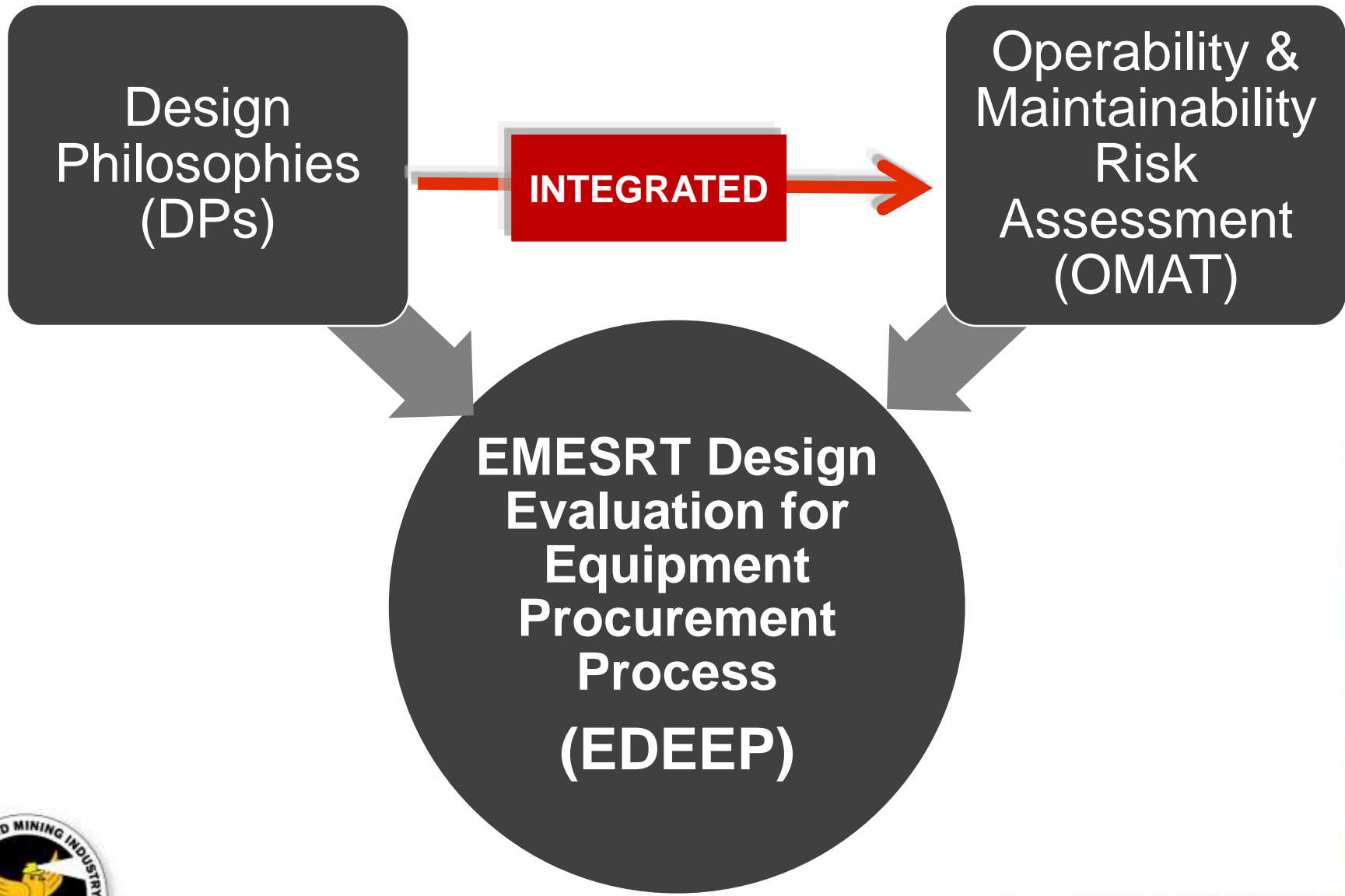
1. Access & Working at Heights
2. Tires & Rims
3. Exposure to Harmful Energies
4. Fire
5. Machine Operation & Controls
6. Health Impacting Factors
7. Manual Tasks
8. Confined Spaces & Restricted Work Areas

Walk around catwalk and guard rails/gates and toe boards.



All catwalks and steps with toe boards. Escape paths left (to rear), right (straight down) and front (on frame steps)





The basic EDEEP Process

1. Priority Task Inventory

2. Task-Based Risk Assessment

3. Equipment Design Information

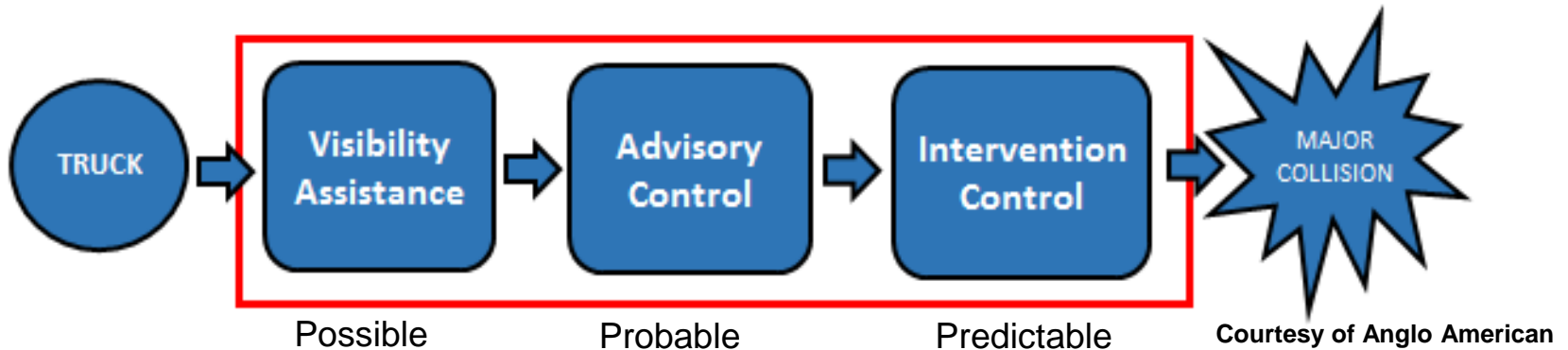


EMESRT Priorities

- In 2007 - a burning platform around Access & Working at Heights
- In 2014 - the burning platform is vehicle interaction (DP 5)
 - EMESRT has held an initial workshop



June Workshop Outcomes



- The workshop progressed:
 - Nature of the Design Issue
 - Objectives of Design Controls
 - Required Performance Parameters of the Controls
 - Protocol related deliverables
- A follow up workshop is scheduled to complete this work



EMESRT Successes

- *OEM design improvements in various equipment*
- *Requests for EMESRT input into design process*
- *Requests for assistance with product risk assessments*
- *Invitations to speak at other industry group events*
- *OEM publications citing EMESRT influence*
- *OEM's encouraging companies to join EMESRT*
- *8 years of engagement between OEMs and members*

www.emesrt.org



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