

ISTA

Verpakkingsvalidatie

Weer een nieuwe norm?

 **IPS Technology**
Packaging Tooling Testing



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Introductie IPS Technology

- Packaging
- Tooling
- Testing

→ **Activiteiten**

- Packaging & Tooling development
- Product & Packaging testing
- Integrale aanpak

→ **Markten**

- High-tech industrie [80%]
- Semiprofessioneel & consumentenproducten [15%]
- Consultancy [5%]

Verpakkingsvalidatie; de basis testen

→ *Mechanisch testen*

- Val, bots, kantel, tuimel testen
- Transporttrillingen (random)

→ *Klimatologisch testen*

- Vocht en temperatuur

→ *Veiligheid testen*

- Compressietesten
- Stabiliteit (omvallen)





Welcome to the jungle....

Belangrijke problemen met transportnormen

- Normen zijn geen testprocedures.....
- Ruimte voor interpretatie.....
- Communicatie richting klant.....
- Niet up-to-date.....





ISTA Organisatie

- Sinds 1948
- NSTC (National Safe Transit Council)
- Non-profit
- ASTM
- 850 leden in 35 landen

ISTA Activiteiten

- Field data analyse; procedures
- CPLP (Certified Packaging Lab Professionals)
- Certificatie verpakkingen
- Acceptatie

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ista CPLP WORKSHOP

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Register today to become a Certified Packaging Laboratory Professional! Both Technician & Technologist Levels will be offered. [More info.](#)

ista INTERNATIONAL TRANSPORT PACKAGING FORUM

April 2-5, 2012
Disney's Yacht & Beach Club Resorts, Orlando, Florida



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How long after a procedure is changed can I continue to use it?

We are designing a bulk package. What tests should we do?

Ask a Question

August 2011 ista views



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■ ISTA Develops Design Protocol for Responsible Packaging. [Click here](#) to learn more.

■ ISTA Standard 7E, Standard 20 and Thermal Lane Data [Click here for complete information.](#)

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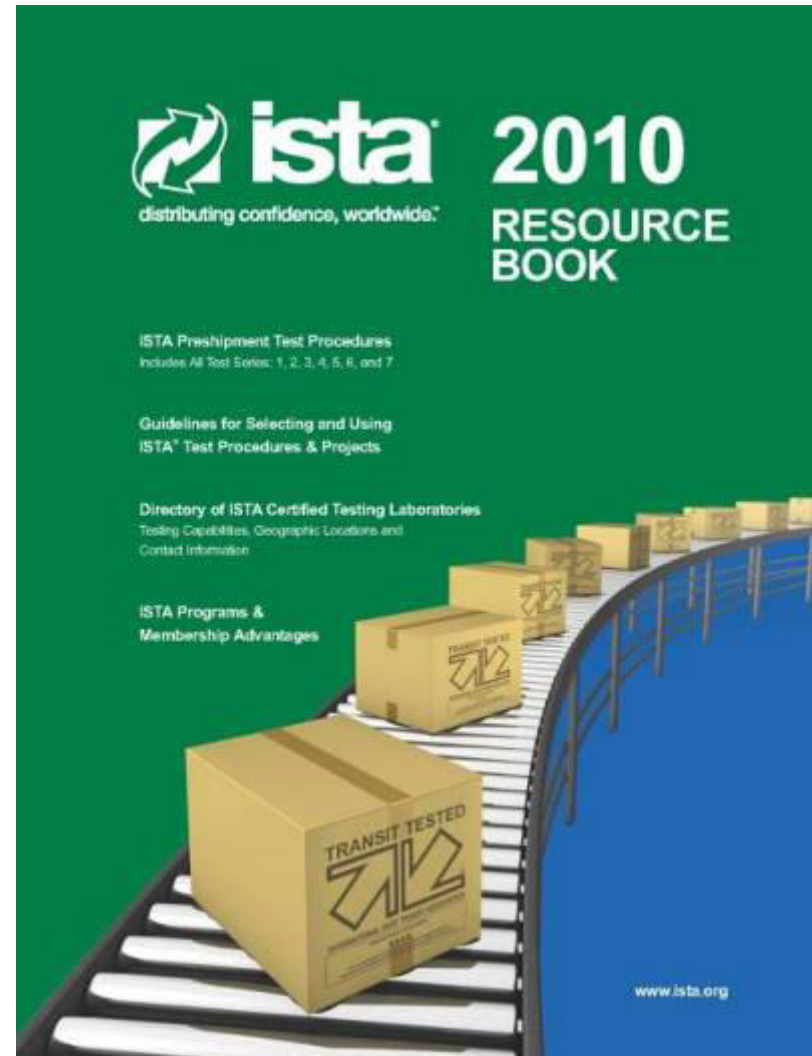


Accreditatie testlab en test engineers

- CPLP (Certified Packaging Lab Professionals)
- Verificatie en registratie testverslagen ISTA
- Gestandaardiseerde testverslagen



ISTA Test Series





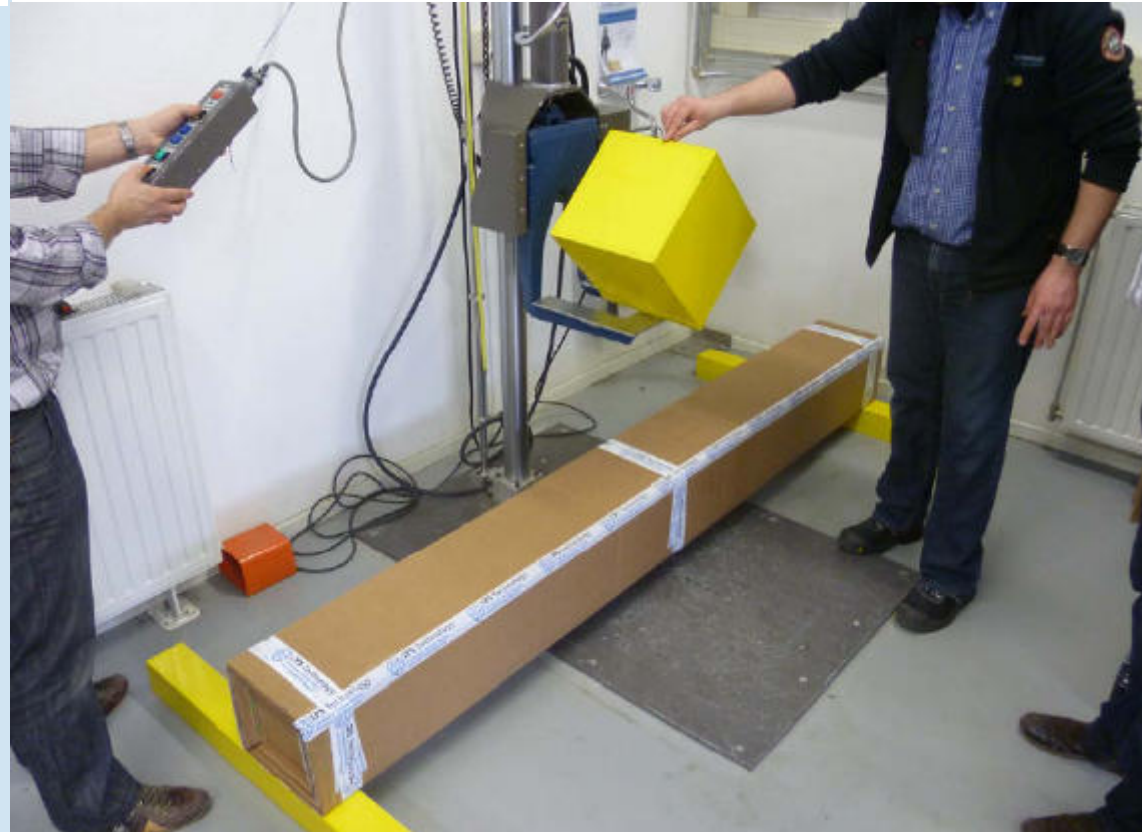
ISTA 3A Testsequentie Elongated

3A – ELONGATED Packaged-Product Test

Sequence Number	Test Category	Test Type	Test Level	For ISTA Certification
1	Atmospheric Preconditioning TEST BLOCK 1	Temperature and Humidity	Ambient	Required
2	Atmospheric Conditioning TEST BLOCK 1	Controlled Temperature and Humidity	Temperature and Humidity chosen from chart	Optional
3	Shock TEST BLOCK 3	Drop	9 Drops - height varies with packaged-product weight	Required
4	Vibration TEST BLOCKS 4 & 7	Random With and Without Top Load	Overall G_{rms} levels of 0.53 and 0.46	Required
5	Vibration TEST BLOCKS 2 & 8	Random Vibration Under Low Pressure	Truck or Truck & Air dependent	Optional
6	Shock TEST BLOCK 9	Drop	8 Drops - height varies with packaged-product weight. Includes drop on hazard	Required
7	Shock TEST BLOCK 10	Rotational Edge Drop	200 mm (8 in)	Required
8	Shock TEST BLOCK 11	Full Rotational Flat Drop	Varies with packaged-product dimensions	Required
9	Shock TEST BLOCK 13	Bridge Impact	Hazard Box dropped 400 mm (16 in)	Required



ISTA 3A: Bridge impact





ISTA 3A: Vibration dynamic load

- Situatie van vibratie tijdens gegroepeerd transport met top-load (102 kg)

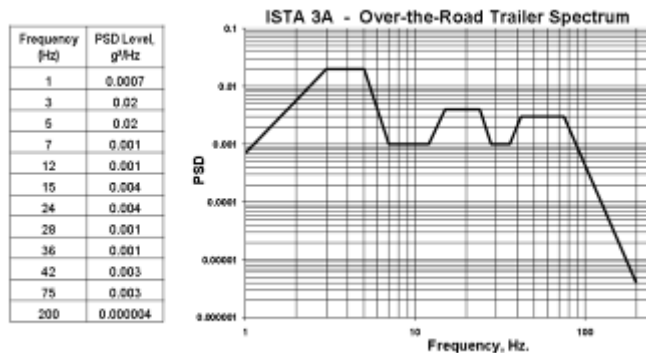


Figure: ISTA 3A- Over-the-Road Trailer Spectrum





Lessons learned IPS Technology

- Uitgeschreven testprocedures dus geen normen vertalen
- Testspecificaties; duidelijker communiceerbaar
- Dynamisch vs. Statisch
- Testvolgorde heeft grote invloed op resultaat



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