



Tillämpad kurs i Banmekanik- Rullning samt Problemlösning

För sjätte gången arrangerar The Packaging Greenhouse kursen Banmekanik- Rullning samt Problemlösning med David Roisum. David Roisum:s kunskap är obestridlig inom branschen och han har mångårig erfarenhet i ämnet.

Målet med kurserna är att ge en djup kunskap i banmekanik/rullning samt ett analytiskt och flödesmässigt tänkande vad det gäller problemlösning i den egna och kundens störningar i samband med rullning/konvertering.

Deltagarna har efter genomförd kurs en grundläggande förståelse och kunskap för de ingående processtegen.

Målgrupp är till exempel Teknisk kundtjänst, Kvalitets- Utvecklingsingenjörer, Processingenjörer, Underhållsingenjörer, Produktionstekniker.

Kursinnehåll	Se längre ner i dokumentet.	
Kurslängd	2+1 dagar	
Kursdatum	20-21:a samt 22:a november	
Kursplats	Stockholm	
Kursvärd	Jonny Widstrand The Packaging Greenhouse AB, Axel Johnsons väg 6, 652 21 Karlstad, Tel 070- 691 1793. jonny.widstrand@tpg.se	
Medverkande	David Roisum	
Kurslitteratur	Pärm med kopior	
Språk	Kurs samt litteratur är på engelska	
Pris	Banmekanik och rullning	14 900 SEK
	Problemlösning	7 900 SEK
	Moms tillkommer	
Anmälan	Görs till Julia Törngren julia.torngren@tpg.se	
Anmälan senast	26.e oktober	



Day 1. Web Mechanics

Reduce Waste and Increase Productivity: An Applications Seminar for Webs of All Types

The course will help you to understand the literature, read between the lines and then to go beyond to prevent or solve real problems on your products and machines

- Find out why wrinkles are formed and how they can be prevented.
- Find out why and how tension must be controlled throughout the machine.
- Find out why and how machines need to be aligned.
- Find out why rollers must be true.
- Find out how to avoid web breaks and damage
- Learn about options for slitting, edge guiding, calendering, winding and many other converting processes.
- Learn how to get your web through your machine at the highest throughput and with minimal trouble.

Course outline

1. Introduction to Web Handling – What is Web Handling?
2. Roller Introduction – Foundations of Web Handling
3. Roller Traction, Slip & Float – Foundations of Web Handling
4. Roller Rules – Foundations of Web Machines
5. Tension Control – Foundations of Web Handling
6. Drives – Strategies for Global Tension Control
7. Nip Mechanics – Nip Load Quality Control
8. Nip Applications – Nips for Web Handling and Processing
9. Wrinkling – Keeping the Web Flat
10. Spreading
11. Guides – Controlling the Path of a Web
12. Slitting – Cutting Cleanly and Reliably

Day 2. Winding

Reduce Waste and Increase Productivity: An Advanced Seminar in Winding Machines and Mechanics

This course will help you understand the winding literature, read between the lines and then to go beyond to prevent or solve real problems on your products and machines.

In this course, I will share with you my two decades of experience and passion with winding machines. We start with the very basics such as the objectives of winding and winder options, and then proceed to winding machine details. Finally roll quality measurement techniques and roll defect analysis are dealt with.

Course outline

1. Winding Introduction
2. Cores – The Foundation of a Wound Roll
3. Winder Arrangements
4. Wound Roll Defects - Due to air, gravity, nips, torque, stresses and so on.
5. Roll Quality Measurement- Visual observation to X-ray Tomography
6. Roll Quality Inspection



Day 3. Problem solving - Critical Thinking in Converting

Reduce Waste and Increase Productivity: An Applications Seminar in Industrial Problem Solving

Have you ever needed to determine what actions will most surely reduce waste and delay? Have you ever wished you could better judge the validity of data, evidence, claims and statements? Have you ever wished you could see through process complexities to the simple order that lies beneath? Have you ever wished you could avoid those efforts and projects which have poor promise of return? Have you wondered what project will most help your career and your company's competitiveness?

As a consultant, I am faced almost daily with some pretty tough problems. To make matters even more challenging, I must often figure things out within just a few hours of seeing a material, a machine or process for the very first time. To be effective in this role obviously requires a breadth and depth of knowledge, which I have shared with you in my Web Seminar. However, we are both regularly faced with problems which are new to experience or whose solutions are outside of our knowledge. For this reason, I developed a course and book, Critical Thinking in Converting, to teach industrial problem solving.

In this course I teach and apply by example, dozens of tools and techniques which can be brought to bear on process problems. Some tools, such as science and statistics, you may already have some familiarity. However, the emphasis of the course is simpler and quicker techniques that I've borrowed or developed to solve web machine problems. This is a truly

unique course, and perhaps the only one with industrial problem solving focus.

Course Outline

Defining a problem – getting started on the right foot

Gathering information - make working theories work for you

Formal and street-smart problem solving methods

Listing options, decision making, project planning

Problem solving pitfalls – how to avoid getting stuck