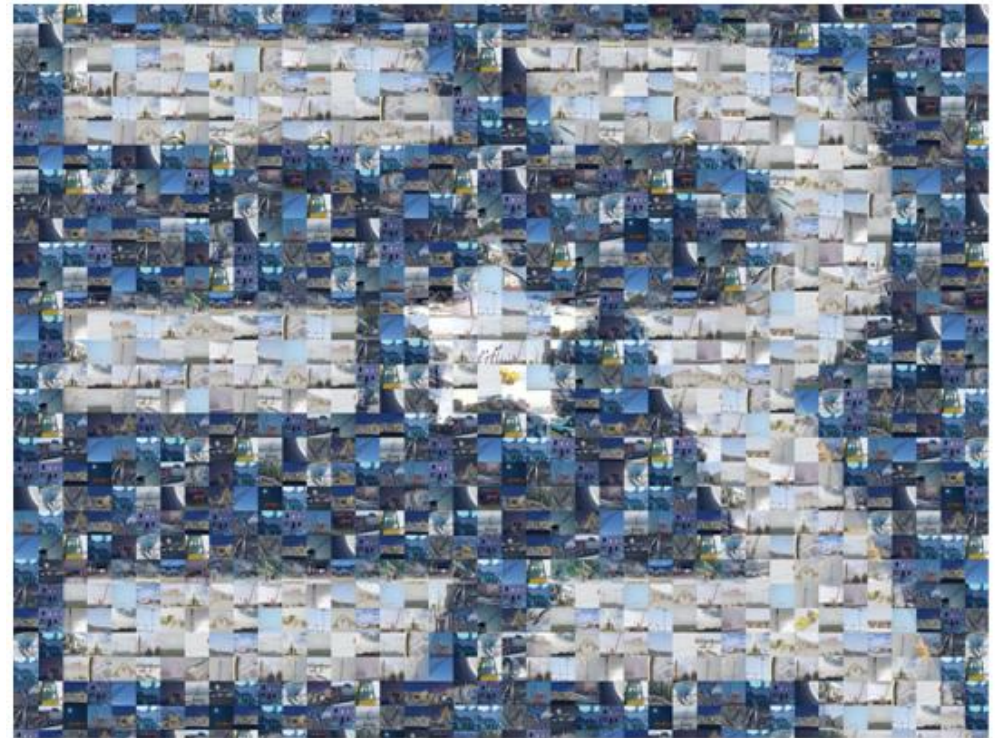


ERA Convention 2012

“Changing Rental”

Product Group – Compaction

Björn Jakobsén

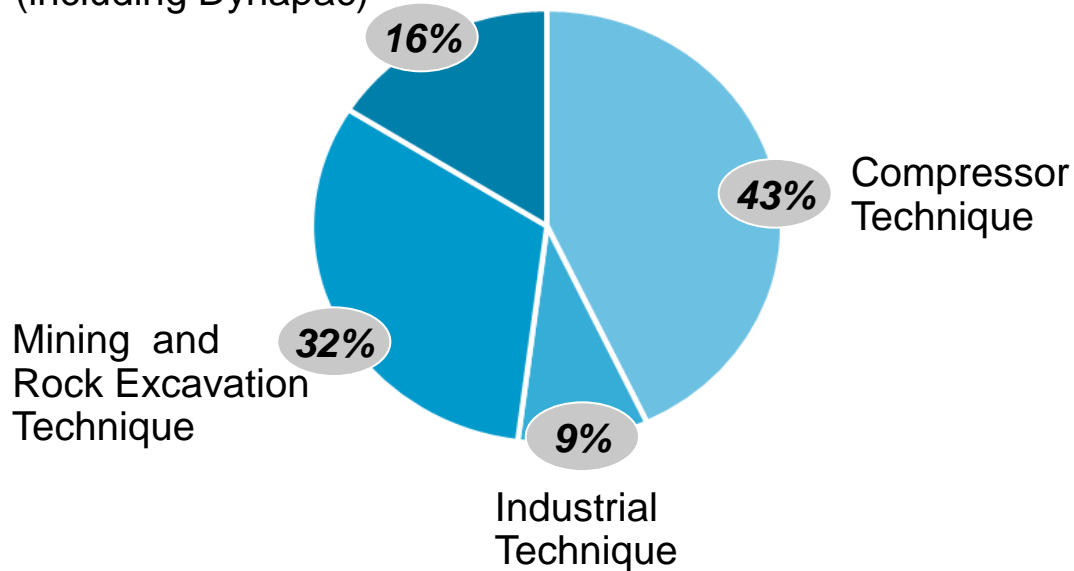


WWW.ERARENTAL.ORG

Supporting a wide variety of industries

Revenues per business area

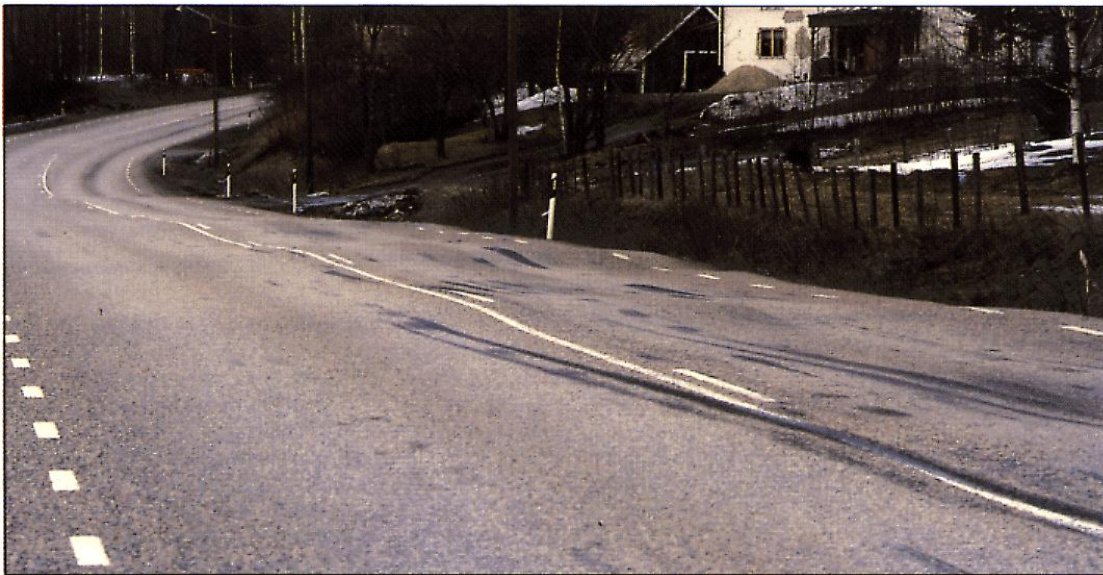
Construction Technique
(including Dynapac)



To review the different aspects of compaction between big and small, long term and short term rental.

Why compaction?

The enduser need a a basic understanding/training!





Compaction cost is 1-2%
of the total project cost

1% increased density
=
10-15% higher load bearing
and longer life time

High quality compaction pays off!

To review the different aspects of compaction between big and small, long term and short term rental.

For all compaction equipment rental:

- We need to know the compaction requirements on specific material to be able to suggest the right equipment. See road authority examples from Sweden/Norway slide 3-4.
- Basic end-user compaction knowledge is appreciated. The importance of Static linier load (not only dead weight of the equipment), Vibration amplitude and working speed. Comp Base/Pave comp are user-friendly tools that are available.
- Short-term/small eq. customers often need more support owing to less experience

To review the different aspects of compaction between big and small, long term and short term rental

Long-term contracts often means:

- More efficient solution (higher compaction performance) is preferred
- Ability to prove that required compaction is achieved, not just number of passes. Compaction meter is then required and now very common in Scandinavia, a system to document the work including cm accurate GPS
- More in depth operators training



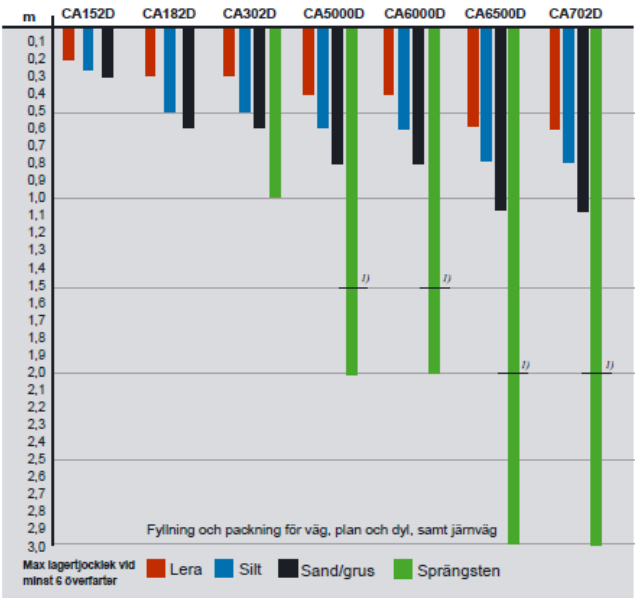
Spec from Norway

- Statens Vegvesen Håndbok 018
- Method spec

Valsetype	Komprimeringsutstyr		Uknuste materialer Sand, grus		Knuste materialer 4) Grus, pukk, kult, gjenbruksbetong		Sprengt stein	
	Total vekt (tonn)	Statisk lineær vekt (kg/cm ²) 1)	Lag-tykk. (mm)	Min. antall passer- ringer 2)	Lag-tykk. (mm)	Min. antall passer- ringer 2)	Lagtykk. (mm)	Min. antall passer- ringer 2)
Vibrerende slepevals	3-5	15-25	≤ 400	7	≤ 200 400	5 7		
	5-8	25-35	≤ 400 500	5 6	≤ 200 400 500	4 5 6	≤ 400 600 800	6 7 8
	> 8	> 35	≤ 400 500	4 5	≤ 200 400 500	3 4 5	≤ 400 600 800 1000	4 5 6 7
Selvgående vibrovals	6-8	15-25	≤ 400	8	≤ 200 400	5 7		
	8-10	25-35	≤ 400 500	7 8	≤ 200 400 500	4 7 8		
	10-13	35-45	≤ 400 500	5 6	≤ 200 400 500	4 5 6	≤ 700	4
	> 13	> 45	≤ 400 500	3 4	≤ 400 500	3 4	≤ 700 1000 1200	4 6 8
Tandemvals 3)	2-4	(15-25) ×2	200	6	200	6		
	4-8	(15-25) ×2	300	5	400	6		
	8-13	(25-35) ×2	400	5	400	5		

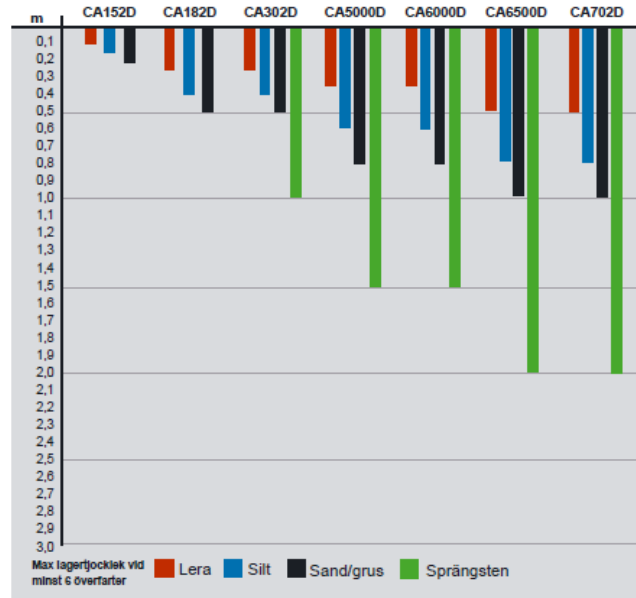
Max tillåten lagertjocklek enl. AMA 10, 6 överfarter

CE/3 Väg, plan och järnväg

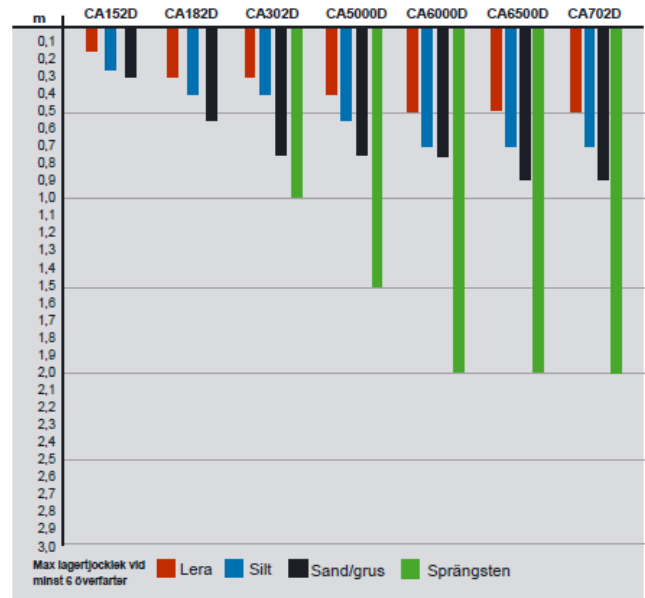


1) Den mindre tjockleken gäller vid fyllning och packning för järnväg

CE/4 Fyllning och packning för grundläggning av och fyllning och packning mot byggnader, mur, trappa, ledningar, fundament mm.



CE/6 Fyllning och packning för väg, plan od, kategori A.



- Materialtyp**
- **Sprängsten**
Bergtyp 1 (kulkvarnsvärde <18). Finjordshalt (0,063/63) <10 viktprocent.
Bergtyp 3 (kulkvarnsvärde >30). Finjordshalt (0,063/63) <15 viktprocent.
 - **Sand/grus**
Block och stenjordar. Grovkorniga jordar, finjordshalt (0,063/63) <15 viktprocent.
 - **Silt**
Blandkorniga jordarter med finjordshalt (0,063/63) 15-30 viktprocent.
Finkorniga jordarter med finjordshalt (0,063/63) >40 viktprocent och lerhalt (0,002/0,063) <=40 viktprocent.
 - **Lera**
Blandkorniga jordarter med finjordshalt (0,063/63) 31-40 viktprocent.
Finkorniga jordarter med lerhalt (0,002/0,063) >40 viktprocent och finjordshalt (0,063/63) >40 viktprocent.

Mer information ang. antal överfarter för att uppnå gällande packningskrav hittar du i Dynapacs erfarenhetsbank, CompBase.



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DYNAPAC CA6000D



Gravel

Fine content < 10 %
Clay content < 5 %
Optimum water content

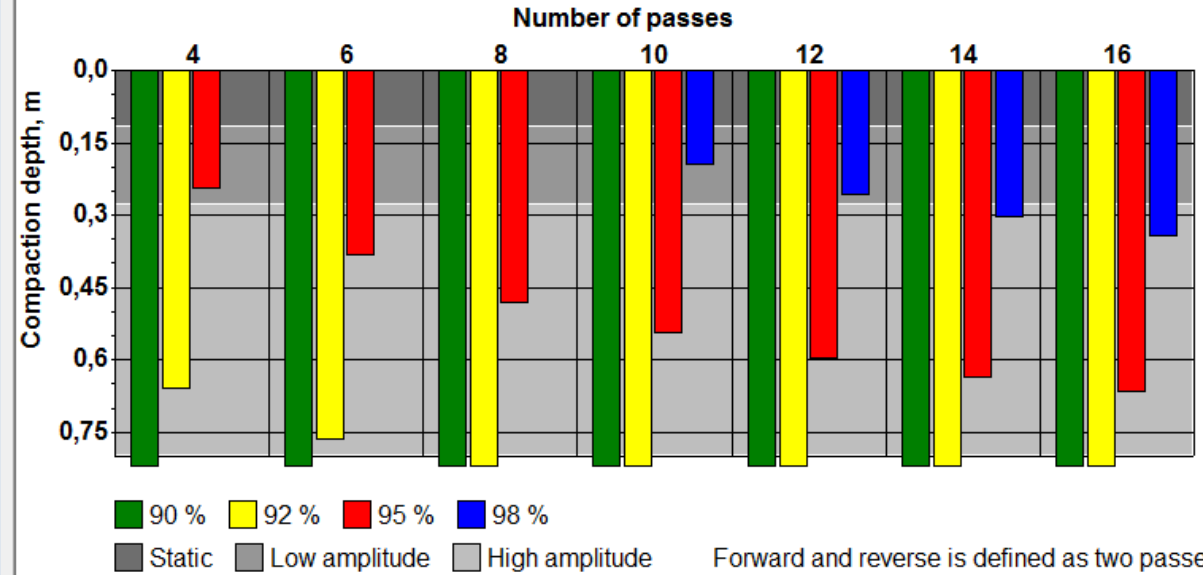
Depth
 Degree
 Capacity

Average
 Minimum

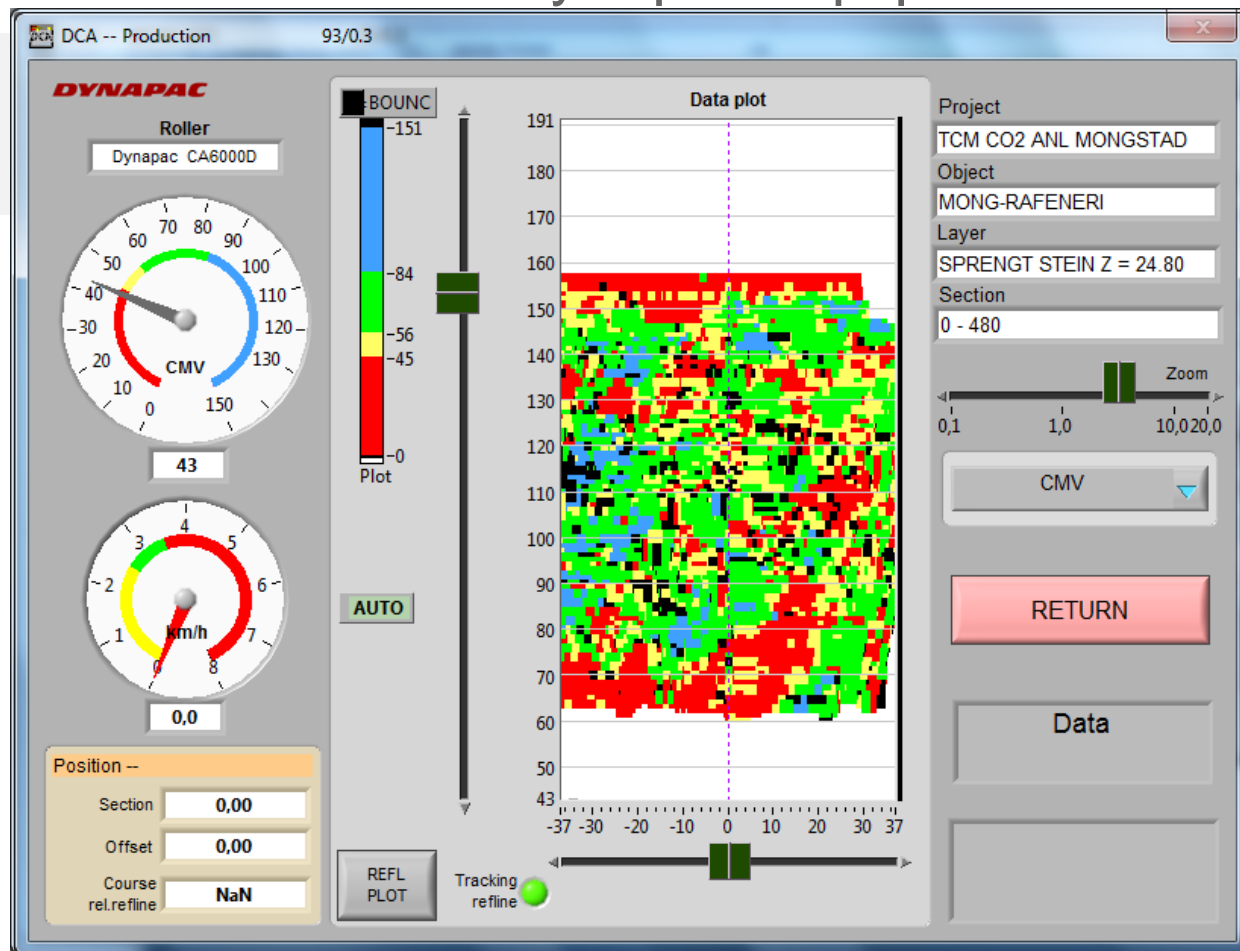
Print

Return

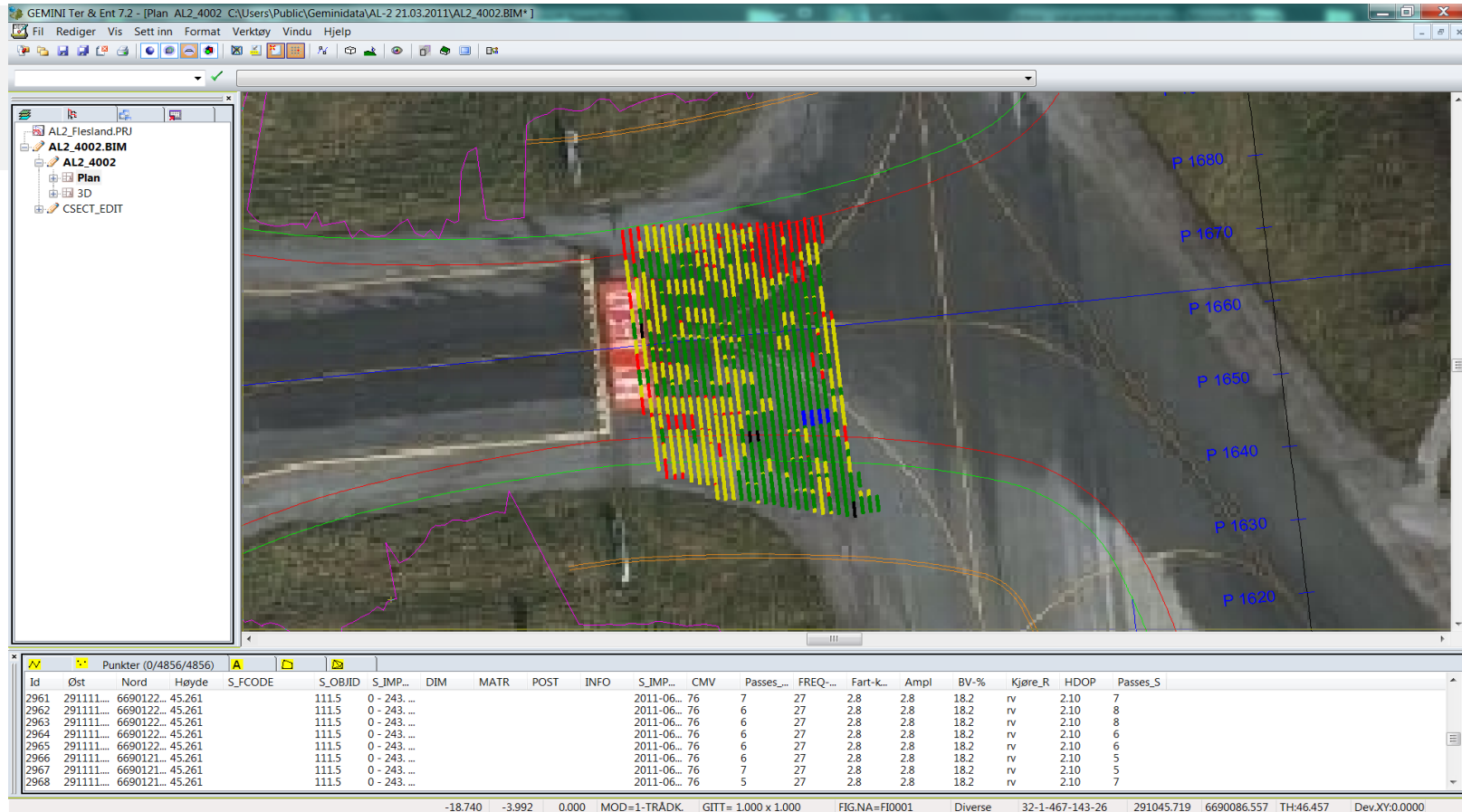
Modified Proctor, Average



DCA for Soil and Asphalt



DCA as preparation tool



- Documentation of existing structures
- Locate areas of inferior quality
- Correct these areas with good precision



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>Product of the Year<? Dynapac CA6000D soil compactor



DYNAPAC

MISSION

COMPACTION

CA5000D • CA6000D • CA6500D
CA5000DCO • CA6000DCO
CA5000PD • CA6000PD • CA6500PD



OPTIMIZED PARAMETERS

Provide superior compaction performance

ACTIVE BOUNCING CONTROL

Prevent damage to the roller and over-compaction

CROSS-MOUNTED ENGINE

A revolution in serviceability

LOW NOISE AND FUEL CONSUMPTION

Sustainability and working environment in focus

MISSION CONTROL

Puts you in full control of the entire compaction process

Dynapac education

- ⑩ Training Academy at our production facilities.
Operators/compaction training
- ⑩ Certification of operators
- ⑩ Local compaction training close to our customers





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ASSOCIATION



Atlas Copco



DYNAPAC

Part of the Atlas Copco Group

Committed to
sustainable productivity.



Atlas Copco

