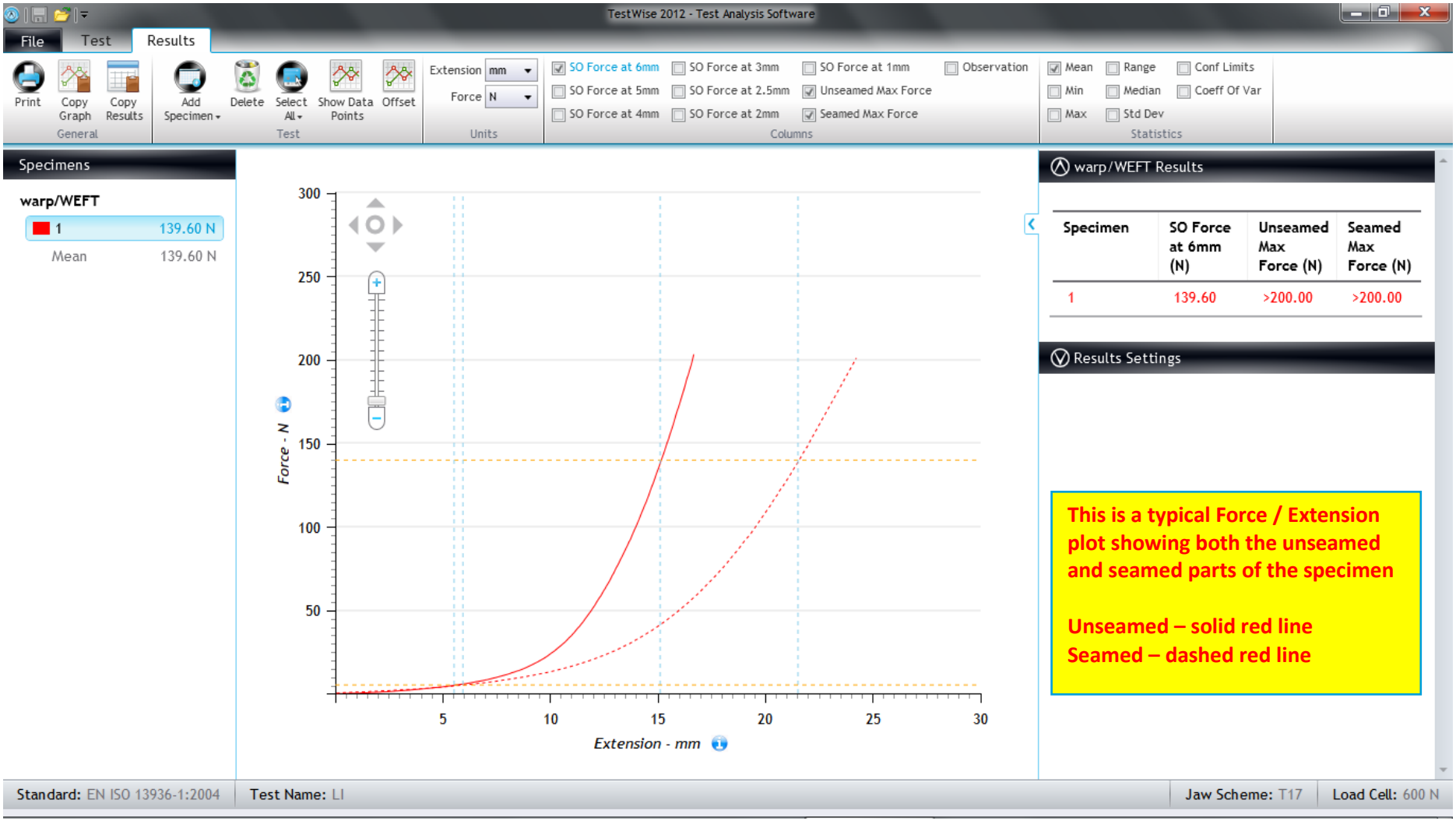
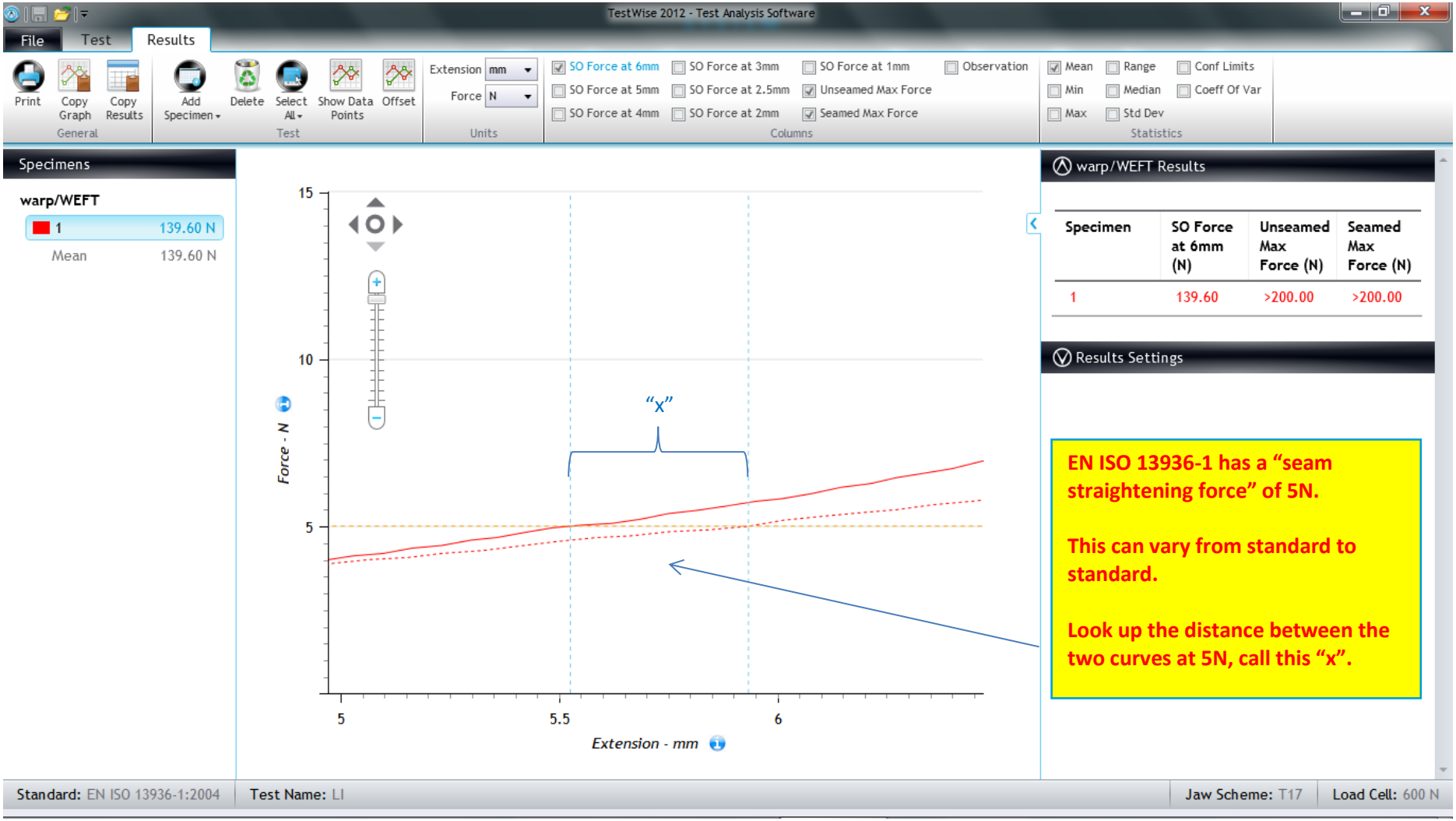
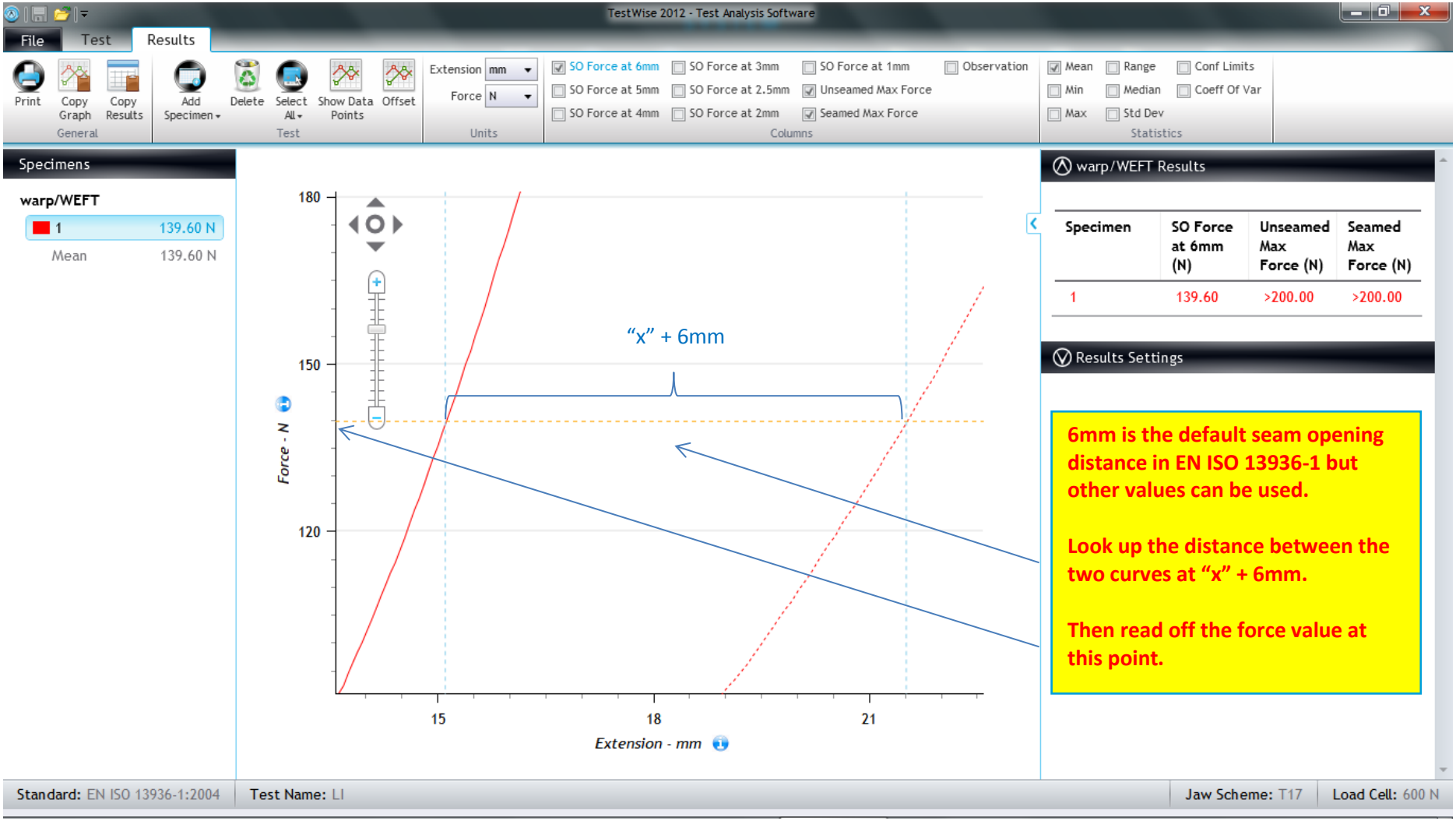
EXAMPLE OF CALCULATING SEAM OPENING FORCE

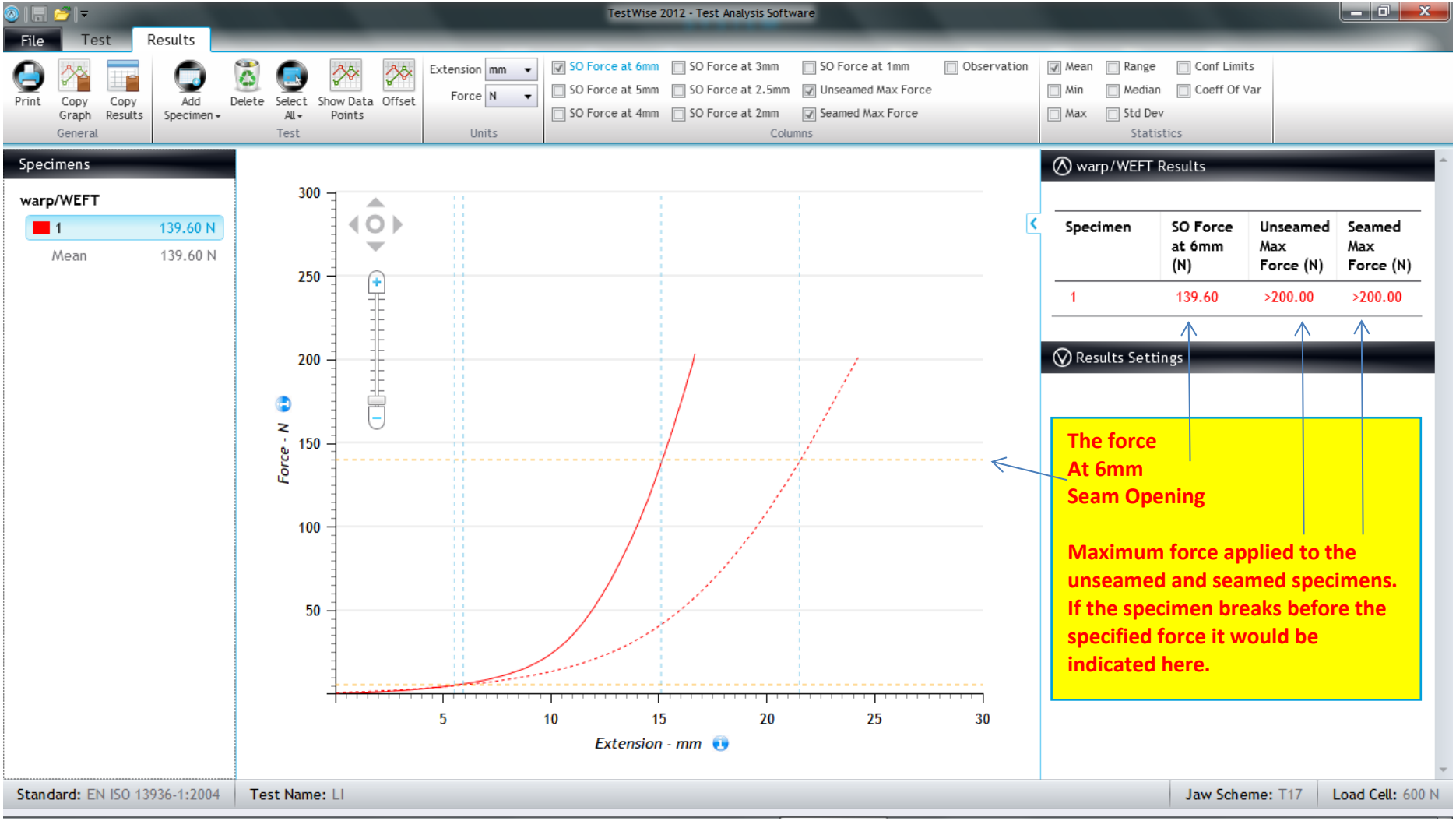
EN ISO 13936-1

Textiles – Determination of the slippage resistance of yarns at a seam in woven fabrics – Part 1: Fixed seam opening method




TestWise 2012 - Test Analysis Software
File
Test
Results
Print
Copy Graph
Copy Results
General
Add Specimen
Delete
Select All
Show Data Points
Offset
Test
Extension mm
Force N
Units
SO Force at 6mm
SO Force at 5mm
SO Force at 4mm
SO Force at 3mm
SO Force at 2.5mm
SO Force at 2mm
SO Force at 1mm
Unseamed Max Force
Seamed Max Force
Observation
Columns
Mean
Min
Max
Range
Median
Std Dev
Conf Limits
Coeff Of Var
Statistics
Specimens
warp/WEFT
1 139.60 N
Mean 139.60 N
15
10
5
Force - N
"x"
5
5.5
6
Extension - mm
warp/WEFT Results
Specimen
SO Force at 6mm (N)
Unseamed Max Force (N)
Seamed Max Force (N)
1
139.60
>200.00
>200.00
Results Settings
EN ISO 13936-1 has a "seam straightening force" of 5N.
This can vary from standard to standard.
Look up the distance between the two curves at 5N, call this "x".
Standard: EN ISO 13936-1:2004
Test Name: LI
Jaw Scheme: T17
Load Cell: 600 N


TestWise 2012 - Test Analysis Software
File
Test
Results
Print
Copy Graph
Copy Results
General
Add Specimen
Delete
Select All
Show Data Points
Offset
Test
Extension mm
Force N
Units
SO Force at 6mm
SO Force at 5mm
SO Force at 4mm
SO Force at 3mm
SO Force at 2.5mm
SO Force at 2mm
SO Force at 1mm
Unseamed Max Force
Seamed Max Force
Observation
Columns
Mean
Min
Max
Range
Median
Std Dev
Conf Limits
Coeff Of Var
Statistics
Specimens
warp/WEFT
1 139.60 N
Mean 139.60 N
180
150
120
Force - N
15
18
21
Extension - mm
"x" + 6mm
warp/WEFT Results
Specimen
SO Force at 6mm (N)
Unseamed Max Force (N)
Seamed Max Force (N)
1
139.60
>200.00
>200.00
Results Settings
6mm is the default seam opening distance in EN ISO 13936-1 but other values can be used.
Look up the distance between the two curves at "x" + 6mm.
Then read off the force value at this point.
Standard: EN ISO 13936-1:2004
Test Name: LI
Jaw Scheme: T17
Load Cell: 600 N


TestWise 2012 - Test Analysis Software
File
Test
Results
Print
Copy Graph
Copy Results
General
Add Specimen
Delete
Select All
Show Data Points
Offset
Test
Extension mm
Force N
Units
SO Force at 6mm
SO Force at 5mm
SO Force at 4mm
SO Force at 3mm
SO Force at 2.5mm
SO Force at 2mm
SO Force at 1mm
Unseamed Max Force
Seamed Max Force
Observation
Columns
Mean
Min
Max
Range
Median
Std Dev
Conf Limits
Coeff Of Var
Statistics
Specimens
warp/WEFT
1 139.60 N
Mean 139.60 N
Force - N
Extension - mm
warp/WEFT Results
Specimen
SO Force at 6mm (N)
Unseamed Max Force (N)
Seamed Max Force (N)
1
139.60
>200.00
>200.00
Results Settings
The force
At 6mm
Seam Opening
Maximum force applied to the unseamed and seamed specimens.
If the specimen breaks before the specified force it would be indicated here.
Standard: EN ISO 13936-1:2004
Test Name: LI
Jaw Scheme: T17
Load Cell: 600 N