



# Unitex® squeegees printing for the long run

## Unitex® Marathon Graphic screen printing

Unitex® Marathon provides premium screen printing performance and quality at a competitive price.

It is made from MDI (Diphenylmethane Diisocyanate) technology, and is designed to give superior resistance to degradation by commonly used inks, solvents and monomers used in modern printing processes.

**Benefits:**

- Compatible with most UV graphic inks - delivers the vibrant colors your printing demands
- Resistant to solvents used in modern ink systems - long predictable print runs \*
- Precision printing edge – pin sharp reproduction
- Excellent abrasion resistance - last print as good as the first print
- Made from high grade polyurethane - compatible with a wide range of inks and systems
- Tight manufacturing tolerances - minimal set up and re-set up times
- Consistent Durometer - keeping your colors strong and vibrant
- High degree of inspection - your last squeegee in stock won't let you down
- Trelleborg Expertise - high performance, long squeegee life and outstanding value



**Durometer/Color Coding:**

Tolerance: +/- 3° Shore A

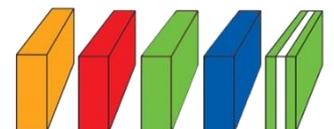


**Softer Squeegee**  
More ink, richer colors

**Harder Squeegee**  
Less ink, greater detail

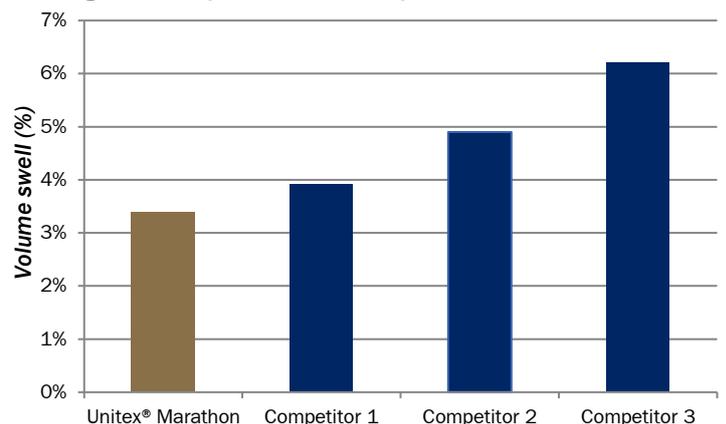
**Profile:**

- Single Durometer
- Multi Durometer



**\* Squeegee Solvent Swell Test**

80 Shore A Single Durometer Volume Swell Test in High Intensity White UV Ink System



Immersed in ink for 4 hours - complete test report available on request





# Graphic screen printing

Typical Unitex® Marathon squeegee applications for the graphic printing include: Plastics, PVC, Decals, Vinyl, Paper, Labels.

## Graphic Printing Processes:

- Automatic flat screen
- Semi-automatic screen
- Rotary screen
- Hand printing

## Typical Ink Systems:

- UV
- Solvent based
- Water based

## Technical Recommendations:

- For printing graphics the squeegee must have the right amount of flexing to transfer ink correctly through the screen and have good solvent/UV ink resistance. Also, it must be free from surface imperfections and irregularities, especially for high quality graphics. Typically for high resolution graphics Unitex® Marathon 75° Shore A (or harder) squeegee is used
- Many printers use Unitex® Marathon Multi Durometer squeegee in 70° or 75° Shore A when higher print pressure is required to ensure fine detail. As it is a multi-purpose squeegee, it can be used on many different types of machines – meaning a cut down on inventory
- Generally, lower hardness squeegees are used for larger mesh openings - such as Unitex® Marathon 65° Shore A

**Unitex® Marathon exceeds the performance of similar squeegees on the market**



## Technical Data:

Dimensions	Plain Section	Tolerance
Length	Up to 3750mm (147")	+/- 10mm
Width	15 - 50mm (0.6 - 2")	+/- 0.5mm
	50 - 100mm (2 - 4")	+/- 1mm
	100 - 610mm (4 - 24")	+/- 5mm
Thickness	Up to 12.5mm	+/- 0.4mm
Type	Hardness	Tolerance
Unitex® Marathon	60° - 90° Sh A in 5° Increments	+/- 3° Shore A

Available in different profiles, hardnesses and sizes on request.

## Case study

Large volume screen printer.

### Objectives:

The company wanted to increase quality as well as reduce excessive wastage and downtime. Before changing to Unitex® Marathon they had constant quality issues with their previous supplier, which included defects in the middle of the printing edge.

### Outcome:

- Excellent quality - zero rejects
- Improvements in print quality and accuracy
- Extended print runs
- Significant reduction downtime and wastage



### Comments from the Print Manager:

'After using Unitex® Marathon for over a year, we could not be happier. The quality issue has now been resolved. It performs really well with UV inks, which has allowed us to increase our print runs. We have now converted all of our screen printing squeegees to Unitex® Marathon.'

## Contact Us

Trelleborg Applied Technologies delivers innovative and reliable solutions that maximize business performance to meet your needs. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.

Tel: +44 (0) 1777 712500

Email: [appliedtechnologies@trelleborg.com](mailto:appliedtechnologies@trelleborg.com)



[WWW.TRELLEBORG.COM/APPLIED-TECHNOLOGIES](http://WWW.TRELLEBORG.COM/APPLIED-TECHNOLOGIES)

