



# Unitex<sup>®</sup> squeegees printing for the long run

## Unitex<sup>®</sup> Exar

Unitex<sup>®</sup> Exar provides excellent screen printing performance for a wide range of applications.

Made from a high grade Diphenylmethane Diisocyanate (MDI) polyurethane Unitex<sup>®</sup> Exar is designed to provide exceptional abrasion resistance, ensuring consistent sharp image quality over long print runs. Independent tests showed a 69% improvement in abrasion loss against a standard MDI polyurethane, which translates to longer screen printing cycles. This will provide a significant cost and time savings as the blade does not need to be changed as often.

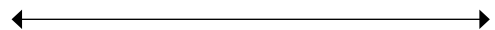
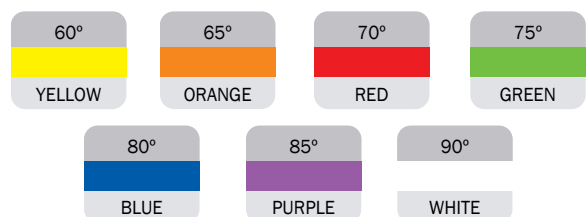
Unitex<sup>®</sup> Exar, is resistant to degradation by commonly used inks, solvents and monomers used in modern printing processes and works exceptionally well on all industrial screen printing as well as decorative printing; such as textiles, graphics, bottles and containers.

### Benefits:

- Exceptional abrasion resistance compared to similar in its class
- Precision printing edge
- Made from high grade polyurethane
- Compatible with most UV graphic inks
- Tight manufacturing tolerances
- Improved volume swell and hardness retention
- Superior solvent resistance and durability
- Ideal for UV ink systems and continued use and processing

### Durometer/color coding

Tolerance: +/- 3° Shore A

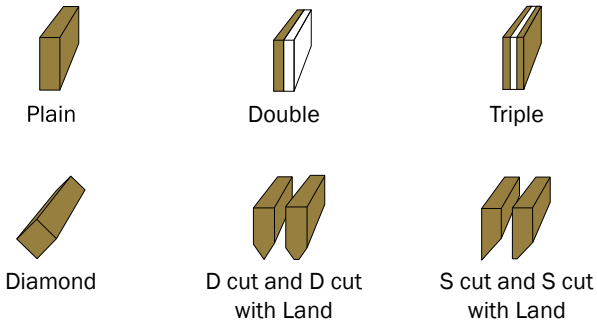


**Softer squeegee**  
More ink, richer colours

**Harder squeegee**  
Less ink, greater detail

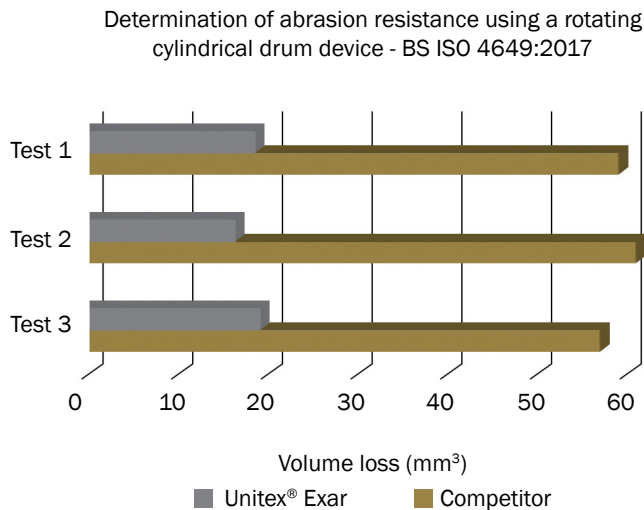
## Profiles

Plain  
 Double  
 Triple  
 Diamond  
 D-Cut 45° and 62°  
 D-Cut with Land 45° and 62°  
 S-Cut 45° and 62°  
 S-Cut with Land 45° and 62°



## Abrasion resistance test - BS ISO 4649:2017

Greater abrasion loss means direct wear to printing edge, resulting in a change in profile and declining print performance causing inconsistent results throughout print run.



## Unitex® Exar is suitable for both high precision and decorative applications including:

- Bottles & containers
- Ceramics
- Glass
- Graphics and decals
- Industrial
- Textiles

## Unitex® Exar exceeds the performance of similar squeegees on the market

### Specifications:

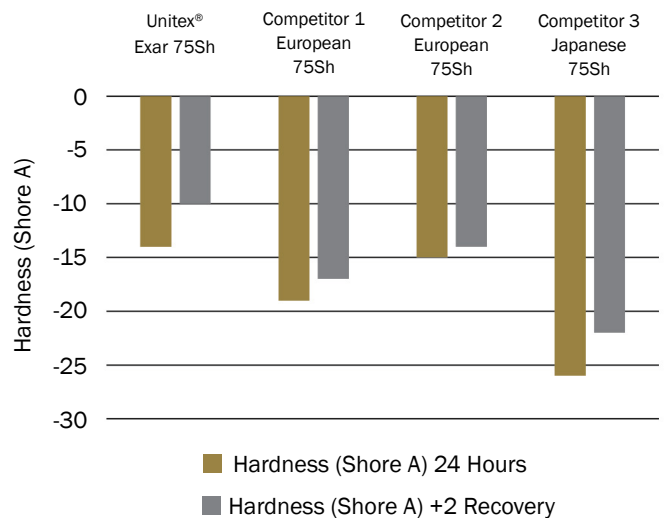
Dimensions	Plain section	Tolerance
Length	Up to 3750 mm (147")	+/- 10 mm
Width	15 - 50 mm (0.6 - 2")	+/- 0.5 mm
	50 - 100 mm (2 - 4")	+/- 1 mm
	100 - 610 mm (4 - 24")	+/- 5 mm
Thickness	Up to 12.5 mm	+/- 0.4 mm
Type	Hardness	Tolerance
Unitex® Exar	60° - 90° Sh A in 5° increments	+/- 3° Shore A

Available in different profiles, hardnesses and sizes on request.

## Full immersion cyclohexanone solvent

### Hardness change

Reduction in hardness reduces the effective print angle and control, resulting in loss of definition and half tone. Unitex® Exar prevents this.



## Technical data chart

Physical Property	Values	Standard
Tensile break strength	49.5 Mpa	BS ISO 37:2017
Tensile break strain	497%	BS ISO 37:2017
Tensile stress at 100% elongation	3.95 Mpa	BS ISO 37:2017
Tensile stress at 300% elongation	10.66 Mpa	BS ISO 37:2017
Tear strength (die B - nicked)	36.48 kN/m	ISO 34-1:2010
Abrasion resistance - volume loss (rotating cylindrical drum - aluminium Oxide 60 grit)	18 mm <sup>3</sup>	BS ISO 4649:2017
Solvent swell mass increase - 2hr submersion in cyclohexanone	16.86%	BS ISO 1817:2005
Solvent swell hardness decrease - 2hr submersion in cyclohexanone	-7 Shore A	BS ISO 1817:2005
Solvent swell hardness recovery - cyclohexanone 2hr + 120hr recovery	-1 Shore A	BS ISO 1817:2005
Retained hardness post swell - cyclohexanone 2hr + 120hr recovery	98.70%	BS ISO 1817:2005
Retained tensile break strength post swell - cyclohexanone 2hr + 120hr recovery	54.5%	BS ISO 1817:2005
Retained tensile break strain post swell - cyclohexanone 2hr + 120hr recovery	90.83%	BS ISO 1817:2005
Retained tensile stress at 100% elongation post swell - cyclohexanone 2hr + 120hr recovery	86.86%	BS ISO 1817:2005
Retained tensile stress at 300% elongation post swell - cyclohexanone 2hr + 120hr recovery	79.69%	BS ISO 1817:2005
Average percentage of retained properties post swell	82.12%	BS ISO 1817:2005
Resilience - rebound resilience	41%	DIN 53512:2000

## 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.



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