Brushes

Overview

Roll Brush

Implanted Roll Brush

Overview

Offers Bar type. Strip Brush and Roll Brush, which are well suited for various industrial applications such as parts leveling, dusting and washing.

Additionally, MISUMI original attachment bracket are provided. Implanted Roll Brush





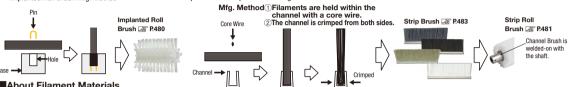




Features of Implanted Roll Brush / Strip Brush

There are 2 ways to manufacture brush: "Implanted Roll Brush" which plant the filaments and "Strip Brush" which arrange the filaments arranged on a straight line. "Implanted Roll Brush" has the property which causes less clogging. "Strip Brush" has the propety which enables more filament and less subject to falling-out.

· Implanted Roll Brush Mfg. Method · Strip Brushes / Strip Roll Brush Mfg. Method



Abou	ıt F	ilamen	ŧΜ	ater	ials

	About Filament Mat	rerials — — / Image /
	Filament Material	Feature
	Nylon 6	Good wear resistance, fatigue resistance, and resiliency characteristics suitable for long term operation. Suitable for food processing. Maximum temp limit for the filaments is 100°C Care should be taken since Nylon 6 dissolves in strong hydrochloric acid, sulfuric acid, formic acid, and phenolic acid.
	Thunderon®	The organic conductive fiber made by copper sulfide chemically bonded to acrylic fiber has static neutralizing functionality. Flexible and has excellent wear resistant characteristics in spite of its low specific density. (Thunderone is a registered trademark of Nihon Sanmo Dyeing Co., Ltd.
	Conductive Nylon Mono-Eight®	Carbon is compounded with nylon so that it is antistatic even if directly contacting with workpiece. Use conditions conform to Nylon 6. Has thicker filament diameter than Thunderon. Resilient filament is usable for anti-static measures. Mono-Eight is a registered trademark of TORAY MONOFILAMENT Co.,Ltd.
_	Nylon with Abrasive Grain	Abrasive particles are compounded with nylon so that it is more resistant to breakage and burrs than Nylon 6. Uses Alumina #320.

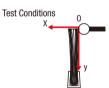
Filament Diameter of Channel Brush (for 30mm)

Channel Width			5mm			3mm				
Filament Material			rlon 6 Conductive Nylon Wono-Eight® Nylon w			Nyle	on 6	Thunderon®	Conductive Nylon Mono-Eight®	
Filament Dia.	0.2	0.3 0.5		0.3	0.6	0.2	0.3	0.075	0.075 0.3	
Photo										
Strip Brush	0	0	0	0	0	0	0	0	0	
Roll Brush		0	0			0				

Filament Material	Filament Diameter	Feature
	0.2	Feel of Tooth Brush (Normal)
Nylon 6	0.3	Feel of Bathtub Brush. Harder than Tooth Brush (Hard)
	0.5	Hard. Feel of Deck Brush
Thunderon®	0.075	Diameter and Feel of Average Human Hair.
Conductive Nylon Mono-Eight®	0.3	Feel of Bathtub Brush. Harder than Tooth Brush (Hard)
Nylon with Abrasive Grain	0.6	Harder and more resilient than Nylon 6, 0.5.

Channal Width TE

Elasticity Test of Strip Brush



Loads are measured while the filament tip (y0 ~ 1mm) is pushed in X direction to cause the leaning

Measured values are not guaranteed values but an example of measured values.



see the test conditions	on the left.
Brush Test Sample	Load in X mm Direction (N)

brusii iest sample			Load in A _ min Direction (N)			uon (N)	Channel Width 15				
Material	Strip Width	Filament Dia.	Filament Length (mm)	1mm	3mm	5mm	10mm	5.5 Nylon 6-T5-0.2-20			
		0.2		0.18	0.45	0.95	1.45	5.0			
		0.3	20	0.45	0.98	1.40	2.50	4.5- Nylon 6-15-0.2-50 Nylon 6-T5-0.3-20			
		0.5		3.20	6.20	9.80	11.90	4.0- Nylon 6-T5-0.3-30			
		0.2		0.05	0.16	0.33	0.50	3.5 Nylon 6-T5-0.3-50			
	5		30	0.03	0.10	0.60	0.98	3.0 - Nylon 6-T5-0.5-20			
	5	0.3	30					2.5 Nylon 6-T5-0.5-30			
		0.5		1.00	1.90	3.05	4.95	Nylon 6-T5-0.5-50 Conductive Nylon-T5-0.3-20			
		0.2		0.01	0.06	0.07	0.16	1.5- Conductive Nylon-T5-0.3-20			
Nylon 6		0.3	50	0.06	0.15	0.16	0.26	Conductive Nylon-T5-0 2-50			
		0.5		0.06	0.20	0.42	0.88	1.0 Nylon with Abrasive Grain-T5-0.6-2			
		0.2	20	0.15	0.34	0.61	1.00	0.5 Nylon with Abrasive Grain-T5-0.6-3			
	3	0.3	20	0.21	0.50	1.17	1.85	0.0 Nylon with Abrasive Grain-T5-0.6-5			
		0.2	30	0.07	0.15	0.17	0.35	Tillin Sillin Sillin Tollini			
		0.3	3	0.08	0.21	0.25	0.70	Channel Width T3			
		0.2	-	-	-	0.06	2.5 Nvlon 6-T3-0.2-20				
		0.3	0.3	0.01	0.02	0.06	0.15	→ Nylon 6-T3-0.2-30			
			20	0.02	0.08	0.15	0.23	Nylon 6-T3-0.2-50			
Thunderon®		0.075	30	-	-	0.01	0.05	Nyloii 6-13-0.3-20			
			20	0.50	1.00	1.80	2.80	Nylon 6-T3-0.3-30 Nylon 6-T3-0.3-50			
	5	0.3	30	0.20	0.30	0.80	1.30	1.5- Nyion 6-13-0.3-50 Thunderon®-T3-0.075-20			
onductive Nylon			50	0.02	0.16	0.17	0.50	- Thunderon®-T3-0.075-30			
Mono-Eight®			20	0.20	0.50	1.10	2.10	1.0 - Conductive Nylon-T3-0.3-20			
mono Eignt	3	0.3	30	0.05	0.18	0.40	1.00	Conductive Nylon-T3-0.3-3(
	,	0.0	50	0.01	0.02	0.06	0.18	0.5-			
			20	0.70	2.00	5.80	8.20				
Nylon with	5	0.6	30	0.30	0.80	1.90	4.20	0.0			
brasive Grain	-		50	0.05	0.10	0.50	1.10	0.0 1mm 3mm 5mm 10mm			

•Values are for reference only, not guaranteed.

■Precaution for Use

- 1 Brush's service life will vary depending on usage conditions and frequency. Pulling off some filaments may cause entire falling-out.
- ②Maximum temp limit for the filaments is 100°C. The filaments will melt and fall off at above 100°C.
- 3Nylon 6 dissolves in strong hydrochloric acid, sulfuric acid, formic acid, and phenolic acid.
- (4) Brush press contact length should be 2mm or less. Do not press further than necessary. (5)Do not bend the channel brush.
- ⑥The Strip Brush has ±2mm bow/bend per L100mm.

■Precaution for Use and Storage

- ①For storage, take care so that the filaments are not plastically deformed. If the brush is left in contact with workpiece while in storage, the filaments may be deformed permanently. Additionally, avoid filament tips from contacts when storing the brush by itself.
- ②Dry before storage.
- 3 Remove any foreign objects from the brush.
- (4)Do not use in high temp. environment or near fire.

RoHS10 ■Brush Body 6.3/(6.3/) Hole for Filament Implanting 3.5 Material Type Туре Brush Filament ■ Dedicated Shaft Collar 6.3/(6.3/) Fixed Nylon 6 2-M5(90°) *D1 =35 Ivlon 66 (Filament Dia, No. 0.1) Brush Rody Vvlon 6 (Filament Dia, No. 0,2~0,5) Configurab Conductive Nylon Mono-Eight® Dedicated Shaft Collar 304 Stainless Steel Dedicated Shaft Collar Construction Diagram Type Filament Dia. d C0.5 CO.5, 0.1 0.1 5 10

Tuse the brush at less than 1000rpm. Note that maximum rotational speed varies depending on mounting method, brush length, brush 0.D. or the number of connected brush.

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■Brush Fixed

LIRRSNE

URBSMF

0.2

0.3

0.3

0.21

0.295

0.295

0.5 0.535 0.15 0.15

Part Number			Filament			D ₁	v	н	Proper Motor Power	Unit Price	
Type	D		Dia. No.	Filament Dia.	d	ן ים	۷	п	(Unit: kW) PReference Value	L50	L100
	80	50				35	15	22.5	0.4		
URBSN	100		0.3	0.3	0.295	40	20	30.0	0.75		
	150	100	i			40	20	0.75			

Fixed by interlocking concave-convex surface.

Brush Configurable												
Part Number		D 5mm	L	Filament	v	н	Proper Motor Power					
Type	D ₁	Increment		Dia. No.	٧	(H=(D-D ₁)/2)	(Unit: kW) PReference Value					
URBSNF	35	60~80	50	0.1	15	12.5~22.5	0.4					
	33	00~80	30	0.2	13							
UNDONF	40	70~150	100	0.3	20	10~55	0.75					
				0.5	20	10~33	0.75					
	35	60~80	50	0.15	15	12.5~22.5	0.4					
URBSMF	3	00~80	30	0.13	13	12.5~22.5	0.4					
OTIDOWII	40	70. 150	100	0.2	20	10.55	0.75					

Dedicated Shaft Collar (Concave-Convex at Both Sides, 2 pcs.)

Part Num	ber	v	Accessories	Unit Price	
Type D ₁		٧	Accessories	Onit Price	
URBSSC	35	15	Hex Socket Set Screw (Flat End) MSSFS5-8		
UNDOOC	40	20	(304 Stainless Steel)		

Select the same size as the brush body D1.



Configure Online

Dedicated Shaft Collar Part Number







■Brush Configurable

Part Nur	Part Number				Filame	nt Dia.	
Type	D1	D	- [0.1	0.2	0.3	0.5
	35	60~80	50				
UDBONE	40	70~150	50				
URBSNF	35	60~80	100				
	40	70~150	100				

	Part Nu	Part Number			Filament Dia.		
	Туре	D ₁	D		0.15	0.3	
Т		35	60~80	50			
Ī	URBSMF	40	70~150	30			
Π	UNDSIVIE	35	60~80	100			
Ī		40	70~150				

Example

2. Only have to replace the worn parts Can be positioned only on the required part

Advantages 1. Can be lengthen by interlocking

rixing Method (Machined Shaft)