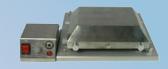


# Bench-Top Capsule Filling System

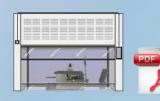
For Use in R&D • Pharmacy Compounding • Nutritional Supplements • Clinical Studies







Optional Powder Vibrator



Powder Hood Guide



# Watch videos at www.profiller.com

ProFiller 300-hole models are the new standard in bench-top capsule filling systems. Available with a choice of Orienters and the largest selection of optional accessories. Experienced capsule users like the higher output, fast size changes, easy to clean design & optional accessories. First time users love the ease-of-use & upgrade options.



#### **Easier To Use**

- Multiple design features make ProFiller easier to use than any other capsule filling system.
- Indicator gauges assist in capsule orientation, separation and locking.
- Fast, trouble-free capsule size changes. All Change Parts marked & fit adjustment free.
- Well-illustrated manuals in multiple languages & video tips at www.profiller.com.



#### **Higher Output**

- Inox (SS316) Filler Plates reduce static for faster filling.
- Tamper pins optimized for higher fill weights & faster filling.
- · Locking handle rear-facing & longer for easier locking.
- Adjustable capsule body height for over-filling.
- Oversize Powder Tray & Push Plate.
- 3700 has a lightweight, 2-piece Orienter & Orienter locater.



### **Grows with You**

- Change Parts Sizes 000-5, 00el-2el & AAA-D¹.
- Add a Powder Vibrator at any time.
- Upgrade 3700/3800 to X900 by adding Orienter & Orienter Change Parts.
- Powder Hood Guide & Lower Height Configuration available.



#### **GMP & Faster Clean-Out**

- Dishwasher safe Inox (SS316) Filler powder contact parts.
- Designed for fast disassembly & visual verification of cleaning.
- Bench-top Filler Base in lightweight corrosion resistant anodized aluminum or upgrade to Inox (SS316).
- Filler Gear, Cam and optional Vibrator are fully covered.



#### Pharmacopoeia Compliant

- Fill weights, USP/EP method within ± 1-3% of average. Typically all 300 capsules/batch are within ± 4-7% of target. More information at <a href="https://www.profiller.com/3fw">www.profiller.com/3fw</a>.
- Validation package available for cGMP compliance.
- Works with all capsules: gelatin, vegetarian/HPMC starch & enteric

<sup>1</sup>3700 in Size 000-5 & 00el-2el, 3800 in Size 00-4, 3900 in Size 00-4; and, 3700 OE in Size AAA-D.

Also Available



#### **Exclusive Features & Options**

- Caps Tray in Inox (SS316) or lightweight anodized aluminum.
- Partial Batch Kit for filling less than a full batch (3700 Only).
- Capsule Counters.
- Attachments for over-encapsulation of tablets, capsules & caplets, and for liquid filling, over filling and partial filling of capsules.

‡output based on powder, operator speed & number of tamps.

Designed & Manufactured by:



1100 / 1120

3600\*

Mixers



Mill

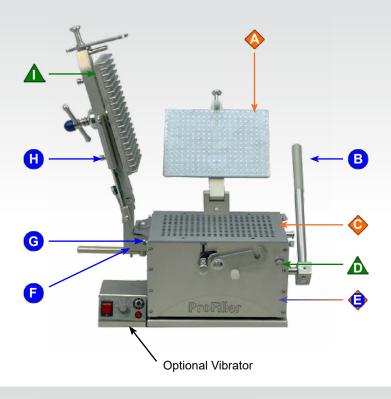


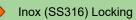
www.torpac.com • info37@torpac.com T: 973-244-1125 F: 973-244-1365 333 Route 46, Fairfield, NJ 07004, USA

\*Upgradeable to 3700 / 3800 / X900

# **Key Features**

# 20+ design features make ProFiller the Bench-Top Fillers of Choice





Inox (SS316) Locking Plate. No rubber pad to wear out or clean.

- Rear locking handle for fast, easy movement across front of В machine.
- Dishwasher safe Inox (SS316) powder contact parts including Bottom Plate (not visible).
- A Adjustable capsule body height for over-filling of capsules.
- Base Frame in light-weight anodized aluminum or upgrade to Inox (SS316).
- Cam position indicator, great for training new operators.
- Over-size thumb screws for easy size change over.
- Dual springs make Tamper easier to lower & raise.
- Tamper pin size range optimized for faster filling & higher fill weights. Size ranges: 00, 0-1, 2-3, 4, 5, 000 & 00el.



Ease of Use



**GMP** 



Speed



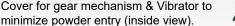
Body Sheets fully separate for easy cleaning

& visual verification of cleaning.



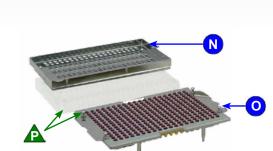


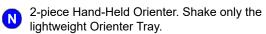
Powder Tray is double-depth for faster spreading.





Multi-use Push Plate speeds up operations.

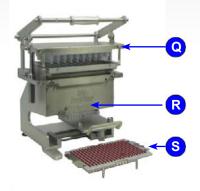


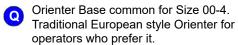


Locking indicator confirms capsules are fully locked.



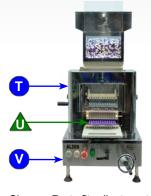
Locating holes in Orienter and tapered locating pins for fast & accurate orientation of capsules into Caps Tray.



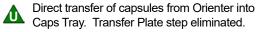


Guide lines to locate Caps Tray for partial batches

Locking indicator confirms capsules are fully locked.



Change Parts fit adjustment free. All screws use same size Allen key.



All factory settings marked for fast and easy re-set if required. See Manual.

Easy access lubrication points on side of W machine.



# **ProFiller X900 & Common Items Ordering Information**

Prices US\$ FOB NJ. Valid 30 Dec 2017

# X900 - Automatic Orienter for Highest Output 8,100 to 14,400 capsule/hour<sup>‡</sup>

# **Full System**

# Everything you need to fill one capsule size:

- Filler Base & Orienter Base
- Change Parts for one capsule size
- 300-pin Tamper
- **Powder Tray**
- Push Plate
- **Powder Spreaders**
- Storage Box for Loose Parts\*
- Capsule Bins\*



	110-120V / 60Hz	220-240V / 50Hz
	\$13800	\$13800
Size 00:	X9F BFU 00	X9F BFR 00
Size 0:	X9F BFU 0	X9F BFR 0
Size 1:	X9F BFU 1	X9F BFR 1
Size 2:	X9F BFU 2	X9F BFR 2
Size 3:	X9F BFU 3	X9F BFR 3
Size 4:	X9F BFU 4	X9F BFR 4

Capsule sizes 5, 000, 00el-2el, AAA-D available as ProFiller 3700 / 3700OE.

## **Change Parts**

### Change Parts for one capsule size include Filler:

- **Body Sheet Set**
- Caps Tray Locking Plate Spacer

#### Orienter:

- Magazine
- Rectifier Raceway
- Slide
- **Additional Caps Tray**

<sup>&</sup>lt;sup>†</sup> If you can fill Size 4 only also order Bottom Spacer Plate P3B BSP 00-3 for \$150.



Size 00:	X9F CPS 00 <sup>†</sup>	\$3575
Size 0:	X9F CPS 0 <sup>†</sup>	\$3575
Size 1:	X9F CPS1 <sup>†</sup>	\$3575
Size 2:	X9F CPS 2 <sup>†</sup>	\$3575
Size 3:	X9F CPS 3 <sup>†</sup>	\$3575
Size 4:	X9F CPS 4	\$3575

- See below if Tamper is required.
- · Capsule sizes 5, 000, 00el-2el, AAA-D available as ProFiller 3700 / 3700OE.

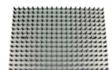
# Common Items for All Models 3700, 3800 & X900

## Tamper for additional sizes (recommended)

300-Pin Tamper is Inox (Stainless Steel 316)

Tampers increase filling speed and fill weights.

Tamper are capsule size specific.



Size 00:	P3B T300P 00	\$370
Size 0-1:	P3B T300P 0-1	\$370
Size 2-3:	P3B T300P 2-3	\$370
Size 4:	P3B T300P 4	\$370

## **Powder Vibrator** Optional Vibrator recommended for faster filling of powders that bridge or are sticky, granular, fluid or flour-like. It also reduces fill weight variation of fine powders. Fully enclosed in Inox (SS316). Filler sits over Vibrator. Also available with Inox (SS316) Base Plate.



Volts / Hz	Item#	US\$
110-120 Volts/60Hz	P3B VIB 110V	\$1980
220-240 Volts/50Hz	P3B VIB 230V	\$1980
100 Volts/50 or 60Hz	P3B VIB 100V**	\$1980

<sup>\*\*</sup> PM VIB 100V is for Japan. It is supplied in 50Hz for East Japan and 60Hz for West Japan. Please specify your requirement.

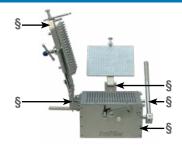
# Inox (Stainless Steel 316) Filler Base Upgrade

Upgrade your Filler Base from Anodized Aluminum to Inox (Stainless Steel 316). Add \$1000 to the price of a standard system of the same size.

Change Parts and Tampers for both filler bases are common.

Inox (SS316) cannot be used with a standard Powder Vibrator. A special Powder Vibrator is required for \$2100.

See www.profiller.com/3fbu for item codes and net weight.



Filler Inox (Stainless Steel 316)

§ Additional Parts in Inox (SS316)



Vibrator Inox (Stainless Steel 316)

## **Alternate Configurations**

All Filler models are also available without a Tamper for those using vibration only, and in reduced height configurations for use under a powder hood. See page 7 for additional configurations. For Powder Hood guide see www.profiller.com/phg.

<sup>\*</sup>Not Shown in Photo



# **ProFiller 3700 / 3800 Ordering Information**

Prices US\$ FOB NJ. Valid 30 Dec 2017

Size 00:

Size 0:

Size 1:

Size 2:

Size 3:

Size 4:

Size 000:

# ProFiller 3700 - Upgradable Model up to 7,200 - 9,000 capsules/hour<sup>‡</sup> **Full System**

# Everything you need to fill one capsule size:

- Filler Base & Orienter Base
- Change Parts for one capsule size
- 300-pin Tamper
- Powder Tray
- Push Plate
- **Powder Spreaders**
- Storage Box for Loose Parts\*
- Measuring Bowls\*
- Capsule Bins\*
  - \*Not Shown in Photo



(optional vibrator shown)

	Item #	US\$
Size 00:	P7T BHS 00	\$5900
Size 0:	P7T BHS 0	\$5900
Size 1:	P7T BHS 1	\$5900
Size 2:	P7T BHS 2	\$5900
Size 3:	P7T BHS 3	\$5900
Size 4:	P7T BHS 4	\$5900
Size 000:	P7T BHS 0001	\$6450

Capsule sizes 5, 00el-2el, AAA-D contact us for more information and pricing. 1180-holes

P7T CPS 00<sup>†</sup>

P7T CPS 0<sup>†</sup>

P7T CPS 1<sup>†</sup>

P7T CPS 2<sup>†</sup>

P7T CPS 3<sup>†</sup>

P7T CPS 4\*

P7T CPCK 000<sup>2</sup>

\$1525

\$1525

\$1525

\$1525

\$1525

\$1525

\$2600

# Change Parts - Use table below only if you already fill any of sizes 00-4 or 0el-2el. Otherwise, contact us

### Change Parts for one capsule size include:

- **Body Sheet Set**
- Caps Tray
- Locking Plate Spacer
- **Orienter Tray**

All Change Parts are Inox (Stainless Steel 316) and include a plastic storage box.



<sup>·</sup> See page 3 if Tamper is required.

 $^{\dagger}$  If you can fill Size 4 only also order Bottom Spacer Plate P3B BSP 00-3 for \$150.

For additional Tampers, Powder Vibrator and Inox (Stainless Steel 316) Filler Base Upgrade, see page 3 to order.

## ProFiller 3800 - For Customers Who Prefer an European Style Orienter up to 7,200 - 9,000 capsules/hour<sup>‡</sup> **Full System**

# Everything you need to fill one capsule size:

#### Filler Base & Orienter Base

- Change Parts for one capsule size
- 300-pin Tamper
- **Powder Tray**
- Push Plate
- **Powder Spreaders**
- Storage Box for Loose Parts\*
- Measuring Bowls\*
- Capsule Bins\*
- \*Not Shown in Photo



Same Output as 3700 (optional vibrator shown)

	Item #	US\$
Size 00:	P8S BSA 00	\$10900
Size 0:	P8S BSA 0	\$10900
Size 1:	P8S BSA 1	\$10900
Size 2:	P8S BSA 2	\$10900
Size 3:	P8S BSA 3	\$10900
Size 4:	P8S BSA 4	\$10900

Capsule sizes 5, 000, 00el-2el, AAA-D available as ProFiller 3700 / 3700OE.

## **Change Parts**

## Change Parts for one capsule size include:

- **Body Sheet Set**
- Caps Tray
- **Orienter Tray**
- Locking Plate Spacer
- Transfer Plate\*\*

Filler Change Parts are Inox (Stainless Steel 316). Change Parts include a plastic storage box.



<sup>\*\*</sup>Transfer Plate is made from Acrylic. An Anodized Aluminum Transfer Plate can be ordered.



Size 00:	P8S CPS 00 <sup>†</sup>	\$1690
Size 0:	P8S CPS 0 <sup>†</sup>	\$1690
Size 1:	P8S CPS1 <sup>†</sup>	\$1690
Size 2:	P8S CPS 2 <sup>†</sup>	\$1690
Size 3:	P8S CPS 3 <sup>†</sup>	\$1690
Size 4:	P8S CPS 4	\$1690

See page 3 if Tamper is required.

For additional Tampers, Powder Vibrator and Inox (Stainless Steel 316) Filler Base Upgrade, see page 3 to order.

Capsule sizes 5, 00el-2el, AAA-D contact us.

<sup>\*</sup> If you do not have Size 5 Change Parts also only also order Bottom Spacer Plate P3B BSP 4-5 for \$300.

<sup>&</sup>lt;sup>2</sup> 180-hole. Includes Orienter Base, Capsule Locking Plate and Bottom Spacer Plate.

Capsule sizes 5, 000, 00el-2el, AAA-D available as ProFiller 3700 / 3700OE.



# **Optional Accessories**

Prices US\$ FOB NJ. Valid 30 Dec 2017

	Filces US\$ F	OB NJ. Valid 30 Dec 201	<i>(</i>	
Item Description		Capsule Size	Item #	US\$
	Accessories for ProFiller 370			
Capsule Counters Divide your batch of capsules into 3 groups of 100 capsules, 5 groups of 60 or 10 groups of 30. Anodized aluminum	§3 2 8	00-5	P3X CTR 3X100 P3X CTR 5X60 P3X CTR 10X30	\$230 \$250 \$290
Premium Accessories Kit Includes Inox (SS316) empty & filled capsule bins and stand. Speeds capsule filling & makes it easier to work in less space. Other items shown for illustration. Visit <a href="https://www.profiller.com/pak">www.profiller.com/pak</a> .		All Sizes	P3X PAK	\$145
<b>Lifting Handle Extension</b> Attaches to Lifting Handle to make capsule separation and locking under a powder hood easier.		All Sizes	P3B LHE	\$160
Over Fill (OF) Parts Standard change parts allow capsules bodies to be lowered by 2mm (Size 00 by 1.2mm) below the surface of the filler. OF Change Parts allow lowering by an additional 2 mm for twice the overfill capacity (3X for Size 00).		000-1	P3X OFP†	\$1050
Vibrator Foot Pedal Press down for vibration on. Use with the P78 Vibrator. Increases output and convenience as it frees operator to use powder spreader.		All Sizes	P3B VIB FP HO	\$225
Powder Tray with Clamps For pharmacy compounding and very fine powders. Four built-in clamps secure Powder Tray to Filler, reducing powder loss under Powder Tray. Useful when working with controlled substances (narcotics).	1 1	All Sizes	P3X PTC	\$320
Option	nal Accessories for ProFiller 3	3700 ONLY!		
Caps Tray For 3700 Purchase an additional Caps Tray. Light-weight anodized aluminum Caps Tray is not Dishwasher Safe.	Anodized Aluminum Inox	All Sizes	P67 CT AL <sup>†</sup> P67 CT SS <sup>†</sup>	\$380* \$450*
Partial Batch Kit Fill fewer than 300 capsules per batch. Includes 1 each of Orienter Divider, Powder Tray Divider & Mini Powder Spreader. Order 30-pin Tamper separately.	(SS316)	00-4	P67 PBK	\$85
<b>30-pin Tamper</b> For use with ProFiller 3700 Partial Batch Kit. Tamper in Sizes 00, 0-1, 2-3, 4.	ЕННИМИЯ З	00 0-1 & 0el-1el 2-3 & 2el 4	P67 T30P 00 P67 T30P 0-1 P67 T30P 2-3 P67 T30P 4	\$85
Autoclave Kit Make the entire ProFiller 300-hole system autoclavable. Includes Inox (SS316) or hard anodized aluminum versions of all plastic parts and Teflon spreader. Visit <a href="https://www.profiller.com/p3xak">www.profiller.com/p3xak</a> .		00-4	P7T AK 00-4	\$1320
Capsule Locking Plate & Capsule Locker For fully locking capsules with coarse or sticky powders e.g. salt, dolomite, frankincense, charcoal.	1	00-4	P67 CLP 00-4	\$200
Capsule Locking Plate is common for sizes 00-4. Both Locker & Locking Plate are required. Capsule Locker is size specific and locks 50 capsules at a time.	of the same of	00-4	P67 CL <sup>†</sup>	\$30
Optional Accessories for ProFiller 3800 / X900 ONLY!				
	Accessories for Profiller 3000 Anodized		DOO OT AL +	#000
Caps Tray For 3800 / X900 Purchase an additional Caps Tray. Light-weight	Aluminum	00-4	P89 CT AL <sup>†</sup>	\$380
anodized aluminum Caps Tray is not Dishwasher Safe.	Inox (SS316)	00-4	P89 CT SS <sup>†</sup>	\$450

<sup>†</sup>Specify Capsule Size when ordering, some accessories are not available for special sizes (000, 5, 00el-2el & AAA-E). \*Contact us for pricing on special sizes (000, 00el or 5)



# **Optional Accessories**

Prices US\$ FOB NJ. Valid 30 Sept 2017

<b>Over-Encapsulation Attachments for Pro</b>	Filler 3700 / 3800 / X900	Specification	Item #	US\$
Tablet Fill Attachment (Standard)  Over-encapsulate round tablets 6.0-7.3 mm diameter and 2.0-3.5 mm height.	9	None	P3X ATF STD	\$600
Tablet Fill Attachment (Custom)  For round tablets outside the size range of Tablet Fill Attachment (Standard) a custom TFA is required.  Delivery 4-6 weeks.		Tablet Dimensions & Outer Capsule Size	P3X ATF Custom	\$1300
Caplet Fill Attachment For caplets or non-round tablets. Engineering drawing of tablet required. Delivery 4-8 weeks.		Caplet Dimensions & Outer Capsule Size	P3X ACF Custom	\$1300
Orienter for Capsule-in-Capsule Fill capsules inside capsules. Order Orienter for inner capsule size. To determine what capsule	All the second s	Specify Inner Capsule 00-4	P3X ACI†	\$720
size you require see our Capsule-In-Capsule size chart <a href="https://www.profiller.com/cicsc">www.profiller.com/cicsc</a> .		Specify Inner Capsule 1el or 2el	P3X ACI EL <sup>†</sup>	\$900
OE Guide Tray  All Over Encapsulation Attachments include a guide tray to correctly locate the attachment and guide the test		n/a	P3X AGT	included with all



OE Attachments



to correctly locate the attachment and guide the test

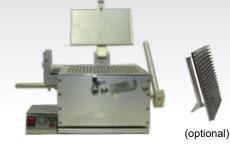
products into the capsule.

# **Need to Fill Sizes AAA-D?**

#### Order a Profiller 3700OE.

ProFiller is the only Bench-top system designed for capsules sizes AAA-D. Your alternative to hand filling small batches of AAA-D capsules for Phase 1 & 2 studies. See <a href="www.profiller.com/3700oe">www.profiller.com/3700oe</a> for brochures, videos and more information on ordering a filler and attachments.

# **Lower Height Configuration**



#### 3700 / 3800 / X900 NT

Filler base without Tamper and Tamper Arm Assembly lowers overall height for use under a powder hood. To be used with Vibrator or Hand-Held 300-pin Tamper. To order Lower Height configuration contact us for information.

### Hand-held 300-pin Tamper (180-pin for size 000/00el)

For use with ProFiller Lower Height Configuration alone or along with a vibrator. Hand-held tamper Includes self-standing handle.

# **Capsule Size Chart**

#### 

# **Shipping & Installation**

Contact us for shipping weights, the recommended installation area and table dimensions <a href="https://www.profiller.com/wd">www.profiller.com/wd</a>.

or

Download the product manuals at <a href="https://www.profiller.com">www.profiller.com</a>.



# **Frequently Asked Questions**

#### 1. Is a CE certificate Available?

A Declaration of Conformity is included with each system. A CE certificate is included with the optional Vibrator & AL300.

#### 2. What is the output?

ProFiller 3700 & 3800 fill up to 7,200 – 9,000 and X900 up to 12,000 - 14,400 capsules per hour for most powders. Our engineers have included features, some patented, which make ProFillers faster and easier to use. The lower output is for fine powders. The higher output is for coarse free flowing powders. Your results will vary based on powder flow properties, operator speed & technique and use of excipients.

#### 3. How accurate are fill weights?

Fill weights, USP/EP method, within ± 1-3% of average. When weighed individually (a stricter standard than USP/EP) typically all 300 capsules/batch are within ± 4-7% of target. For more information visit <a href="www.profiller.com/3fw">www.profiller.com/3fw</a>. Results vary due to powder properties and require use of excipients & 1-3 tamping cycles.

## 4. What capsule types can I fill?

ProFillers have been tested with different brands and types of capsules: gelatin, vegetarian/HPMC, starch & enteric. For the softer vegetarian capsules, our 3 Body Sheet Set design ensures 100% separation of capsules and the Locking Plate with domes prevents denting of capsules.

#### 5. What size capsules can I fill?

The 3700 fills sizes 000-5, 00el-2el, and AAA-D. The 3800 fills sizes 00-4. The X900 fills sizes 00-4. To order Change Parts for X900 see page 3, for 3700 / 3800 see page 4.

#### 6. Is a smaller ProFiller available?

We offer 3 smaller hand-held models: a 100 hole, a 120 hole, and a 300 hole. The 300 hole ProFiller 3600 can be upgraded at any time as the filler & orienter change parts can be used on the 3700 and the filler change parts can be used on the 3800 & X900. Visit <a href="https://www.profiller.com">www.profiller.com</a>.

#### 7. What are the maintenance requirements?

We recommend daily cleaning, preferably washing, of the machine to remove any powder. At a minimum the Cam and the Body Sheet Set should be wiped clean of powder and lubricated with a food grade lubricant (e.g. Vaseline petroleum jelly). Visit <a href="www.profiller.com/tips">www.profiller.com/tips</a> and see the maintenance section.

#### 8. Where can I find product manuals?

Visit www.profiller.com. Click on Technical Support.

#### 9. What is ProFiller made of & can it be cleaned in an automatic dishwasher?

See Manual for materials of construction. For all models the Filler Change Parts can be cleaned in an automatic dishwasher and is safe for use with automatic dishwasher detergents. For remaining parts see manuals.

## 10. What are the installation and utility requirements?

See Manual for the recommended table size and height and information on operating under a powder hood. No utilities (electricity, compressed air or water) are required unless you order the X900 or the optional Vibrator. The X900's electrical specifications are on page 3. The vibrator's electrical specifications are on page 3. If you have different electrical requirements specify them in your order. If you are filling under a powder hood see our guide at <a href="https://www.profiller.com/phg">www.profiller.com/phg</a>.

#### 11.Can I over-encapsulate or double-blind tablets, capsules and caplets?

Yes, see page 7 for special attachments.

### 12.Can I fill non-aqueous liquids or powders that bridge or are sticky, granular, fluid or flour-like?

Yes, capsules filled with non-aqueous liquids for stability or clinical trials, if not sealed, will need to be kept vertical to minimize leakage between the cap and body. Capsules for commercial sale require sealing using equipment purchased separately. Add the optional Powder Vibrator for faster filling of hard-to fill powders. For information visit <a href="https://www.profiller.com/vibrators/use">www.profiller.com/vibrators/use</a>.



# **ProFiller Products**

# **CAPSULE FILLING SYSTEM**

Hand-Held Systems in 100 120 & 300 holes







Bench-Top Filler 300 holes

Choose your Orienter



Hand-Held Orienter 3700 / 37000E



European Style Orienter 3800



**Automatic Orienter** X900

Fastest & easiest to use capsule filling systems. Output from 2000-14000 capsules/hour in sizes 000-5, 00el-2el and AAA-D. Full range of accessories for over-encapsulation, liquid filling, partial-filling, over-fillling, capsule counting and more.



E.U. Patent EP2561851 A3



ProMixer from 130ml to 10L. Traditional motor driven mixers in two sizes and a selection of drum and V-shells. A 3-Axis 2L manual shaker-mixer that uses rotation, translation and inversion.



3-Axis Mixer



750



10L



V-Shells 220ml-5L



Drum Shell 130ml-10L





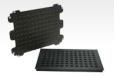
ProMolds™ Anodized Aluminum molds.



TTM Tablet & Triturate



TLMTroche & Lozenge



**RDTM** Rapid Dissolve Tablet



**RSM** Rocket Shaped Rectal Suppository



# **Other Equipment**



ProMill™

Three Roll **Ointment Mill** 



ProCoater™

For enteric film & coating of capsules & caplets



ProFunnel™

Funnel for precision capsule filling on a balance



**ProCounters** 

Divide 300 capsules into batches of 30, 60 or 100