# ProMixer™3DH 3-Dimension Hand Mixer/Blender

For Use in R&D • Pharmacy Compounding • Nutritional Supplements • Foods

# Typical mixing time is 2-3 minutes.



# ProMixer 3DH™ vs other 3D Mixers

ProMixer 3DH is an improved version of Swiss 3D or 3 Axis Mixers from the makers of the ProFiller capsule machine

- Ergonomic handle to hold during mixing and an extra-wide Stainless Steel (Inox) base for stability. No need to clamp.
- Made from GMP compliant materials. No powder coated or plated parts.
- Includes 1.5L, 2.0L plastic jars and rubber straps.
- Optional Flexible Brush is supplied with a jar & lid for mixing of small vials, jars, flasks, tubes, etc.
- Cage designed to prevent optional flexible brush from slipping when it is used without a jar.
- Optional accessories: Flexible brush & jar for mixing vials, Unguator® jars, etc.; set of 3 lnox (stainless steel) balls for breaking up powder lumps; and 2 C-clamps to secure the 3DH to a table.







Brush & Jar

C-Clamps

# Visit www.torpac.com for more information on this product

### Overview

- The 3DH Manual ProMixer™ is a fast, low-cost tumble mixer that homogenizes powders of different particle sizes, shape and density; liquids of different viscosities; solutions and suspensions.
- Typical mixing time is 2-3 minutes.
- Helps ensure uniform mixing from batch to batch and operator to operator.
- Mixing is based on three-dimensional inversion kinematics, also known as the Paul Schatz principle.

# Mixing Speed & Time

- Mix at same speed as you hand-mix a cake or similar batter e.g. approximately 45-60 rpm or less than 1 rotation a second.
- High speed mixing is not required or recommended for mixing powders.
- Tumble mixing is a gentle method of mixing ingredients at low rpm to avoid reducing the particle size. For powder mixing allow 2-3 minutes at 45 to 60 rpm or approximately 90-120 revolutions for a uniform blend.
- For mixing soluble powders and liquids a higher rpm is recommended.

# **Recommended Container Sizes**

- Supplied with one 1.5L and one 2.0L cylindrical plastic jars.
- Fully compatible with Inversina\* jars and containers that fit in the Inversina\* Mixer.
- Jars from 80-118mm in diameter and up to 210mm in height may be used. See Table on reverse.
- Optional flexible brush insert and jar enables mixing in small vials, jars, flasks and test-tubes.



Microscopic view of mixed powders

# Information on Optional Accessories, Dimensions and Jar Sizes see reverse.

\*Inversina is manufactured by Bio-Components, Switzerland. Unguator® is a trademark of GAKO Konietzko GmbH.

For Automated Powder Mixing up to 10L

Designed & Manufactured by:



V Shell





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# **Dimensions & Accessories**

# 3DH Manual Mixer / Blender System

#### **Item Description** Item #

# System

3DH Mixer Base, Stainless Steel (Inox) Jar Cage, 1.5L & 2.0L Jars (PET with Polypropylene Lid.) & 2 Rubber Straps.

Shipping Weight: 12 kg (27 lbs)

Shipping Dimensions: 43 x 42 x 32 cm (17 x 17 x 13 in)



XM-3DHMS

# **Optional Accessorie**

### Flexible Brush, Jar & Straps.

Flexible Brush with jar lid and straps. Flexible brush fits inside the jar and allows for safe mixing of small vials, Unguator® jars, flasks, tubes, etc.



XM-3DHBJ

# Stainless Steel (Inox) Balls

Three 20 mm diameter balls to break up lumps in fine or hygroscopic powders. May not break up all lumps and may require up to 500 revolutions.



XM-SB20

# Table Bolts & Nuts

Use to permanently mount 3DH Mixer to a table. For tables up to 32 mm (1.3 in) in thickness.



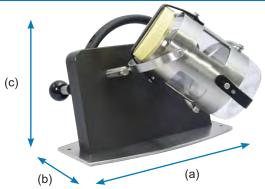
XM-3DHBN

Use to mount 3DH Mixer to a table. Mixer can be removed in minutes for portability. Made from Stainless Steel (Inox).



XM-3DHCC

# **Mixer Dimensions**



	Operating Area(> greater than)			
Length	(a)	Depth (b)	Height* (c)	
>45 ci	m	>38 cm	>47 cm	
>18 ii	n	>15 in	>18 in	
* Clearance between table surface and any shelf or cupboard above				

	Weight (without ja	ar) & Dimensions	
Weight	Length (a)	Depth (b)	Height (c)
9 kg	35 cm	15 cm	23.5 cm
20 lbs	14 in	6 in	10 in
Recommende	ed table height 70 - 90 cn	n (27.5 - 35.5 in)	

# Jar / Container Sizes Guide

Jar	Volume*	Powder Volume*	Liquid Volume <sup>†</sup>	External Diameter	External Height
1.5 L	1.5 L	1.0 L	1.35 L	111 mm	188 mm
	51 fl oz	34 fl oz	46 fl oz	4.4 in	7.5 in
2.0 L	2.0 L	1.5 L	1.8 L	117 mm	208 mm
	68 fl oz	51 fl oz	61 fl oz	4.7 in	8.2 in

\*Usable Volume for mixing powders is up to 70% of air volume.

†Usable Volume for mixing liquids or powder & liquids up to 90% of air volume.

For safe operation ensure jars or containers are within the height range that corresponds to the diameter.

Outer Diameter	Height should be	Outer Diameter	Height should be
(mm)	within range (mm)	(in)	within range (in)
80 mm	210 mm	3.2	8.3 in
85 mm	203 - 210 mm	3.4	8.0 - 8.3 in
90 mm	197 - 210 mm	3.6	7.8 - 8.3 in
95 mm	190 - 210 mm	3.8	7.5 - 8.3 in
100 mm	183 - 200 mm	4.0	7.3 - 7.9 in
105 mm	177 - 200 mm	4.2	7.0 - 7.9 in
110 mm	170 - 200 mm	4.4	6.7 - 7.9 in
115 mm	163 - 200 mm	4.6	6.5 - 7.9 in
118 mm	159 - 200 mm	4.7	6.3 - 7.9 in

# CAPSULE FILLING SYSTEMS Hand-Held Systems in 100 120 & 300 holes















3600

Bench-Top Filler 300 holes

3700 / 3700 OE

3800

Hand-Held Orienter European Style Orienter Automatic Orienter X900