# Mixers & Conditioners

# Identify. Create. Resolve.



IBS specialize in the design, manufacture and supply of a range of mixers best suited to your specific mixing and material characteristics.



Whether your application is batch mixing or continuous mixing, major, minor and micro additives, liquid to solid, solid to liquid, or liquid additives or de-lumping during mixing, IBS has vast experience - over 30 years in building mixers to assist you in your suitable mixer selection.

#### **IBS Standard Range of Mixers:**

### **Batch Mixing:**

Ribbon Blender

Paddle Mixers.

Z arm Mixers

Plough shear

#### Continuous mixing:

Twin Pug Mixers

Twin ribbon mixers

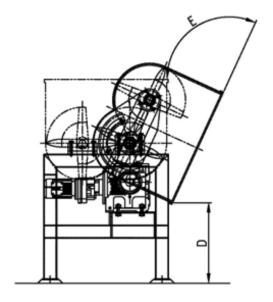


Plough shear mixer. (U trough or Tubular design)



IBS provide the latest technology to offer our customers the greatest possible saving in production and performance.

We can provide complete turnkey mixing plants including batch mixing, loading and un-loading systems, product de lumping during mixing or gentle mixing action for friable products.





#### Mixing Criteria for Selection of Mixer

The type of mixer is dependent on many factors some are as follows but these are not limited to the following:

- Production requirements: Batch or Continuous.
- Capacity throughput
- Characteristics and nature of product, additives and mixed material characteristics and flow ability.
- Uniformity of mix and additives.
- Quantity and percentage of Major, Minor and Micro ingredients
- Powder to liquid or liquid to solid mixing requirements.
- Does the material form lumps during mixing or require conditioning
- Clean down and contamination/ Clean down and sanitary requirements.
- Selection of suitable end seal for specific materials is very important.
- Heating or Cooling.

#### **IBS Paddle Mixers**

The IBS Paddle Mixer is unsurpassed for its FAST, THOROUGH BLENDING. Curved, adjustable paddle blades combine a scooping and lifting action with a unique "criss-cross" blending pattern to assure a complete uniform blend for partial batches as well as full batches.

Unlike conventional Ribbon Blenders, which tend to be slow and do not allow for blending of partial batches.

Thorough Clean-Out and Positive Discharge, this is achieved with the paddle blades being curved to conform to the contour of the mixing chamber and installed to allow a close tolerance with the mixer shell. This close tolerance assures a thorough clean-out of the chamber and a positive discharge.

IBS Mixers are of heavy duty construction, giving long life and trouble free performance.

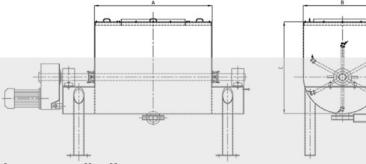
An innovative "WHIZZER" can be installed on any paddle or any plough-type fluid bed mixer to provide capabilities to de-lump, pulverise, grind, finish, blend, fiberise or intensively agitate.

#### Why should you invest in an IBS Paddle Mixer and not a Ribbon Blender?

Paddle Mixers offer the customer; Easy thorough clean-out, positive discharge, gentle mixing action assures no damage to product, mixes partial batches as easily as full batches, saving in labour and maintenance costs, modular construction, fast, thorough blending, delumping capabilities, excellent for liquid addition.

#### **IBS Standard Paddle Mixers**

SERIES	500			700			900			1100			1200		1500		
MODEL	5030	5060	5090	50120	7060	70120	70180	90120	90180	90240	110210	110180	110240	120180	120240	150180	150240
Working Capacity	55	115	170	230	230	450	680	910	1360	1780	1190	1780	2380	2380	3170	3820	5100
(1)							200000										
Total Capacity (I)	85	170	255	340	340	680	1020	1130	1700	2270	1590	2320	3170	3060	4080	5040	6740
Installed Power	0.75-	1-3	1.5-	1.5-4	1.5-	2-7.5	4-7.5	7.5-	11-18	11-22	7.5-15	11-22	11-22	7.5-15	11-18	22-40	22-40
(kW)	3		4		4			15									
RPM	40	40	40	40	28	28	28	24	24	24	20	20	20	18	18	16	16
No. of Paddles	2	4	6	8	2	4	6	4	6	8	4	6	8	6	8	6	8
Dimensions (mm)																	
Α	305	610	915	1220	610	1220	1830	1220	1830	2440	1220	1830	2440	1830	2440	1830	2440
В	480	480	480	480	610	610	610	915	915	915	1070	1070	1070	1220	1220	1525	1525
С	635	635	635	635	950	950	950	1195	1195	1195	1345	1345	1345	1525	1525	1980	1980





#### **IBS Z-Arm Mixers**

IBS Z-Arm Mixers are designed for fast, reliable mixing of products for the food industry. Our mixers are successfully operating and mixing ingredients for confectionery through to cereal products.

The Z-Arms Mixers have the following features:

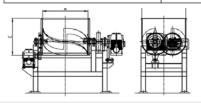
- Z-Arms cast from stainless steel in one piece
- Mixers can be polished to suit your requirements
- The shafts seals can be quick knock down sanitary type
- The mixer bowls are heavy duty, with continuous polished welds
- The mixer bowl can be tilted for fast and complete emptying
- Cooling and heating jackets as required
- Customised lid and cover to allow in feed of major and minor ingredients

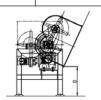




#### **IBS Standard Z-Arm Mixers**

MODEL	500	700			
Working Capacity (I)	500	700			
Total Capacity (I)	615	960			
Installed Power (kW)	7.5	1-3			
RPM	16	40			
No. of Z-Arms	2	2			
Dimensions (mm)					
Α	940	1150			
В	910	910			
С	765	1050			
D	612	600			
E (degrees)	115	115			









#### **IBS Pug Mixers**

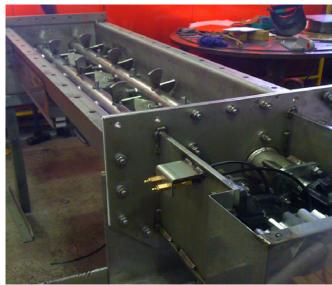
IBS Pug Mixers are suitable for a wide range of industries from clay and bricks through to mineral extraction processes. Pug mixers are used for applications requiring continuous flows with difficult to handle sticky products. IBS have designed mixers with highly abrasive and corrosive products. Different materials of construction can be mild steel, stainless steel through to exotic alloys such as Alloy 600 and Hastelloy.

Our Pug Mixers can be supplied with different options such as:

- Heating or cooling jackets
- Liquid injection nozzles
- Wear liners
- Adjustable mixer paddles to control throughput and retention time
- Adjustable mixer outlet for bottom discharge, or weir for end discharge









## Ask us how we can improve your processes today.

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