

## Bi Layer Tablet Press for R&D-SDL 2



Lab Press – SDL-2 is a High Tech Double Layer Rotary Tablet Press for R&D and small batch production. This Single sided R & D Double Layer Tablet Press fully conforms to GMP and the safety requirements. The Turret is driven centrally by a motor and Reduction gear box. The turret speed is adjusted by A.C. frequency drive. Its available in Regular Model D' Tooling or B' Tooling Multi Tooling – D+B Tooling or D+B+BB.

## PECIAL FEATURES OF Lab Press SDL-2

- The speed of the Turret is adjustable through ACVF variable drive system.
- The Speed of the Force feeder Adjustable with A.C.V.F. Variable drives system.
- All Electrical Controls on Touch Screen.
- Excellent accessibility for quick cleaning and product conversion.
- Turret Central drive Mechanism with Powerful Gearbox.
- Machine with Pre-Compression.
- Double Compression Mechanism for Double Layer Tablet.
- Dust Suction Nozzle Arrangement.
- Tablet Thickness & Weight adjustment controls outside compression zone.
- All critical parts made in CNC machines.
- Turret Die plate & material contact parts are made of SS 316.
- Three piece Turret with keyway to suites any shaped Tablet Punches.
- Outside controls for quick setting of Tablet thickness & Weight adjustment.
- Gravity feeding system for Easy charging of granules & minimum wastage of material.
- Force Feeder system for Second layer.
- First layer Pneumatic ejection for checking weight.
- Totally enclosed, GMP model.
- All Fasteners are of SS 304.
- All Guards magnet catch with Stainless steel Covers.
- All Bakelite Knobs Fixed with stainless steel threaded studs.
- Lower cam track can change without lifting Turret & no need of any setting.
- Charging Hopper with Powder Level window and material stop Cock facility.

- Turret Guard with full height to cover wiper seal area.
- Utilizes "TSM" or "EU" "B", "D" and "BB" standard tool configurations.
- Lower roll carrier Oil tray with SS 304 material.
- All Electrical Components are CE approved.
- Lower Punch Wiper seal with NT6/a is an Acrylonitrile Butadiene Rubber of Hardness Shore 'A' 88°, Temp range 40°C to 100°C, surface roughness static 0.8 μm with corrosion resistant metal ring houses NBR element for smooth Lower punch operations.
- Minimum 3 mm thickness tablet can be press.
- Bottom Plate inside/outside Cladded with SS 304.
- Turret & Cam Tracks Processed by Electrode less Nichol Plated (ENLP) for Long life.
- Special R & D Purpose machine with Combined "B", "BB" & "D" Tooling available.
- Pressure Roller & Pins are processed with hard heat-treatment.
- Low noise level.
- Upper guard & Lower side guard interlocking for operator's safety.
- Miniature Circuit Breaker for over load Protection as a Safety Feature.
- Electrical voltage & frequency can be provided as per customers' requirements.

## **Technical Specifications:**

No. Of Station	MODEL (TOOLINGS)	'B'	'D'	'B' + 'D'	'B' + 'D'
Max. Compression Load   1st Layer (Tons)   20 kN / 2 Tons   20 kN / 2 For "D" Tooling   22 kor "D" Tooling   22 kor "B" Tooling   22 kor "B" Tooling   20 kN / 2 For "B" Tooling   22 kor "B" Tooling	No. Of Station	11	-		
Test Layer (Tons)   20 kN / 2 fons	Material Feeding system 1st La		•		
1st Layer (Tons)   Max. Compression Load   2nd Layer (Tons)   22 For "D" Tooling   22 For "B" Tooling   15 For "B" Tooling   11 For BB' Tooling   12 For "B" Tooling   12 For "B" Tooling   13 For "B" Tooling   11 For BB' Tooling   11 For BB' Tooling   12 For "B" Tooling   13 For "B" Tooling   14 For BB' Tooling   15 For "B" Tooling   15 For "	Max. Compression Load			20 kN / 2 Tons	
As kn / 4.5 ion   As kn / 4.	1st Layer (Tons)				
22   For "D" Tooling   22   For "D" Tooling   15   For "B" Tooling   15   For "B" Tooling   15   For "B" Tooling   15   For "B" Tooling   11   For BB' Tooling   11   For BB' Tooling   12   For "B" Tooling   12   For "B" Tooling   13   For "B" Tooling   14   For BB' Tooling   15   For "B" Tooling	Max. Compression Load				
Max. Tablets Dia. (mm)         15         23         15 For "B" Tooling 11 For "B" Tooling 11 For "B" Tooling 11 For BB' Tooling 11 Fooling 1	2nd Layer (Tons)				
Max. Depth Of Fill         20 mm           1st Layer           Max. Depth Of Fill         8.5 mm           20 mm           Max. Depth Of Fill           2nd Layer         8.5 mm           Pneumatic Ejection           For Sample weight check – SHAKTI Dust Extraction Unit Required           Sampling Device for           Weight check         1st Layer by pneumatic ejection           Turret Speed (RPM)         3 to 34         0 t	Max. Tablets Dia. (mm)	15	23		
Max. Depth Of Fill1st LayerMax. Depth Of Fill2nd Layer8.5 mmFor Sample weight check – SHAKTI Dust Extraction Unit RequiredSampling Device for1st Layer by pneumatic ejectionWeight check1st Layer by pneumatic ejectionTurret Speed (RPM)3 to 343 to 343 to 34Output Tablets/ Hour *2244018360102006120[max]19801620400540Output Tablets/ Hour *19801620400540[min]1.5 + 1.5 kgBoth Hopper Capacity1.5 + 1.5 kgAir Pressure only for4 Bar Air PressurePneumatic ejection model4 Bar Air PressureMain Electric Motor2 HP, 1440 RPM, 3 Phase(Driven through ACVF)1/8 HP, 220v				15 For "B" Tooling	
Max. Depth Of Fill   8.5 mm   8.5 mm					11 For BB' Tooling
Max. Depth Of Fill 2nd Layer  Pneumatic Ejection  Sampling Device for Weight check Turret Speed (RPM)  Output Tablets/ Hour * [min]  Both Hopper Capacity Air Pressure only for Pneumatic Ejection Max.  Max. Depth Of Fill  8.5 mm  8.5 mm  For Sample weight check – SHAKTI Dust Extraction Unit Required  1st Layer by pneumatic ejection  4 8 4 8 4 8 4 8 4 8 8 8 8 8 8 8 8 8 8				20 mm	
Pneumatic Ejection  For Sample weight check – SHAKTI Dust Extraction Unit Required  Sampling Device for  Weight check  Turret Speed (RPM)  Output Tablets/ Hour *  [max]  Output Tablets/ Hour *  [min]  Both Hopper Capacity  Air Pressure only for  Pneumatic ejection model  Main Electric Motor  (Driven through ACVF)  Force Feeder Motor  For Sample weight check – SHAKTI Dust Extraction Unit Required  1st Layer by pneumatic ejection  4 3 to 34  10200  6120  400  540  4 Bar Air Pressure					
Pneumatic Ejection  For Sample weight check — SHAKTI Dust Extraction Unit Required  Sampling Device for  Weight check  Turret Speed (RPM)  Output Tablets/ Hour *  [max]  Output Tablets/ Hour *  [min]  Both Hopper Capacity  Air Pressure only for  Pneumatic ejection model  Main Electric Motor  (Driven through ACVF)  Force Feeder Motor  For Sample weight check — SHAKTI Dust Extraction Unit Required  1st Layer by pneumatic ejection  4 8 4 8 4 8 4 8 4 8 4 8 8 8 8 8 8 8 8	Max. Depth Of Fill			8.5 mm	
Sampling Device for  Weight check Turret Speed (RPM) Output Tablets/ Hour *  [max] Output Tablets/ Hour *  [min] Both Hopper Capacity Air Pressure only for Pneumatic ejection model Main Electric Motor (Driven through ACVF)  Extraction Unit Required  1st Layer by pneumatic ejection  4 8120  400  540  400  400  4 Bar Air Pressure  2 HP, 1440 RPM, 3 Phase	2nd Layer				
Weight check Turret Speed (RPM) Output Tablets/ Hour *  [max] Output Tablets/ Hour *  [min] Both Hopper Capacity Air Pressure only for Pneumatic ejection model Main Electric Motor (Driven through ACVF) Force Feeder Motor  Tist Layer by pneumatic ejection 1 st Laye	Pneumatic Ejection For S				
Turret Speed (RPM)  Output Tablets/ Hour *  [max]  Output Tablets/ Hour *  [min]  Both Hopper Capacity  Air Pressure only for  Pneumatic ejection model  Main Electric Motor  (Driven through ACVF)  Force Feeder Motor  1 sto 34	Sampling Device for			1st Layer by pneumatic ejection	
Output Tablets/ Hour *  [max]  Output Tablets/ Hour *  [min]  Both Hopper Capacity  Air Pressure only for  Pneumatic ejection model  Main Electric Motor (Driven through ACVF)  Force Feeder Motor  18360  10200  6120  400  540  1.5 +1.5 kg  4 Bar Air Pressure  2 HP, 1440 RPM, 3 Phase	Weight check				
[max]2244018360102006120Output Tablets/ Hour * [min]19801620400540Both Hopper Capacity1.5 + 1.5 kgAir Pressure only for Pneumatic ejection model4 Bar Air PressureMain Electric Motor (Driven through ACVF)2 HP, 1440 RPM, 3 PhaseForce Feeder Motor1/8 HP, 220v	Turret Speed (RPM)	3 to 34	3 to 34	3 to 34	3 to 34
Coutput Tablets/ Hour *   1980   1620   400   540     Both Hopper Capacity   1.5 + 1.5 kg     Air Pressure only for   4 Bar Air Pressure     Pneumatic ejection model   Main Electric Motor   2 HP, 1440 RPM, 3 Phase     Force Feeder Motor   1/8 HP, 220v	Output Tablets/ Hour *	22440	19360	10200	6120
[min] 1980 1620 400 540  Both Hopper Capacity 1.5 +1.5 kg  Air Pressure only for 4 Bar Air Pressure  Pneumatic ejection model 2 HP, 1440 RPM, 3 Phase  (Driven through ACVF) 1/8 HP, 220v	[max]	22440	10300	10200	0120
Both Hopper Capacity	Output Tablets/ Hour *	1000	1620	400	540
Air Pressure only for Pneumatic ejection model  Main Electric Motor (Driven through ACVF)  Force Feeder Motor  4 Bar Air Pressure  2 HP, 1440 RPM, 3 Phase  1/8 HP, 220v	[min]	1300	1020	400	340
Pneumatic ejection model  Main Electric Motor (Driven through ACVF)  Force Feeder Motor  4 Bar Air Pressure 2 HP, 1440 RPM, 3 Phase	Both Hopper Capacity			1.5 +1.5 kg	
Pneumatic ejection model  Main Electric Motor (Driven through ACVF)  Force Feeder Motor  1/8 HP, 220v	Air Pressure only for			4 Bar Air Pressure	
(Driven through ACVF)  2 HP, 1440 RPM, 3 Phase  1/8 HP, 220v	Pneumatic ejection model				
Force Feeder Motor 1/8 HP, 220v				, ,	
, , ,	·				
Flectric Sunnly Single Phase / Three phase				·	
Cingle i hase / Three phase	Electric Supply			Single Phase / Three phase	