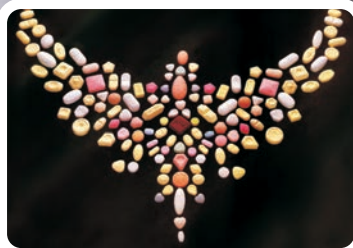


Safeguard Your TOOLS

Tool Care

An ultimate solution



CLEANING



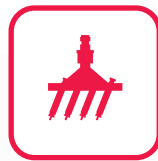
ASSESSMENT



RECTIFY



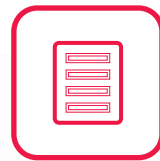
MENSURATION



SHEEN



LUBRICATION



STORE



parle Elizabeth



About Parle Elizabeth

Parle Global Technologies Pvt. Ltd., India & Elizabeth Carbide Die Co., USA backed with 100 years of combined experience in providing toolings & tableting solutions, forayed in a Joint Venture in 2008 for the manufacturing of high quality Toolings & Presses in India. The objective was to manufacture high quality toolings, tool care products, Blister Change Parts & build compression machines for new pharmaceutical products by introducing and making use of technology & instrumentation that was available.

The Joint Venture has successfully launched 10 different types of presses ranging from R&D to high speed commercial model of single & bi-layer tableting with instrumentation and automatic weight control models. Many new capabilities were built for the Domestic & International Customers with successful installation & services. The Toolings, Blister Change Parts & Toolcare division could give solutions to all kinds of Pharmaceutical & Non-pharma challenges emerging from Indian & overseas markets.

Parle Elizabeth, Tooling products have their presence in over 56 countries and 26 countries for Compression machines. The Indian market is supported by very efficient team of Sales and service personnel with backup of Agents & Dealers spread to various overseas markets. With about over 900 people today, Parle group is all committed to meet the expectations of the customers and ensure to be a reliable and most preferred partner for its products and services.

Having manufactured high end tooling for esteemed customers since 1974, we ensured that the tools run well and are properly maintained. Parle Elizabeth Tools Pvt. Ltd. introduced range of equipments for checking, maintaining, polishing, cleaning, handling & storing of tools. Thanks to all our customers who believed on us with this product line and registered an instance success.

Values

PERFORMANCE EXCELLENCE

Performance excellence is about reviewing and raising the performance threshold, for competitive edge; setting and meeting stretch targets; accomplishing and exceeding performance commitments. It means discouraging mediocrity in ourselves and others and confronting status quo.

LEADING EDGE KNOWLEDGE

Leading Edge Knowledge is a necessary ingredient for competitiveness and growth; enhancing capabilities; actively pursuing and applying Best Practices; continuously upgrading and benchmarking with Best In Class. It is the key to working smart instead of working hard; a continuous search for alternatives and new ways of doing things differently.

NURTURANCE

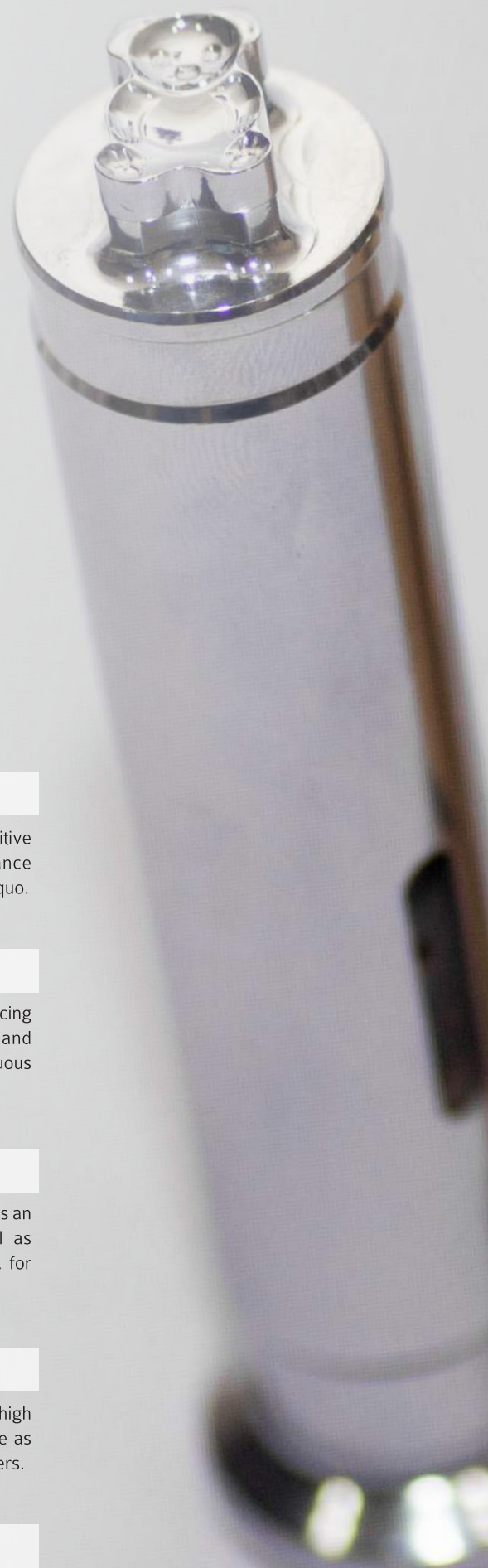
Nurturance is helping ourselves and others to grow in professional and personal life. It promotes an atmosphere of fairness with participation and encourages a climate of trust as well as trustworthiness' a positive environment for Parle Group to become a learning organization, for connection between Parle Group and its employees.

CUSTOMER ORIENTATION

Customer Orientation is sensitivity and responsiveness to the market and customer needs for high quality existing as well as new products and services, with deliveries and after-sales service as committed. It establishes positive long term relationships with both internal and external customers.

INTELLECTUAL HONESTY

Intellectual Honesty is honesty to self; doing what we say; making and meeting meaningful commitments. It goes beyond simplistic integrity, financial honesty, telling the truth and includes transparency and speaking up in situations when silence would yield an undesired result.



SAFEGUARD YOUR TOOLS

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CLEANING



The main operation in this process is to clean and dry the contaminated parts by using multiple baths of Ultrasonic Cleaning Systems.

1.1 ULTRASONIC CLEANING PROCESS

(A) Stage I Pre-cleaning:

In this process the heavy contamination will be removed and critical contamination will be loosened.

Detailed Process:

- The components to be cleaned initially in this process. A 1000 watts' immersion heater is provided in this process for heating the cleaning solvent.
- Thermocouple and temperature controller is provided in this chamber for controlling the heating temperature of the cleaning solvent.
- The component is cleaned by chemical and thermal energy in this chamber.
- Thermal insulation is provided from outside of the tank to prevent heat losses.
- The capacity of this tank is depending on the customer requirement.



BEFORE

(B) Stage II Ultrasonic Cleaning:

In this process Critical contamination will be separated from components and components are Ultrasonically cleaned.

Detailed Process:

- After pre cleaning stage the components are loaded in this chamber for effective cleaning
- Thermocouple and temperature controller is provided in this chamber for controlling the heating temperature of the cleaning solvent.
- Transducer are provided in this chamber at various locations for efficient cleaning of the components
- Drain valve is provided to the tank for draining the liquid after cleaning process.



AFTER

(C) Stage III Thermal Rinsing with Air Agitation:

In this process loose contamination which is lying on the components are getting separated. Previous cleaning stages chemical tresses will be removed from the components.

Detailed Process:

- This stage is same as that of first stage, except in this, hot water is used an Air Agitation arrangement is provided in the tank to enhance the rinsing effect.
- This creates turbulence in the liquid thereby increasing the effect of rinsing.
- The whole procedure of creating this turbulence is known as air agitation.



PUNCHES AND DIES DURING RINSING

(D) Stage IV Thermal Drying:

In this process components are dried with hot air.

Detail Process:

- The hot air is directed from all the sides to the components with the help of blower exhauster
- Thermocouple and temperature is provided in this chamber for controlling the heating temperature of the air
- Insulation is provided from outside of the tank to avoid the thermal losses.

(E) Rust Preventive Oiling (R.P.O):

In this process components are applied with rust preventive oil.

Detail Process:

- After completing all the above cycles, a layer of rust preventive oil is applied on the cleaned components, before storage.

MACHINE MODELS AND PROCESS DETAILS



UTWS 101

SINGLE STAGE UTWS

- Ultrasonic cleaning



UTWS 102

THREE STAGE UTWS

- Ultrasonic cleaning
- Thermal Rinsing and Air Agitation
- Thermal Drying



UTWS 103

FOUR STAGE UTWS

- Ultrasonic cleaning
- Thermal Rinsing and Air Agitation
- Thermal Drying
- Rust Preventive Oiling



UTWS 104

FIVE STAGE UTWS

- Pre - Preventive
- Ultrasonic Cleaning
- Thermal Rinsing and Air Agitation
- Thermal Drying
- Rust preventive oiling

NOTE: (a) Tank capacity and Tool Holding: As per the requirement.

CLEANING



COMPARISON BETWEEN

ULTRASONIC CLEANING PROCESS	MANUAL CLEANING PROCESS
Scientific way of cleaning the components.	Conventional way of cleaning the components.
Highly effective and efficient cleaning process.	Less effective and efficient cleaning process.
DM/ Purified water is used for cleaning.	IPA (ISOPROPYL ALCOHOL) is used for cleaning.
Multiple components are cleaned at a time.	Single component is cleaned at a time.
Consistency in the cleaning process.	In-consistency in the cleaning process.
Critical contamination is easily removed from the components.	Critical contamination can't be removed from the component.
Skilled labor is not required.	Skilled labor is required.
System dependent process.	Person dependent process.
Process complies to Audit requirements.	Process doesn't complies to Audit requirements.



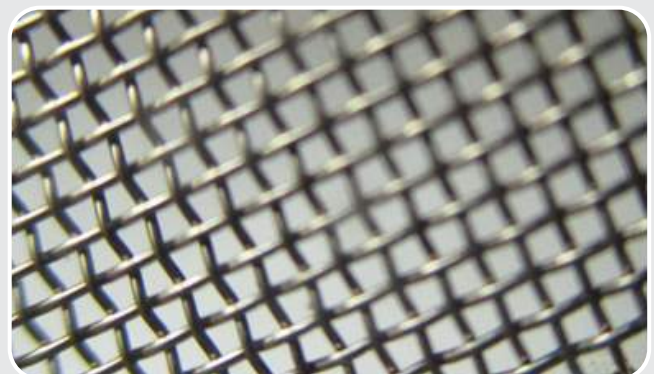
PUNCHES & DIES



ROUND SCREEN



SIEVE



MAGNIFIED VIEW OF SIEVES



ASSESSMENT



It is recommended to visually inspect the tools prior to any repairs/polishing. This can be done using eye glass or magnifying lenses to ensure the desired tool life is achieved which in turn to validate periodical maintenance procedure.

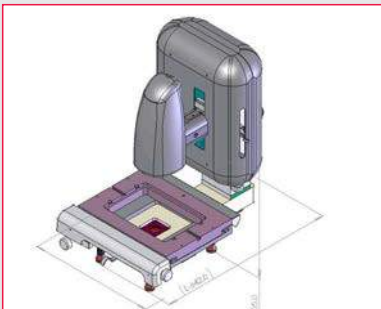
Tool assessment is required to confirm the condition of punch tip face, embossing, Die bore finish, pitting or Corrosion marks.

It is also used to check the tablets with higher magnification under microscope which can detect the surface and cosmetic defects.

2.1 VISUAL INSPECTION EQUIPMENTS



MAGNIFYING EYE GLASS



VISION MEASURING SYSTEM (VMS)



MAGNIFYING LENS



MICROSCOPE (LESS MAGNIFICATION) | MICRO-SCOPE (HIGHER MAGNIFICATION)



Clean critical areas of Tooling like Punch Tip, Embossed lettering etc. A comprehensive kit for minor maintenance of Punches and Dies to enhance Tooling life by taking care of critical areas of tooling such as Embossing, Punch Tip, Die Bore etc.

3.1 PUNCH POLISHING KIT



PPK 1001

HIGH SPEED POLISHER

- For holding and rotating the polishing wheels and felt bobs during Punch polishing.
- This is to ensure the desired shine is achieved in the punch cavity and get good finish on the tablet after compression.



PPK 1002

MOTORIZED CHUCK UNIT

- The completely enclosed polishing motor with adjustable guard cum support with safety switch. Used for general polishing of Punch tip, barrel and head.



PPK 1003

PNEUMATIC POLISHER

- For Polishing the Punch cavities with the help of nylon brushes. This is to be used with motorized chuck unit.
- This is a high RPM polisher to achieve bluster finish on the punch cavities including embossing, logo, break line etc. which in turn will produce the super finish on the tablet.



PPK 1004

DIAMOND PASTE SYRINGE

- For applying on Punch tip face when brass brushes are used for removing the pit marks or corrosion from Punch tip face.



PPK 1005

NYLON POLISHING BRUSH - WHEEL TYPE BRUSH

- For fine polishing/ shining of Punch tip face with the help of high speed pneumatic polisher.



PPK 1006

NYLON POLISHING BRUSH - CUP TYPE BRUSH

- For fine polishing/ shining of Punch tip face with the help of high speed pneumatic polisher.



PPK 1007

BRASS POLISHING BRUSH - WHEEL TYPE BRUSH

- For removing pit marks/corrosion marks from the Punch tip face with the help of high speed pneumatic polisher and diamond paste.



PPK 1008

BRASS POLISHING BRUSH - CUP TYPE BRUSH

- For removing pit marks/corrosion marks from the Punch tip face with the help of high speed pneumatic polisher and diamond paste



PPK 1009

FELT BOBS - DOME TYPE BOB

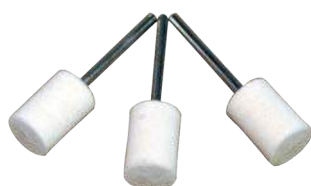
- For fine polishing/ shining of concave design Punch tip face with the help of high speed pneumatic polisher.



PPK 1010

FELT BOBS - CONICAL TYPE BOB

- For fine polishing/ shining of small size tablet Punch tip face with the help of high speed pneumatic polisher.



PPK 1011

FELT BOBS - CIRCULAR TYPE BOB

- For fine polishing/ shining of FFBE/FFRE Punch tip face with the help of high speed pneumatic polisher.



PPK 1012

NYLON TURRET CLEANING BRUSHES - NYLON BRUSH D TYPE

- For cleaning the Turret Punch Guide/bore for D type tooling machine by removing fine particles of powder.



PPK 1013

NYLON TURRET CLEANING BRUSH - NYLON BRUSH B TYPE

- For cleaning the Turret Punch Guide/bore for B type tooling machine by removing fine particles of powder.



PPK 1014

BRASS TURRET CLEANING BRUSH - BRASS BRUSH D TYPE

- For cleaning the Turret Punch Guide/bore for D type tooling machine by removing sticky powder.



PPK 1015

BRASS TURRET CLEANING BRUSH - BRASS BRUSH B TYPE

- For removing the Punch tip inside, outside edge burr/ pit marks and smoothen.



PPK 1016

LAPPING STICK - SQUARE SHAPE

- For removing the Punch tip inside, outside edge burr/ pit marks and smoothen.



PPK 1017

LAPPING STICK - TRIANGULAR SHAPE

- For removing pit marks/corrosion marks from the Punch tip face with the help of high speed pneumatic polisher and diamond paste.



PPK 1018

LAPPING STICK - HALF ROUND

- For removing the Punch tip inside, outside edge burr/ pit marks and smoothen.



PPK 1019

BUFFING WHEEL - PLAIN TYPE WHEEL

- For polishing and shining the complete Punch barrel and Die by removing contamination.



PPK 1020

BUFFING WHEEL - TAPER TYPE

- For polishing and shining the complete Punch barrel and Die by removing contamination.



PPK 1021

BUFFING SOAP

- Used with Buffing wheel for shining the Punches and Dies.



PPK 1022

EMERY ROLL - COARSE GRIT

- For Punch tip outside edge burr removal application.



PPK 1023

POLISHING STRIP - FINE GRIT

- For Punch tip outside or Die inside fine polishing application.



PPK 1024

MICRO POLISHING POWDER

- For polishing or shining of Punch tip face when used with nylon wheels/ felt bobs.



PPK 1025

GREASE

- For applying on Punch tip faces & to dip in Micro polishing powder when nylon wheels or felt bobs are used.



PPK 1026

POLISHING MEDIA FOR TOOL POLISH MACHINE (FOOD GRADE)

- For luster finish on Punches and Dies, when used in Automatic Polishing Machine.



PPK 1027

POLISHING PASTE (FOOD GRADE)

- For luster finish on Punches and Dies, when used in Automatic Polishing Machine.

3.2 PRESS TOOL KIT



PTK 0001

DIE DRIVING ROD

- Used for the driving the Dies during fitment in the Die Turret.



PTK 0002

TIGHT PUNCH REMOVAL TOOL - D TYPE

- For removing the tight punch from the Punch turret.



PTK 0003

TIGHT PUNCH REMOVAL TOOL - B TYPE

- For removing the tight punch from the Punch turret.



PTK 0004

DIE ALIGNMENT - D TYPE

- For aligning the D Type Dies to enter perpendicularly in the Die Turret of the machine.



PTK 0005

DIE ALIGNMENT - B TYPE

- For aligning the B Type Dies to enter perpendicularly in the Die Turret of the machine.



PTK 0006

DIE ALIGNMENT - BB TYPE

- For aligning the BB Type Dies to enter perpendicularly in the Die Turret of the machine.



PTK 0007

DIE SEAT CLEANER - D TYPE

- For efficient cleaning of powder from Die Turret seat insider corner.



PTK 0008

DIE SEAT CLEANER - B TYPE

- For efficient cleaning of powder from Die Turret seat insider corner.



PTK 0009

DIE SEAT CLEANER - BB TYPE

- For efficient cleaning of powder from Die Turret seat insider corner.



PTK 0010

HANDLE DRIVE (1/2") - L TYPE

- Used for general locking of Hex socket grub screws. (Ratchet type without Torque setting).



PTK 0011

HANDLE DRIVE (3/8") - T TYPE

- Used for general locking of Hex socket grub screws. (Ratchet type without Torque setting).



PTK 0012

HEX ADAPTOR

- Allen key socket/ adapter to suit above handle for long reach application.

A) 5/16"	1/2" Sq. x 5/16" Long
B) 3/8"	1/2" Sq. x 3/8" Long
C) 8 m.m.	1/2" Sq. x 8 m.m. Long
D) 10 m.m.	1/2" Sq. x 10 m.m. Long



PTK 0013

DIE LOCK HANDLE - T TYPE

- Used for Die locking with size of Allen as 3/8" & 5/16"



PTK 0014

STRAIGHT EDGE

- For confirming the proper fitment of Dies on the Die table.



PTK 0015

FEELER GAUGE (25 BLADES) 0.04 - 1.00mm RANGE

- For checking the gaps on the machine (if any) due to wear & tear.



PTK 0016

TEFLON Mallet

- For removal of keys and other soft operation.



PTK 0017

Flat Brush

- For cleaning.



PTK 0018

Round Brush

- For cleaning.



PTK 0019

Tool Box

- For keeping all mentioned items in one box with proper manner.



PTK 0020

Diamond File (Flat Niddle Type)

- For general fine filing application.



PTK 0021

TORQUE WRENCH

- For applying the defined clamping pressure for Die locking.



PTK 0022

POLISH PAPER

- For general fine polishing application.



PTK 0023

SCREW DRIVER SET

- For general application of fitment.



MENSURATION



Tool Checker checks international standards set by global tooling councils like EURO 8 TSM. Digital Inspection Kit suitable for Inspection of Critical Parameters of Punches & Dies such as Tip Size, Barrel Diameter, Overall Length, Working Length, Cup Depth, Head Thickness, Die Height Die OD, Die Bore etc.

4.1 PUNCH INSPECTION KIT



PIK 1001

MICROMETER - ANALOGUE TYPE 0 - 25mm

- For accurate measuring & inspection of diameter up to 25mm, without display.



PIK 1002

MICROMETER - ANALOGUE TYPE 25 - 50mm

- For accurate measuring & inspection of diameter from 25mm to 50mm, without display.



PIK 1003

DIAL GAUGE - ANALOGUE TYPE LC - 0.01mm

- Used for measuring Punch concentricity, cup depth, overall length, die concentricity etc. with display.



PIK 1004

DIAL GAUGE - DIGITAL TYPE LC - 0.01mm

- Used for measuring Punch concentricity, cup depth, overall length, die concentricity etc. with display.



PIK 1005

MICROMETER - DIGITAL TYPE 0 - 25mm

- For accurate digital measuring & inspection of diameter up to 25mm with display.

MENSURATION



PIK 1006

MICROMETER - DIGITAL TYPE 25 - 50mm

- For accurate digital measuring & inspection of diameter from 25mm to 50mm with display.



PIK 1007

INPUT TOOL FOR MICROMETER AND DIAL GAUGE

- Used for connecting the measurement instrument to a computer for data collection.



PIK 1008

INPUT CONNECTING CABLE FOR MICROMETERS

- Used for connecting the micrometers to a computer.



PIK 1009

INPUT CONNECTING CABLE FOR DIAL GAUGE

- Used for connecting the dial gauge to a computer.



PIK 1010

RADIUS GAUGE - 1 TO 7 MM

- For measuring radius of curvature of Punches & Tablets.

MENSURATION



PIK 1011

RADIUS GAUGE - 7.5 TO 15 MM

- For measuring radius of curvature of Punches & Tablets.



PIK 1012

FIXTURE FOR HOLDING D TYPE PUNCH

- For holding the Punch in vertical direction on the comparator stand



PIK 1013

FIXTURE FOR HOLDING B TYPE PUNCH

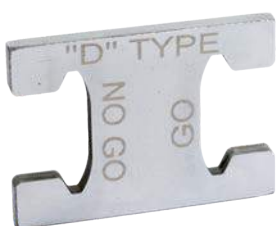
- For holding the Punch in vertical direction on the comparator stand



PIK 1014

EURO STANDARD HEIGHT GAUGE

- Used for setting standard overall length of Punches on comparator stand.

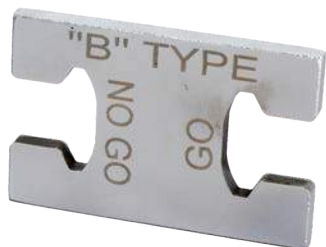


PIK 1015

HEAD GO / NO GO GAUGE (FOR D TYPE)

- Used for checking punch head dimension like thickness, inside head angle.

MENSURATION



PIK 1016

HEAD GO / NO GO GAUGE (FOR B TYPE)

- Used for checking punch head dimension like thickness, inside head angle.



PIK 1017

INCREMENTAL DIE SET (FOR D TYPE)

- For tablet press, turret die pockets, inner diameter checking with incremental value of 0.01mm up to 0.10mm. Incremental value start from standard Die OD.



PIK 1018

INCREMENTAL DIE SET (FOR B TYPE)

- For tablet press, turret die pockets, inner diameter checking with incremental value of 0.01mm up to 0.10mm. Incremental value start from standard Die OD.



PIK 1019

INCREMENTAL DIE SET (FOR BB TYPE)

- For tablet press, turret die pockets, inner diameter checking with incremental value of 0.01mm up to 0.10mm. Incremental value start from standard Die OD.



PIK 1020

DIAL POINTER

- Pointer Anvil - for die concentricity & cup depth. Ball Anvil - For Punch concentricity & overall length.

MENSURATION



PIK 1021

MAGNIFYING EYE GLASS

- For visual inspection of punch tip face, embossing, die bore finish and pitting or corrosion etc.



PIK 1022

BENCH COMPARATOR STAND

- For holding V - Block & Dial Gauge for measurement of Punches and Dies.



PIK 1023

V - BLOCK WITH C CLAMP

- For mounting the Punches & Dies on V - block for checking Tip & Barrel concentricity with the help of dial gauge & comparator stand.



PIK1024

PACKING BOX (SPECIALLY DESIGNED FOR STORING & CARRYING OF INSTRUMENT'S)

- Complete storage of inspection items.



PIK 1025

DIE BORE GO NO GO GAUGE

- For inspection of Die bore size.

4.2 AUTOMATIC INSPECTION SYSTEM

- The Automatic Inspection System is used for inspecting the punches and dies with the help of Electronic Touch Probes and this data is then transferred to the system.
- Automated Inspection systems is a vertically structured consulting engineering firm specialization in Automated Ultrasonic Testing (AUT). Included among our standard products are novel and advanced application, customized software, hardware and scanning devices.



AUTOMATIC INSPECTION SYSTEM

FEATURES OF THE SYSTEM

- Fully Automated Inspection process.
- Physical contact software based system with touch probe mechanism.
- 21CFR compliant software.
- Tool life management software.
- Multi gauging system i.e. multiple parameters can be checked at a time.
- Confirmed repeatability and consistency in measurement.
- Operator skill for inspection is minimized.
- Duplication of data is not required, as the direct inspection report is generated as per your inspection format.
- Password protected software.
- Speedy and reliable process of inspection.
- Absolutely user friendly system.

PARAMETERS INSPECTED BY THIS EQUIPMENT

PUNCHES	DIES
Tip size	Outside Diameter
Barrel size	Total Thickness
Tip to Barrel concentricity {Round, Capsule, Oval}	Inside Diameter {For Round Shape}
Overall Length	
Cup Depth	
Working length	



PARAMETER SETTING

Parameter Setting

Port Name

0

Port Number

1

Parameter Name

ODI

Initial Control Limits Specifications

UCL Value

0.2

LCL Value

0.1

☒ Automatic

UCL

0.175

☐ Manual

LCL

0.125

Masters Used

☒ One

Analog Zero

0

☐ Two

Reference Value

0.05

Dumps for Storing Data

☐ Single

☒ Double

Port Type

☒ Normal

☐ Eager

☐ Halfness

Instrument

Analog

Work Stations

1

Switch

1

Units

MM

No. of Digits

4

Range

1000

Measurement Mode

Static

Formula

F14F2

Color Codes

Reading > UCL

☒

☐

UCL >= Reading >= LCL

☒

☐

LCL >= Reading >= LCL

☒

☐

Reading < LCL

☒

☐

Background Colour

☒

☐

Reading Colour

☒

☐

☒ Accept

☒ Delete

☒ Close

MASTERING SCREEN



REPORT RETRIEVAL

Retrieval

Consolidated Report

ProductName QUINAPRIL TABLETS USP 40 MG ▼

Punch ID PID3 ▼

From Date Time 11-Nov-2013 ▼ 09:00 AM ▼

To Date Time 11-Nov-2013 ▼ 01:05 PM ▼

Parameter Name BAPSL-1 ▼

Fixture No --ALL-- ▼

Embossing Upper ▼

Operator Name All ▼

Shift All ▼

View Report

Close

CONSOLIDATED REPORT

Home Insert Page Layout Formulas Data Review View Developer Add-ins Tools														File	
A17 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100															
DIES AND PUNCHES INSPECTION RECORD															
PUNCH ID: _____															
Tooling Mfg Date:		Reference SOP No:				Drawing No:				Page:		of:			
DESCRIPTION															
Supplied by		Receipt Date		Product		Size in mm		Tooling Details		Upper Punch		Lower Punch		Dies	
								Tooling Type							
								Embossing							
								Quantity in Nos.							
INSPECTION REPORT															
Date of inspection: _____															
Punch Type (1 to 0.04 mm for Round & 0.04 mm for Other Shape)		Punch Body Diameter (Upper) (+0.00/-0.013)		Overall Length (Upper) (+0.00/-0.00)		Working Length (V-0.08 mm for Round & 0.1 to 0.13 mm for Other Shape)		Concentricity of Punch		Physical Damages (If Any)		Internal Diameter		Damages (If Any)	
		Round-1		Round-2		Round-3									
1	+	-	25.35	-	25.35	-	25.35	-	+	+	+	+	+	+	+
2	+	-	25.35	-	25.35	-	25.35	-	+	+	+	+	+	+	+
3	+	-	25.35	-	25.35	-	25.35	-	+	+	+	+	+	+	+
4	+	-	25.35	-	25.35	-	25.35	-	+	+	+	+	+	+	+
Note: - 1. To go Body Concentricity should not be more than 0.02 mm for round shape punches and 0.05 mm for other shapes - 2. All dimensions are in millimeters - 3. Standard Punch body diameter for 8 and 88 type is 33.00 mm, for 9 type 25.35 mm and for F5 32 is 32 mm - 4. Standard Punch overall length for 8,88,9 and F5 12 type tooling is 133.60 mm Remarks (If Any): _____ Inspected By (Signature): _____ (Checked By / Sign / Date): _____															

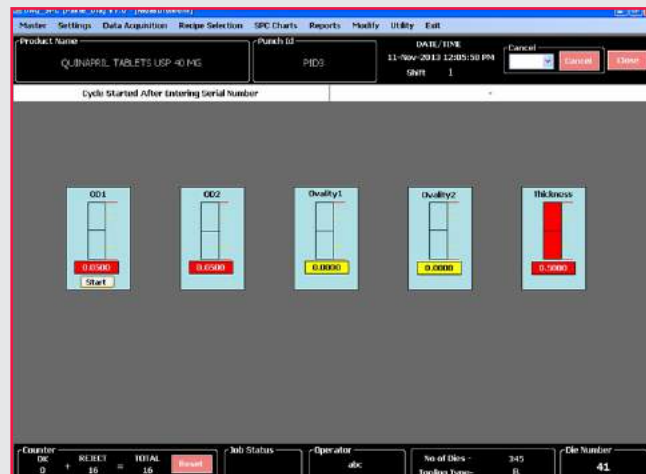
MENSURATION



AUTOMATIC INSPECTION FOR DIE UNIT



MASTERING SCREEN



MEASUREMENT SCREEN

The Consolidation Report displays a table of inspection data. The table has columns for 'S.No', 'C.Date/Time', 'Dz.No', 'OD1', 'OD2', 'Ovality1', 'Ovality2', 'Thickness', and 'Total'. The data is organized into rows, with the first row showing a summary of the inspection results.

S.No	C.Date/Time	Dz.No	OD1	OD2	Ovality1	Ovality2	Thickness	Total
1	11/11/2013 12:14:36 PM	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2	11/11/2013 12:14:41 PM	2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
3	11/11/2013 12:14:47 PM	3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
4	11/11/2013 12:14:52 PM	4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CONSOLIDATION REPORT

The SPC Summary Report displays a table of inspection data. The table has columns for 'PName', 'UTL', 'LTL', 'Mean', 'Max', 'Min', 'Range', 'StdDev', 'Cp', 'Cpk', 'Pp', 'Ppk', 'Std. Dev.', 'Std. Error', 'Acc', 'Rej', and 'Total'. The data is organized into rows, with the first row showing a summary of the inspection results.

PName	UTL	LTL	Mean	Max	Min	Range	StdDev	Cp	Cpk	Pp	Ppk	Std. Dev.	Std. Error	Acc	Rej	Total
OD1	0.2000	0.1000	0.0500	0.0500	0.0500	0.0000	0.0000	0	0	0	0	0.0000	0.0000	0	4	4
OD2	0.2000	0.1000	0.0500	0.0500	0.0500	0.0000	0.0000	0	0	0	0	0.0000	0.0000	0	4	4
Ovality1	0.2000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0.0000	0.0000	4	0	4
Ovality2	0.2000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0	0	0	0	0.0000	0.0000	4	0	4
Thickness	0.2000	0.1000	0.0500	0.0500	0.0500	0.0000	0.0000	0	0	0	0	0.0000	0.0000	0	4	4

SPC SUMMARY REPORT



DIES



PUNCHES



The automated tool polish machine is specially made for polishing the tools for the better production of tablet finishing. This is the special type of machine for:

- Improving Tool Quality.
- Longer Tool Life.
- Reduces chipping during tablet compression.
- This process prevents special polishing corrosion.



DIE HOLDER



ANGULAR PUNCH HOLDER



MEDIA MIXER

5.1 AUTOMATIC TOOL POLISH MACHINE

DESCRIPTION	TP - I
Capacity of Polishing	Punch: D/B Type: 45 Nos. Dies: D/B/BB Type: 48 Nos./60 Nos./60 Nos.
Storage Space beneath the machine	Available
Cooling Arrangement	Jacketed Tanks available
CE Certification	Available
Machine Dimensions	990 (W) x 774 (D) x 2071 (H)
Machine Weight	350 Kg.
Power Supply	1.2 KVA/ 230 V
Food grade compatibility of polishing media	Food Grade Certificate available
Food grade compatibility of polishing paste	Food Grade Certificate available
Material for Punch Holders	Food Grade Acetal
Material for Die Holders	Stainless Steel
Media Life	200 polishing hours
Machine Structure	Stainless Steel with Aluminum Frame
Machine Movement	On Caster Wheels
Touch Screen	Password protected program menu
Operation safety features	Available
Consumables (Polishing Media) consisting of	1 Batch of 35 Kg each {One Process Container}
TP-100	15 kg.
TP-400	20 kg.
TP Shining Paste	5 kg.
21 CFR System	Available (Optional)
GMP System	Available



TP - I



DIE HOLDER



ANGULAR PUNCH HOLDER



MEDIA MIXER

DESCRIPTION	TP - II
Capacity of Polishing	Punch: D/B Type: 90 Nos. Dies: D/B/BB Type: 96 Nos./120 Nos./120 Nos.
Storage Space beneath the machine	Available
Cooling Arrangement	2 Jacketed Tanks available
CE Certification	Available
Machine Dimensions	1280 (W) x 760 (D) x 2071 (H)
Machine Weight	550 Kg.
Power Supply	1.2 KVA/ 230 V
Food grade compatibility of polishing media	Food Grade Certificate available
Food grade compatibility of polishing paste	Food Grade Certificate available
Material for Punch Holders	Food Grade Acetal
Material for Die Holders	Stainless Steel
Media Life	200 polishing hours
Machine Structure	Stainless Steel with Aluminum Frame
Machine Movement	On Caster Wheels
Touch Screen	Password protected program menu
Operation safety features	Available
Consumables (Polishing Media) consisting of	2 Batch of 35 Kg each {One Process Container}
TP-100	30 kg.
TP-400	40 kg.
TP Shining Paste	10 kg.
GMP System	Available
21 CFR System	Available (Optional)



TP – II



DIE HOLDER



ANGULAR PUNCH HOLDER



MEDIA MIXER

DESCRIPTION	TP - ECO
Capacity of Polishing	Punch: D/B Type: 45 Nos. Dies: D/B/BB Type: 48 Nos./60 Nos./60 Nos.
Storage Space beneath the machine	Not Available
Cooling Arrangement	Non Jacketed Tanks available
CE Certification	Not Available
Machine Dimensions	690 (W) x 774 (D) x 1755 (H)
Machine Weight	250 Kg.
Power Supply	1.2 KVA/ 230 V
Food grade compatibility of polishing media	Food Grade Certificate available
Food grade compatibility of polishing paste	Food Grade Certificate available
Material for Punch Holders	Food Grade Acetal
Material for Die Holders	Stainless Steel
Media Life	200 polishing hours
Machine Structure	Stainless Steel with Aluminum Frame
Machine Movement	On Caster Wheels
Touch Screen	Password protected program menu
Operation safety features	Available
Consumables (Polishing Media) consisting of	1 Batch of 35 Kg each {One Process Container}
TP-100	15 kg.
TP-400	20 kg.
TP Shining Paste	5 kg.
21 CFR System	Available (Optional)
GMP System	Available



TP – ECO



LUBRICATION



Applicable to protect the tool with food grade rust preventive oil, which improves the tool life on the press. The same is available in non-toxic, rust preventive, corrosion resistant and food grade.

A range of non-toxic oils and greases specially formulated to provide and maintain the high level of product performing when machinery lubrication is required.

6.1 RUST PREVENTIVE OILING



PUNCHES



DIES





STORE



Optimum utilization of space for storing punches, dies & other spare parts in vertical or horizontal design. The same can be customized as per availability of floor space.

7.1 TOOL STORAGE SYSTEM

Optimum utilization of space for storing punches, dies & other spare parts in vertical or horizontal design. The same can be customized as per the availability floor space.

STORAGE CABINETS (MANUAL)



HORIZONTAL STORAGE CABINET FOR PUNCHED & DIES



VERTICAL STORAGE CABINET



PUNCH HOLDER TRAY

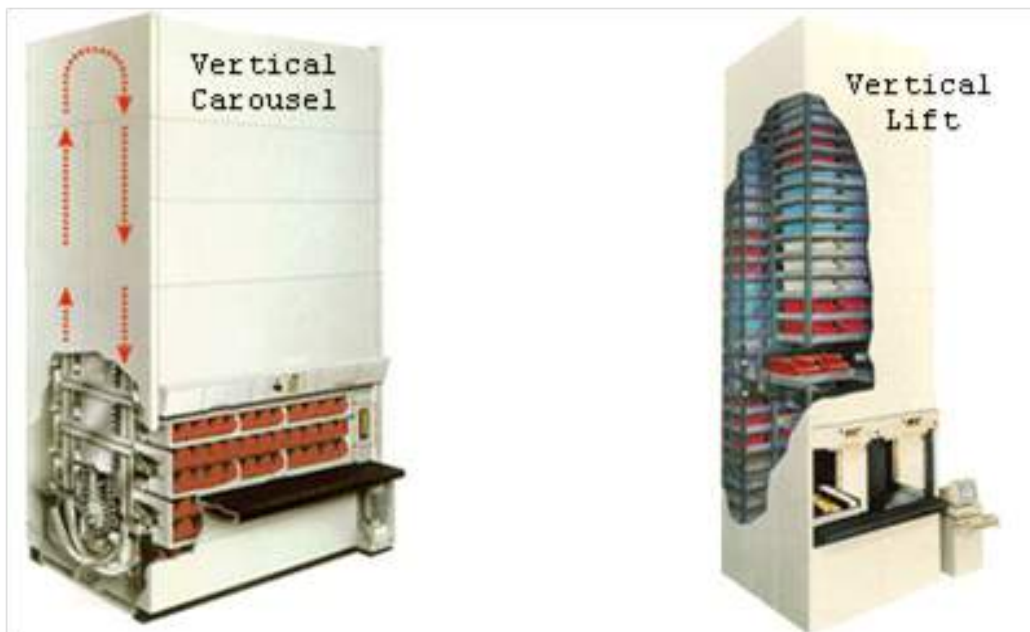


CUSTOMIZED DESIGN AS PER ROOM LAYOUT

VERTICAL CAROUSEL SYSTEM (AUTOMATED)

Technical Details of Vertical Carousel System for Punches & Dies

- This is the most modern & cost effective Storage & Retrieval System for today's growing industries. It offers several benefits compared to conventional racking system.
- It uses the complete available height for storage & yet retrieve material automatically to the operator's hand reach level.
- The storage racks are suspended on two vertical chain loops which are electrically driven.
- The complete mechanism is enclosed by sheet metal cladding.
- Only one window is provided at ergonomic level for easy loading & unloading of material.
- It is provided with PLC controller which facilitate material retrieval by shelf number or part number.
- The system can also be interfaced with central inventory management system or ERP through a special software developed by Parle Elizabeth Tools Pvt Ltd.



Vertical storage, industrial carousel systems are automated solutions with a series of carousel (Rotating carrier shelves) travelling the shortest distance to deliver the selected part to the operator's workstation ready to be collected.

Vertical carousel makes up for this inefficiency in that they can store product up to 20-meter-high in the air.

BENEFITS

Quick Retrieval

Since only the retriever moves to locate and retrieve tray/material, the speed can be higher, ensuring fast retrieval.

Space Saving

Floor space can be saved (40%) since the entire available height is being used and even the operating windows can be provided at 2 or 3 different levels.

High Safety of Material

Materials is stored in completely enclosed racks, ensuring safety from theft, dust, mishandling or damage.

Manpower Saving

Due to complete automation and speedy retrieval, manpower is saved to a considerable extent.

Inventory Control

Material is retrieved only after entering the part number & quantity and hence, precise control on the inventory can be achieved.

ADVANTAGE OF VERTICAL CAROUSEL SYSTEM

- No load imbalance.
- Pitch of trays can be altered and is flexible.
- Multiple pitches can be provided.
- Fixed pitch or optimized pitch (Machine automatically allocates space, considering the component height).
- No vibration or jerks during the operation.
- Bar code scanner can be connected externally to the machine.
- Material can be accessed from the top (Easy accessibility).
- Auto door provided
- Manual cranking facility available in case of power failure

AUTOMATIC STORAGE & RETRIVAL SYSTEM (AS/RS)

An Automated Storage and Retrieval System (ASRS or AS/RS) consists of a variety of computer-controlled systems for automatically placing and retrieving loads from defined storage locations. Automated storage and retrieval systems (AS/RS) are typically used in applications where:

- There is a very high volume of loads being moved into and out of storage
- Storage density is important because of space constraints
- No value is added in this process (no processing, only storage and transport)
- Accuracy is critical because of potential expensive damages to the load



SAFETY FEATURE

- Force reducing speed function of lifting.
- Over run detector of lifting.
- Carriage anti-fall device.
- Emergency stop button.
- E-chain current.
- 8-Bit interlock sensor to interlock with other equipment's.



SYSTEM HEIGHT

- Maximum – 35 M

PERFORMANCE

- Maximum travel speed – 200 m/min.
- Maximum lifting speed – 60 m/min.
- Maximum shuttle speed – 60 m/min.



CONTROLS

- Data transmitted by infrared.
- Manual control panels.
- software for maintenance and instrumentation.

MOBILE RACKING SYSTEM

- Mobile Racking Storage Systems are extremely compact and 100% accessible. They are like Selective Racking systems only the racking is on wheels that move along floor rails.
- Each racking shelf remains compacted until they are required to be accessed. With a press of a button, which can be remotely controlled, electric motors move the Mobile Racking as needed to creating an aisle space in between two racking blocks so that access to pallets can be obtained.
- This system required lesser space than conventional racking systems/cupboards. It can save up to 60% of the floor space compared to conventional static shelving or can increase the storage capacity by almost 100%.

PRINCIPLE

- The basic idea here is to eliminate the floor space requirement between two fixed racking and utilize this space to accommodate more racks. Here, the racks are mounted on guiding tracks which allow forward and backward movement. This type of arrangement requires only one aisle for access and storage and retrieval of material.



CUSTOMIZED FABRICATION AS PER ROOM LAYOUT, SUITABLE FOR THE STORAGE OF:

- Change parts
- Raw materials
- Finished goods
- Spares
- Medical Equipment's
- Records/ Stationary/ Files



FEATURES

- Manual/ Motorized movements of storage racks.
- Optimum space/height utilization for storage of goods.
- Improved controls and through put time.
- Reduced operational cost.

CONSTRUCTIONAL FEATURES

- Sturdy and precision-fabrication racks using high quality material.
- Precisely engineered guide rails, gears, sprockets and chains for smooth, jerk-free movement and low noise or vibrations.
- Sealed bearings with lifetime lubrication.
- Sheet metal cladding, ensuring protection from dust, damage or theft.
- Position locking of racks during usage to ensure operator safety.
- Complete system can be locked to prevent unauthorized access.
- System requires minimal maintenance.

ADVANTAGES

Space Saving

Typically, up to 60% space saving due to single aisle for multiple racks.

High storage capacity

Due to single aisle, storage space availability increases by nearly 80% to 100% in the same area as that of conventional racking.

Safety

Stored material is safe from dust, damage, external influences or theft and in-built system features ensure safety of operator.

Reduced manpower

Very less manpower required for moving the racks with heavy loads.

Easy to locate the materials

A list of stored material is available on an acrylic sheet holder on one side of the rack. This feature saves nearly 30% of time.

Individual locking rack

Allow access to multiple racks simultaneously.

TOOL INTEGRA



Ultrasonic Cleaner



Storage for
In-process Tools



Vertical / Horizontal
Tool Storage Cabinet

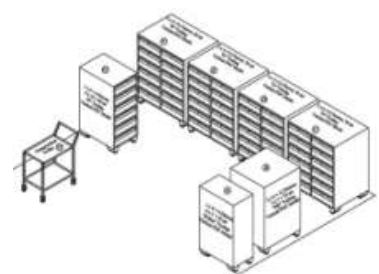
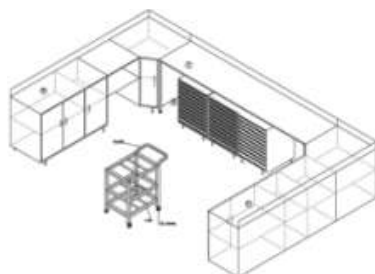
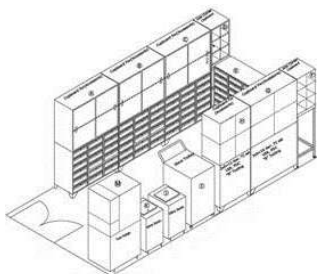


Transport
Trolley



Document Storage

INTEGRATED TOOL VALIDATION ROOM



CUSTOMIZED AS PER AVAILABLE FLOOR SPACE

INDIA - OPERATIONS



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Sikkim

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Sanand-II,
Ahmedabad - 382170,
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Mumbai

9, Rajvidesh Building, Prime
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Vasai (East), Thane - 401 208,
Maharashtra, India.

Shripal Industrial Estate,
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Vasai (East), Thane - 401 208,
Maharashtra, India.



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: UZBEKISTAN



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