





## ABOUT OUR COMPANY

Pharmatech Engineering Company, Founded in the year 1993 at Mumbai (Maharashtra, India), one of the fastest growing & well reputed Organisation. We are manufacturer & exporter of wide range of all models of Blister, Strip & Alu Alu Machine parts & tablet tooling for Compression machine. Our object is to manufacturer superior quality products with innovativeness, specifications, stern supervision by qualified team of Engineers, timely services with best prices in all over India & abroad countries proven track records of consecutive 25 years & satisfied more than 800 valued clients by supplied 20,000 sets of parts. We are a technology driven company to provide you packaging solutions.

**Perfect Tablet Tools** & **Rotek Pharma Technologies** are our group of companies for tooling technology promoted since 1987 with an experience of over three decades.

" A to Z solutions for all your Packaging Needs."

#### KEY FEATURES OF INFRASTRUCTURE FACILITY

- · ISO 9001: 2008 certified plant.
- Wide area of 13000 Sq.ft. manufacturing plant at Rabale.
- Large capacity & high speed CNC machines capable of manufacturing extensive range of products.
- Well-equipped Quality Control & Quality Assurance laboratory.
- Computer aided design to optimize efficiency in terms of cost, quality & reliability.







#### **BLISTER MACHINE - CHANGE PARTS**



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**BFR CSR** 

**PUNCH TOOL & GEARS** 

FORMING TOOL & INDEXING ROLLER



**CUTTING TOOL** 



BLISTER / COUNTER SEALING ROLLER



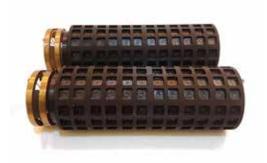
UNIVERSAL BRUSH FEEDER

Materials of Construction: Aluminium - Premium Grade HE-30, HCHC - Premium Grade D2 Steel, OHNS - Premium Grade D2 Steel, Stainless steel - Grade S.S. 316, Teflon (PTFE) - Polytetra Fluro Ethylene produced by ATF Fluorotec U.K., Gears - Cast Iron & stainless steel, Fasteners nut, Bolts & washers springs - TVS Unbreako/ Spring steel, Brush Rollers - Nylon & wire brushes with food grade, Nylon - Denier Ballistic Nylon, Bearings - SKF, FAG-Ina, NSK. Coating: Sand Blasting, Hard Grey Anodizing with 20 microns, ENP (Electroless Nickle Platting 10 to 15 Microns, Blackodizing for corrosion Resistance, Buffing etc.





#### **STRIP MACHINES - CHANGE PARTS**



DIE SEALING ROLLER



**GEARS** 



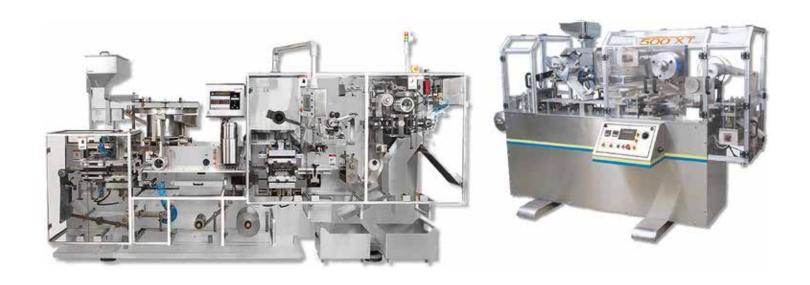
**CHUTE CHANNEL** 



**BOWL TRACK** 

Materials of Construction: Aluminium - Premium Grade HE-30, HCHC - Premium Grade D2 Steel, OHNS - Premium Grade D2 Steel, Stainless steel - Grade S.S. 316, Teflon (PTFE) - Polytetra Fluro Ethylene produced by ATF Fluorotec U.K., Gears - Cast Iron & stainless steel, Fasteners nut, Bolts & washers springs - TVS Unbreako/ Spring steel, Brush Rollers - Nylon & wire brushes with food grade, Nylon - Denier Ballistic Nylon, Bearings - SKF, FAG-Ina, NSK. Coating: Sand Blasting, Hard Grey Anodizing with 20 microns, ENP (Electroless Nickle Platting 10 to 15 Microns, Blackodizing for corrosion Resistance, Buffing etc.





#### **ALU ALU MACHINES - CHANGE PARTS**







**PUNCH TOOL** 

**SEGMENT** 

FEEDING CHANNEL







MAIN CAM

**INDEXING ROLLER** 

**EMBOSSING TOOL** 

Materials of Construction: Aluminium - Premium Grade HE-30, HCHC - Premium Grade D2 Steel, OHNS - Premium Grade D2 Steel, Stainless steel - Grade S.S. 316, Teflon (PTFE) - Polytetra Fluro Ethylene produced by ATF Fluorotec U.K., Gears - Cast Iron & stainless steel, Fasteners nut, Bolts & washers springs - TVS Unbreako/ Spring steel, Brush Rollers - Nylon & wire brushes with food grade, Nylon - Denier Ballistic Nylon, Bearings - SKF, FAG-Ina, NSK.

Coating: Sand Blasting, Hard Grey Anodizing with 20 microns, ENP (Electroless Nickle Platting 10 to 15 Microns, Blackodizing for corrosion Resistance, Buffing etc.







ROTEK PHARMA TECHNOLOGIES

COMPRESSION TOOLING

BROCHURE

# **KNOW US**

## The **ROTEK PHARMA TECHNOLOGIES** was founded by a team of tooling experts in 1987, with an experience of over three decades in Tooling Technology.

The company is engaged in Design, Development, Manufacturing and supply of Quality Tablet Tooling's & its Accessories. We have the expertise and facilities to meet the growing demand of the tableting industry for standard / customized tooling's for a range of application.

Our wide range of products include A to Z solution for all your tableting needs. Our commitment towards developing ground-breaking solutions through R&D in areas such as metallurgy, punch coating, boosting productivity (by our multi tip solutions) and Quality Assurance Measures which has being successfully adopted by customers worldwide. We believe that every penny spent in research and development is a penny well spent.

We have been supplying our tooling's to various sectors like Pharmaceutical, Nutraceutical, Confectionery, Veterinary, Cosmetic & Ceramic Industries by marketing it in both domestic as well as international market.

At ROTEK PHARMA TECHNOLOGIES we not only manufacture tablet tooling's of unparallel quality, but also provide support equipment to help maintain tablet quality. Our headquarters is strategically located in one of the finest progressive industrial society. ROTEK PHARMA TECHNOLOGIES campus includes Administration, Manufacturing, Testing, Training and R&D facilities specifically designed to convey our customers about our Development, Growth & Reliability.





Tablet Compression Tooling's are in the existence from more then a century now and as being the only source to form solid dose of medication through compression the industry has seen many changes and advancements with the use of Special Purpose Tool Steels to finding new ways on resolving the general & critical Tableting issues with Advanced Coating Solutions to Introducing Multiple Tip for the Tooling to improvise & boost productivity which has been very Revolutionary for the past couple of decades in which we have been a part of the journey and are always proud of the same.

With the introduction of new and robust Technical Advancements with the implementation of Automation we have been aiming all the possibilities to make things better and relieving for the user, giving them peace of mind and ability to focus better on other sections of work.

Keeping this user satisfaction as our priority we ROTEK PHARMA TECHNOLOGIES started our manufacturing facility in 1987 and since have always catered the industries growing demands and finding newer ways to help make things better for the end user, which has given us a good market presence and a huge list of happy customers worldwide, by keeping the focus straight on what we started it with we are always learning & innovating.

#### WE MANUFACTURE TOOLINGS FOR:

























#### & many more catering the industry.

The categories we make tooling's for is undefined as we are equipped to manufacture any customized tooling required by the client to cater their needs, but here are a few commonly made tooling types:

- EURO STANDARD TOOLING (`BB', 'B', 'DB' & 'D' TYPE)
- TSM STANDARD TOOLING (`BB', 'B', 'DB' & 'D' TYPE )
- FETTE TOOLING including SEGMENT DIES
- · KILIAN TOOLING
- · JAPANESE STANDARD TOOLING
- · BOLUS TYPE TOOLS
- · MULTI TIP TYPE TOOLING CUP TYPE
- · MULTI TIP TYPE TOOLING MONO BLOCK TYPE
- MICRO TIP TYPE TOOLS
- · SNAP TAB TYPE TOOLS
- · 3D TIP TYPE TOOLS



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## TOOL STEEL



For tool steel toughness, resistance to wear and corrosion, strength and resistance to distortion and warping during heat treatment are its most important properties. These properties are the condition under which it is manufactured. For purpose of comparison, the steels used to manufacture tablet press tooling have been grouped in three categories:

- O1 Steel: It is a General Purpose Steel which is a Oil Hardened Non Shrinking Steel which has High Hardenability and is commonly used for Blanking & Stamping Punches.
- **S7 Steel:** Is a tool steel grade with exceptional impact resistance plus the highest hardenability of shock resisting grade of Tool Steel due to which is commonly used in Tablet Compression Punches for its heavy load bearing capacity.
- D3 Steel: Is a Hot Die Steel and comes under the Category of High Carbon High Chromium (H.C.H.C.) Steel which has Great Resistance to Wear due to the percentage of Chromium in its structure for which it is also the most preferred choice for Tableting Dies.
- **D2 Steel**: It comes under High Carbon High Chromium (H.C.H.C.) Steel category which also has Excellent Wear Resistance & Abrasion Resistance and so is generally used for Abrasive Tablet Compression.
- **440C Steel:** Is a Stainless Steel type with High Carbon and High Chromium percentage of Elements which also has Excellent Hardenability and can go upto 60 HRC max. This category of Steel is used to Manufacture Small Tips for Multi Tip Tooling's.
- **A2 Steel:** Is a Cold work Steel and is a Air Hardening Steel which provides High Hardness with good dimensional stability which also averages better Wear Resistance.
- **S5 Steel:** Is a primarily a Oil Hardening Grade Steel which was developed for Better Resistance to Shock that has Good Elemental combination of Manganese-Silicon-Molybdenum.
- **408 Steel**: Is a Stainless Steel which is a Ferritic Steel that offers good mechanical properties which is Resistant to Corrosion and prevents rust corrosion cracking.
- **S1 Steel**: Is a Cold work Steel which has Tungsten in its Elements due to which it has Greater Toughness and Impact Resistance also can obtain High Hardness.
- **K340 Steel**: Is a Premium Cold work Steel which has High Yield Strength and good Toughness properties which is suitable for Chipping & Premature Wear issues also has Excellent Compressive strength.
- **PK5 Steel**: It is a Premium Steel with Chromium content of upto 16% to 18% which helps in obtaining least Ra value on the surface giving the surface a mirror finish which make it very less Coefficient to friction.
- **N690 Steel**: Is a Premium Steel with Chromium content similar to the PK5 Steel with the addition of Cobalt in it which bonds the molecular structure uniformly giving it Greater Surface finish and Longer Durability.

#### CHEMICAL COMPOSITION OF TOOL STEELS

PERCENTAGE OF CHEMICAL ELEMENTS **CHEMICAL ELEMENT** 440C 408 **S7** D3 D2 S5 K340 PK5 N690 01 0.40n 9n-0.40-1.40-0.95-0.95-0.50-0.400.85-2.00-0.90-**C** CARBON 0.55 0.60 1.00 0.55 160 1.20 1.05 0.650.551.20 1.20 0.00-0.00-0.60 0.10-0.20-1.00-0.20 0.00-0.00-0.40-0.20-0.20-Mg MANGANESE 0.40 0.80 0.60 0.60 1.00 1.00 1.00 0.60 0.50 0.50 1.40 0.10-0.00-0.00-0.00 1.75 0.00-0.15-0.60-0.20-0.20-0.20-0.00-Si SILICON 1.00 0.60 1.00 0.50 0.30 1.20 0.50 0.50 0.50 0.60 1.00 0.00-0.60 1.00-7.00-0.40-0.70 11.0-16.0 4.75 16.0-16.0-3.00-11.0-Cr CHROMIUM 9.00 3.50 13.0 13 O 1.80 0.00-0.00-0.15-0.00-0.00 0.00-0.15-0.15-0.00 0.00-V VANADIUM 0.50 0.35 0.30 0.30 0.50 0.20 0.20 0.35 1.00 1.10 0.10-0.60 1.50-0.00-**W** TUNGSTEN 3.00 1.00 0.00-0.00-0.75 0.90 0.20-0.90-0.90-1.30-0.70-Molybdneum 0.50 1.80 1.20 140 1.35 2.20 110 1.10 0.00-1.50-3.00 Ni NICKEL 0.50 0.00-1.20-**COBALT** 



### TOOL COAT



Based on the product nature such as - abrasive, corrosive, sticky etc.

We at ROTEK PHARMA TECHNOLOGIES recommend various types of coating. As described below:

#### **CVD** Coating

#### **HCP**

A Type of CVD coating which is highly reflective and resistant to Corrosion & Wear also has Very less Coefficient to friction resulting in smoother Compression & Ejection of Tablet, also this coating comes as a default with ROTEK Compression Punches.

#### 2D Surface Coating

#### **ENI**

A two tone silver goldenish coating which is obtained by deposition of Nickel alloy into the metal surface by a bath and not by electrodes or external electrical charges which allows even surface deposition resulting in a Very Smooth Surface Finish.

#### 3D PVD Coating

#### HCP+

A uniquely developed coating which is PVD Superior Hard-Chromium Coating which has a very homogeneous structure along with low density of pores with a good Non-Stick property.

#### CRN+

Is a Silver Black coating which is Hard and is a Double layer of Chromium Nitride coating on the Punch surface which results in a almost pore free surface which helps in Compression of Abrasive Tablets making it more durable and sustainable in such environment.

#### CRX+

Is a Dark Grey coating which along with 2 layers of coating has a 3rd Thick & Dense layer of surface coat which helps further in dealing with Abrasion, Sticking, Wear & Galling also adding up the durability of the Punch with increased service life.

#### **SPN**

Is a Silver Grey coating which is the Best performer against Heavy Sticking & Picking issues due to its Nano structure the surface on which it is applied gets a pore free surface finish and provides a very smooth surface area which is unmatched by any other surface coating.

#### MLY

A Mild Silver coating which is a combination coating which is a two layer coating which has a additional surface with anti stick properties which further reduces the effect of formulation sticking on the Punch Face.

#### TIN

Is a Golden coating which is Very Hard and due to which it works great against Wear resistance which is also used for both Punch & Die to protect it from Wear & Corrosion.

#### **CRN**

It is a Extremely Hard and inert coating with upto 2X harder then Hard Chrome which performs well in Corrosive environment and in sliding Wear applications. It also has Low Residual Stress and is Low Coefficient to friction.

#### **CRX**

Is a Greyish coating which is specially developed to also work with Abrasion and Sticking at the same time which is also a combination coating which has triple layer protection to give the best results for Sticking & Wear related issues.

#### SPN+

Is a Silver Grey coating which is dense thick layer of an already super fine coating which helps in Heavy Sticky Tableting conditions due to its Nano structure it gives the Best surface finish which is uncomparable with any other surface coating.

#### DLC

It's called Diamond Like Carbon coating which is Black and is a Nano Composite coating which has a unique property of natural diamond low friction, high hardness and high corrosion resistance which is perfectly suited for most extreme tableting conditions.

Selecting the right coating for your tableting tools is mainly influenced by the raw materials used in tablet. **Our experienced team will be happy to advise you.** 



#### WHY CHOOSE US

We are a customer driven and quality focused manufacturer and exporter of tooling for compression machine and packaging machine parts. We eastablish a strong market goodwill and set a foothold in the global marketplace.

#### QUALITY CONTROL

All our products can be guaranteed for highest possible safety, quality & efficacy. Independent CNC Tool room with meticulous planning, optimum use of resources.

#### **QUALITY ASSURANCE**

Quality Assurance Department to manage the performance of our global quality system. QA department assures Quality, safety designed & built in our products. We ensure all the functions of QC & Manufacturing are well controlled by Quality Assurance.

#### **CUSTOMIZED SOLUTIONS**

Having experience of more than 20,000 parts supplied parts help us to provide integrated and comprehensive solutions for different challenges with after sales service, establishes long term relationships with internal & external customers.

"Quality is when the customer comes back and not the product."



## PACKAGING MACHINE MODEL CHANGE PARTS

CAM	nMX ACG nMX-C PAM PAC MC MK-33  HM-200R HM-400R HM V3 HMV5 HMV6 TR HM 400 P	BP-100 ELMACH EP-102 BP-602 BP-450AD CARTOBLIS MINIBLISS UNIPACK BQS B45 BMAX HI CART	EPI-MINI EPI-1000 EPI-2000 EPI-2200 EPI-2300 EPI-2500 EPI-3000FBXT EPI-500 FBXT EPI-3010 PDA EPI-3015 PDA EPI-3522
IMA – PG	MINI STAR  PHARMAPACK-150CH PHARMAPACK-240 CH ROTOVAC-210V ROTOVAC-210S ROTOVAC-PLUS CLINIPACK ECO STAR PG-SUPER PG-EXCEL-230T FORMAPACK-230XT TR-100 TR-102	RAPIDPACK	RP-240CH RP-230PDA RP-250PDA ROTOFORM-1 ROTOFORM-2 ROTOFORM-3 RP-230CT MACH-1 PLUS MACH-1 TURBO RP 230FR RP 320FR MACH 1 MP MACH 1 AV
ACCURATE	240 PLUS 250 EVO 300 FBR EXCEL 44 FLATERN-SXL	STRIP PACKAGING MACHINE	MACH 1 2AV MACH 1 SPM  HEMSON SATELLITE GANSON SAMS DIE CRAFT

KLOCKNER, ULHMANN & MANY MORE.



#### **OUR CLIENTS**



































Countries we have clients in:







#### **OFFICE ADDRESS**

PHARMATECH ENGG, CO. MFG, PVT, LTD. 48, New Modella Industrial Estate, Wagle Estate, Thane (W) - 400604, India. +91 9821072425 / + 91 22 25828871 / +91 22 25821585 sales@pharmatechengg.com www.pharmatechengg.com



#### **MANUFACTURING UNIT**

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#### **GROUP OF COMPANIES**





