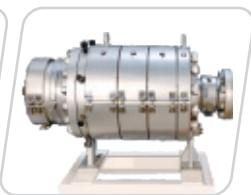
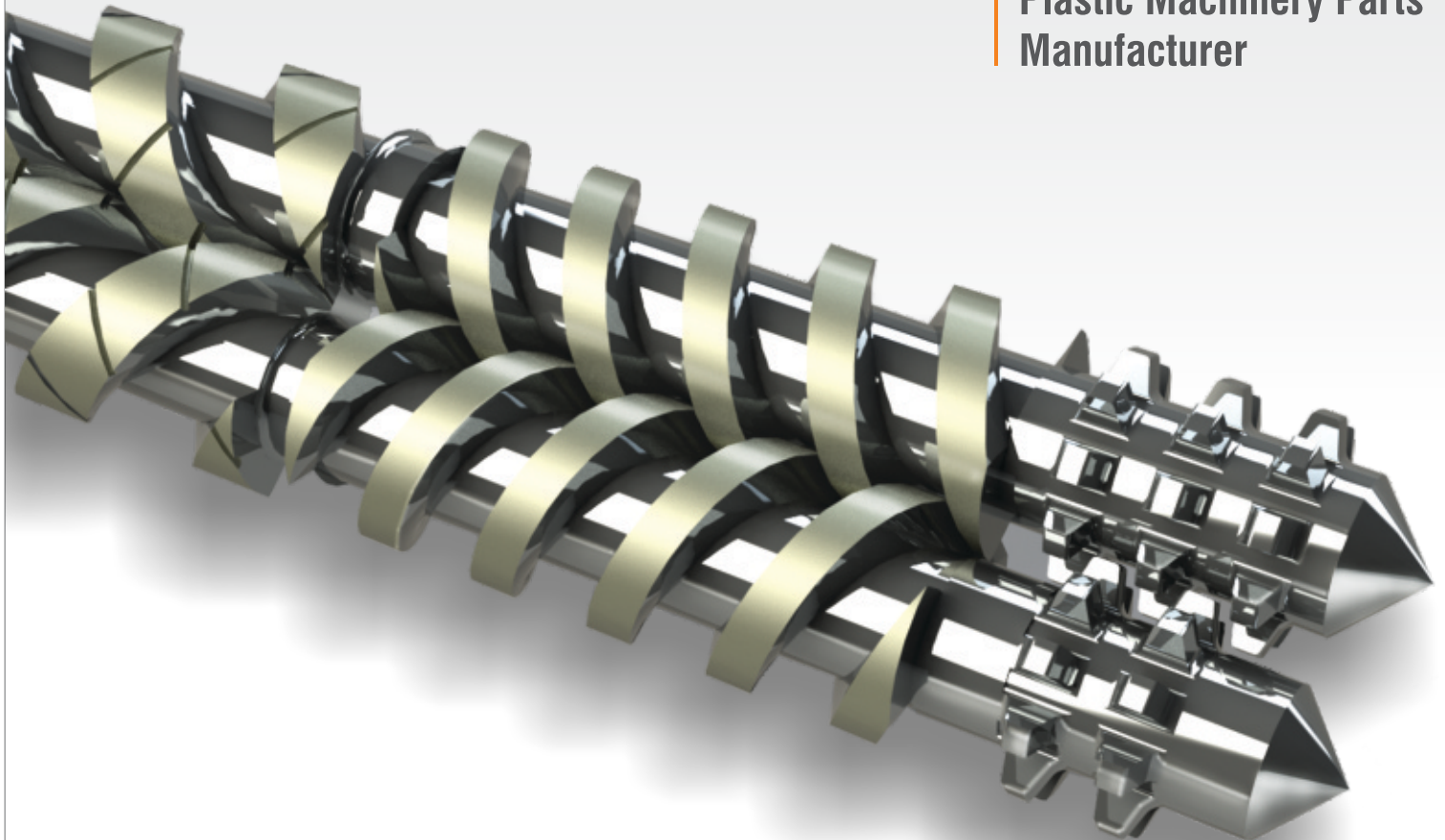


**Extruder Screw Barrel
& All Types of
Plastic Machinery Parts
Manufacturer**



Your Output Is
Our Success



About Us:

Premium Quality Screw Barrels For Your Extruder

Tirupati Industries has over 27 years of experience producing Screw, Barrel, Groove Sleeve, Die Head, Sizer, Sleeve Fitted Front Barrel, Candle filter assembly, and all types of Plastic Extrusion Machine Parts.

Tirupati industries are the first choice as a Screw Barrel Manufacturer, not just because of our best quality but also for our good business ethics as well. We are a Sole Proprietorship company incorporated in 1994 at Ahmedabad (Gujarat, India) and always strives hard to provide our valued customers with the qualitative range of plastic machinery parts as per the global set standards.

Why Chose Us?

When you chose us, you will aquire the benefits of enriched experience of quality and commitments. When it comes to Screw Barrels, we never disappoint our customers.

The Unparalleled Experience We Have :



Customers :
1500+



New Customer
addition per year :
30+



Number of
Machines:
20+



Products manufactured
per year :
900+

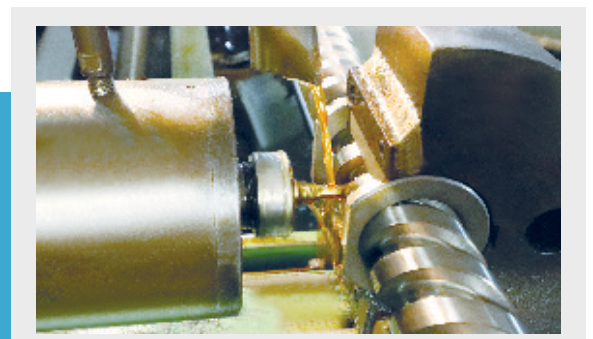


Exported
countries:
23+



Company History

- **1994** | Birth of the Tirupati Industries in the field of Plastic Industries.
- **2000** | We established our presence in the field of Screw Barrel.
- **2010** | 16 years of efficient work, expansion of products, and export to the world.
- **2015** | Expansion to more than 10000 sq.ft. area.
- **2020** | It's a longer path and we only reached few milestones; more is yet to come.



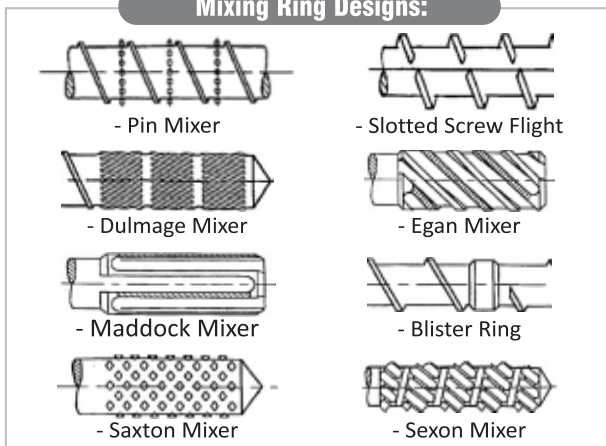
SINGLE SCREW BARREL

- **Diameter Range:** 20mm to 200mm.
- **Length:** upto 6000mm.
- **Material:** Certified EN41B MUSCO procured from an authorized dealer.

Single Screw Features:

- Dimensional accuracy in tolerance of ± 0.02 .
- Higher Output capacity and longer life span.
- Extraordinary surface hardness with TC coating. (Depth 1.5 to 2 mm)
- Accurate linearity of screw. ($<0.02\text{mm/m}$)

Mixing Ring Designs:



In many applications where higher output and better mixing are required, the following screw designs can be provided with flawless accuracy and quality at Tirupati industries.

Barrier Screw :

Features:

- Increases melting efficiency.
- Increases the plasticizing capacity.
- Removes solid bed breakup.
- Allows more control and stability.

Maddock Mixing Ring:

Features:

- Better mixing of melt polymer.
- Homogenous melting.

Single Barrel Features:

- Precise positioning of barrel bore and smooth finishing.
- Accurate compatibility with Die and Gear Box.
- Bore inspection with precision gauging machine.
- Extraordinary wear-resistant by Nitriding.
- Higher Output.

Application of Single Screw Barrel: -

Orientation Extrusion Machinery:

- Extrusion Coating Machine. (LD/HD/PP)
- Sheet Extrusion Machine. (PP/LD/HD/ABS/PC/HIPS)
- Tape Plant.

Blown Film Plant:

- Mono Layer Extrusion Plant. (LDPE/LLDPE/HM/HDPE/PVC/PP)
- Multi-Layer Film Plant. (LDPE/LLDPE/Nylon/HDPE/PP)

Pipe Plant:

- PVC Conduit Pipe
- PVC Suction
- PVC Soft Tubing
- SPVC Braided Hose
- HDPE Pipe
- PVC Cable Coating
- PVC Profile

TWIN SCREW BARREL

At Tirupati industries, We manufacture wide range of Twin Screw Barrel. This includes the Counter Rotating - Parallel & Conical Twin Screw Barrel.

- **Diameter Range** : 52mm to 110mm.
- **Output Capacity** : 110 Kg/hr to 900 Kg/hr.
- **Material** : Certified EN41B MUSCO procured from an authorized dealer.

Twin Screw Features:

- Dimensional accuracy in tolerance of ± 0.02 .
- Accurate gap checking with pin gauge.
- Effortless to fit in barrel and higher Output capacity.
- Longer life with Gas Nitriding.
- Extraordinary surface hardness with TC coating. (Depth: 1.5 to 2 mm)
- Accurate linearity of screw. ($<0.02\text{mm/m}$)
- Best melt quality.



Twin Barrel Features:

- Precise positioning of twin barrel bores and centre distance.
- Extraordinary surface quality through honing.
- No trace of any irregularities in assembled barrel's ID bores.
- No burning and lining problem in production.
- Extraordinary wear resistant by Nitriding.
- High Plasticizing performance.



Application of Twin Screw Barrel: -



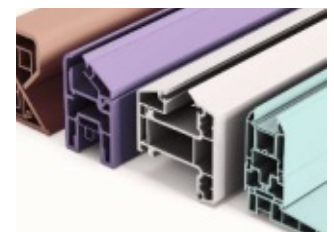
PVC Pipe & UPVC Pipe



RPVC Pipe



CPVC Pipe

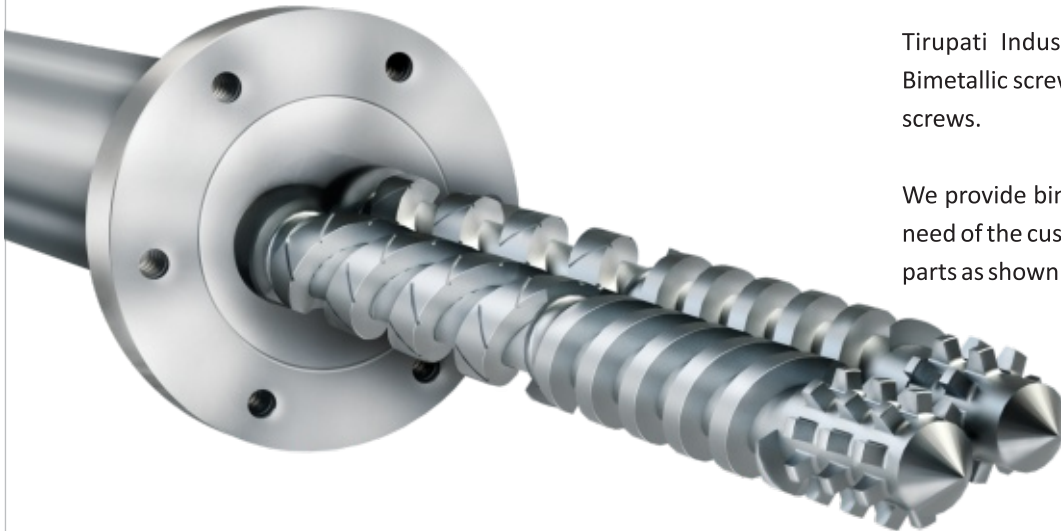


PVC Profile

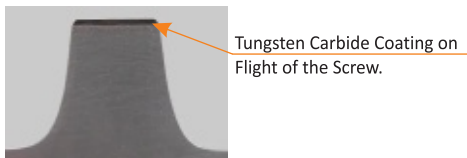
BIMETALLIC SCREW

Tirupati Industries has capacity to provide the best Bimetallic screws by doing various types of TC coating on screws.

We provide bimetallic TC coating as per the economical need of the customer. We have divided our coating in two parts as shown below:



Type 1. TC coated one zone:

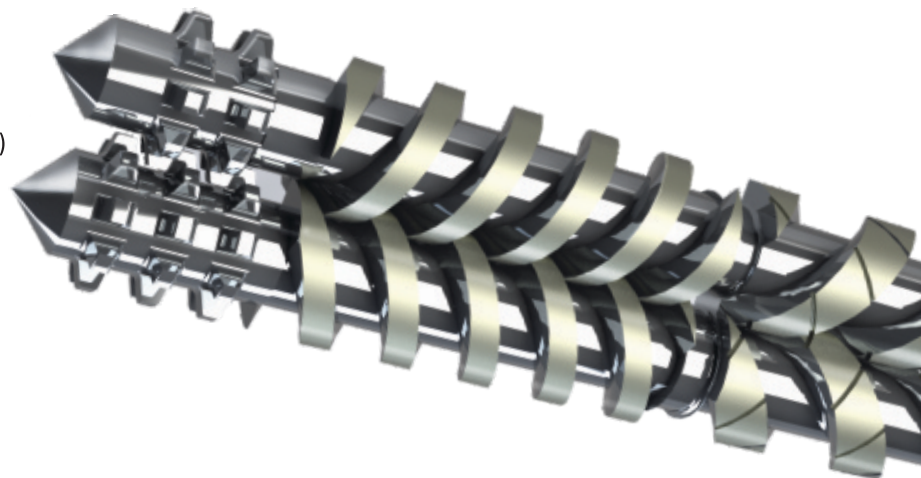


Problem: Screw wearing in melt zone. (metering zone.)

Solution: HVOF-Tungsten Carbide Coating.

Features:

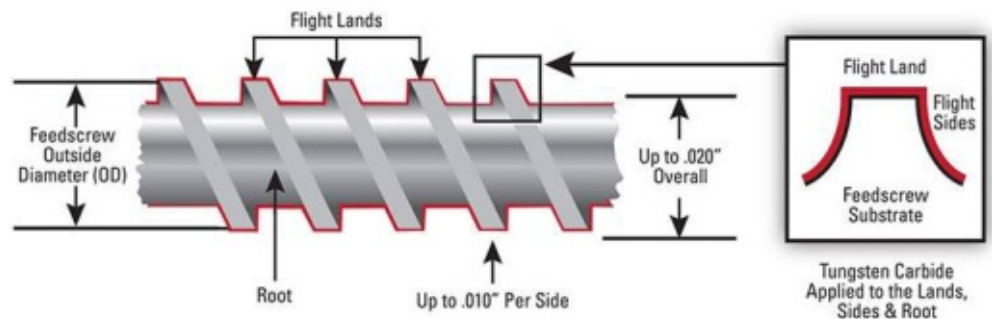
- Outstanding life compares to Nitrided Screw.
- Remarkable wear resistant.
- Impervious surface quality.
- Higher sustainability against filler damage.
- Economical solution with better performance.
- No delamination problem.



Type 2. Full encapsulated TC coating:



88% Wc-Cr thermal spray Coating.



HVOF TC Coating

Features: -

- Extraordinary life of screw.
- Automated coating.
- Unified coating thickness. (0.15 to 0.20mm)
- Mirror finish.
- Higher wear and corrosion resistant.
- Outstanding sustainability against filler damage.

Flash Carbide coating

Features: -

- Economical then HVOF.
- Longer life.
- High Wear and corrosion resistant.
- Unified coating thickness. (0.08mm to 0.10mm)
- Mirror finish.

BIMETALLIC BARREL

Processing Dimension : Dia 20mm to 200mm and length up to 6000mm.
Alloy powder composition : Wc (50%-60%), C, Si, Cr, B, Ni, Mo, Co, etc.

Features

- Higher wear and corrosion resistant.
- Longer and better life than normal barrel.
- Made with flawless precision and accuracy.
- Centrifugal casting method is used.
- Bimetallic layer thickness: 2.0 to 3.0 mm.
- Better sustainability against filler damage.

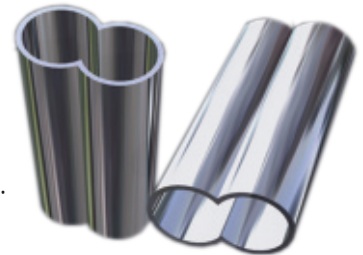
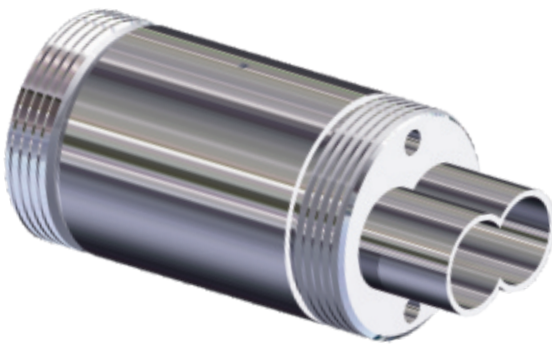


Sleeve Fitted Front Barrel:

At Tirupati industries, each Twin Barrel is fitted with Sleeve Fitted Front Barrel to increase the life of the Barrel.

Features:

- Certified HSS M2 Material.
- Precise fitting with Twin Barrel.
- No trace of irregularities in assembled barrel ID bores.
- No sticking and burning of material.
- Extraordinary life.
- Better sustainability against filler damage.



Groove Sleeve

At Tirupati Industries, we provide Groove Sleeve/Groove Feed for our single barrel.

Diameter : 37mm to 150mm.
Material : EN41B and HSS M2/D2.



Features:

- Better melting capacity.
- Higher output.
- Remarkable wear and corrosion resistant.
- Precise measurement.
- Provided Inspection report.

Pressure and Vacuum Sizer

At Tirupati Industries, we manufacture both types of sizing tools required for pipe extrusion.

Manufacturing Range: dia 40mm to 630mm. **Manufacturing Range:** dia 20mm to 1200mm.



Type 1: Pressure sizer.

Type 2: Vacuum Sizer.

Features:

- Accurate size tolerance.
- Seamless production.
- Qualitative output.
- Provided Inspection report.
- Competitive cost.

Candle filter and Assembly

At Tirupati Industries, we manufacture candle filter and its assembly ranging from dia 50mm to 120mm.

Material for sleeve : SS (certified)
Material for assembly : EN19 (certified)



Diameter: 50mm to 120mm.

Features:

- Better Filtration capacity due to efficient design.
- Long lasting working capacity due to certified material.
- Self-cleaning capacity.
- Compatible with your machine.
- Competitive cost.

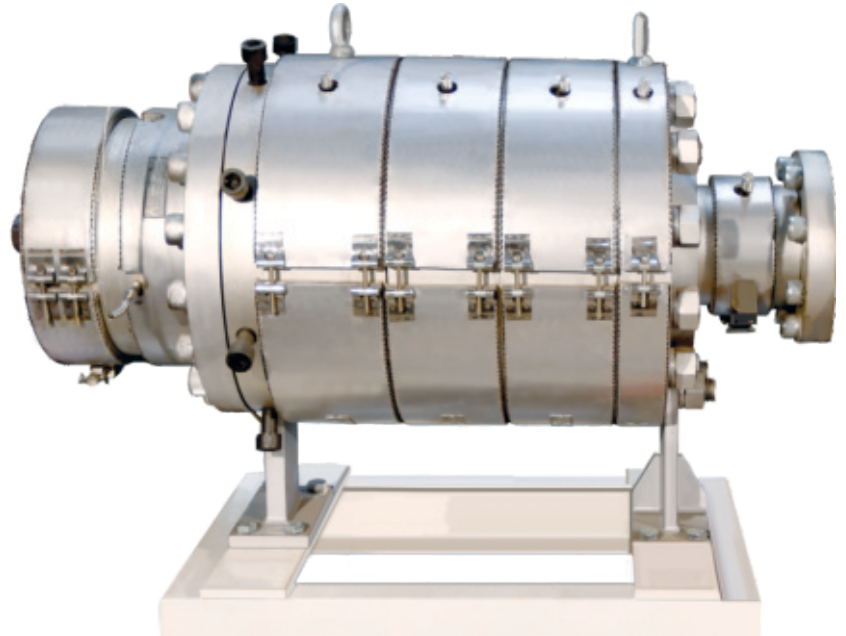
DIE HEAD

RPVC Pipe extrusion plant die:

Spider Design

Features:

- High-volume low-pressure design ensures vast thickness range.
- Uniform melt distribution throughout the entire pipe circumference.
- Twin die heads for higher outputs in smaller diameters.
- Extruders utilization from 80-100% even with smaller pipes.
- Elimination of continuous spider marks (ID to OD) allowing better mechanical properties of the pipe.
- Ideal residence time profile with selective temperature control on the sensitive material.



Specification:

Model	Unit	W-63	W-110LV	W-110HV	W-200LV	W-200HV	W-250	W-315
Pipe Size	mm	20-63	20-110	20-110	32-200	63-200	75-250	90-315
Output	Kg/hr	100	200	250	250	320	425	550

HDPE Pipe extrusion plant die:

Spiral Design

Features:

- Improved inner pipe surface and short purging time.
- Optimized back pressure allows a balance of compression & melt temperature control.
- Uniform melt flow can be achieved yielding minimum wall thickness deviation.
- Enables PE, PPR, ABS processability only by changing the toolings.
- Constant processing characteristics over the full range of material.
- Consistent product quality for all pipe sizes.
- Low pressure build-up & low melt temperature even with high throughput.



Specification:

Model	Unit	WM - 50	WM - 110	WM - 200	WM - 250	WM-450
Pipe Size	mm	12-50	20-110	20-200	63-250	90-450
Output	Kg/hr	200	350	500	800	1000



SERVICES

Reconditioning Service:

At Tirupati industries, we provide the repairing service for your worn-out and faulty screw barrels. With our team of experts, we have designed a systematic procedure to ensure the restoration of the functionality of your screw barrels.

1. Receiving your worn-out screw barrel.
2. Cleaning and pre-Inspection.
3. Cost estimation.
4. Customer approval.
5. Restoration operation.
6. Inspection report.
7. Proforma and Payment.
8. Packing and Dispatch.

Our Norms:

- Warranty is Your Entitlement.
- Process and Product Optimization.
- Inspection on Each Step.
- Rapid Response and Fast Delivery.
- From Order till Installation Satisfaction Customers.



OUR CLIENT



Your Output Is Our Success

Location :

11, 12, Om Industrial Park, Opposite Maruti Estate, Near Prashant Engineering, Bombay Conductor Road, Phase-1, GIDC Vatva, Vatva Industrial Estate, Ahmedabad-382445, Gujarat, India

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