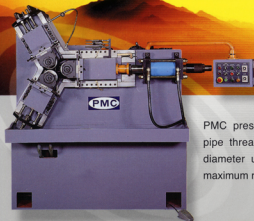




THE WORLD TURNS ON PMC MACHINES HYDRAULIC PIPE THREAD ROLLING MACHINES

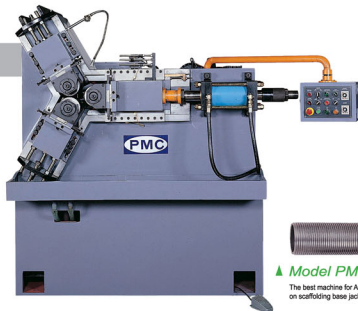


3-ROLL-TYPE

PMC presents a series of 3-roll-type pipe thread rolling machines for pipe diameter up to 204 mm of 100 tons maximum rolling pressure

▶ STANDARD MACHINE FEATURES

- Full series of 6 PMC pipe thread rolling machines feature a three roll (cylindrical thread die) designed with the pipe blank being supported in position between the dies by a work rest blade or holding fixture for light ~ medium ~ heavy duty accurate threads in high production rate.
- Powerful gear box transmissions to 3-die-spindles + hydraulic feeds for both Through-Feed (continuous rolling) and In-Feed (plunge rolling) productions just by changing the rolling dies.
- The right-hand die is movable type on a precision slideway, it feeds to roll and retracted after rolling is by a hydraulic cylinder feeds (variable pressure) in adjustable stroke and die penetration.
- Quick inching and Die Matching Adjustment work for matching the 3-roll thread profile while in thrufeed production (by tilting the 3-die-spindles to get a helix angle - inclination is up to 8°)
- The machine base is fabricated of high strength steel plates with rib reinforcement for maximum rigidity, plus heavy duty slideways and spindle support housings give extra strength and rigidity. It is designed for minimum deflection and guaranteeing a long productive life.
- The Hydraulic System is located on the rear side of the machine base. This facilitates cooling and easy maintenance, with a pressure compensated pump + flow control and a directional valve. The rolling and return pressures are adjustable, as is speed of die penetration and retraction.
- All models suit for threads of Vee, ACME, stub acme, metric, worm, buttress, ball, multiple start, PT, NPT.....etc., knurls and many other special forms can be produced by our machines.
- Wide industrial applications for: oil pipe connectors; automobile and motorcycle parts; radiating pipes; oil tank covers; art lamps; scaffolding systems; nipple threads; groove formings.....etc.
- Model PM-3D-80 and 100 suit for 1-1/2" ~ 4" heavy duty ACME threads on scaffold systems (scaffolding tube, prop, prop sleeve, base Jack), with innovative design of By-Speed Thru-Feed Thread Rolling Dies features high speed, smooth and accurate thread rolling up to Nine (9) start.
- Model PM-3D-150 and 200 suit for oil pipe thread rolling.



▲ Model PM-3D-80

The best machine for ACME-thread on scaffolding base jacks and props



▲ Model PM-3D-80 AUTO

- Model PM-3D-80 Auto – with Bundle Magazine Loader + Auto Feeder + Auto Thread Rolling + Auto Out-Feeder designed for fully-automatic through-feed thread rolling production on scaffolding pipe jacks.

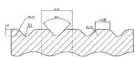


▼ *Model PM-3D-100*



Working Example 1:

- Throughout thru-feed thread on 1800 mm long scaffolding pipe jack
- 70 mm O.D. seamless mild steel pipe of 3 mm thickness
- THREE-START Thread x 6.45 mm Pitch (89°) x 1.9 - 2 mm Depth

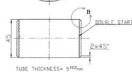


DETAIL OF 'V' (SCALE 10:1)
THREAD PROFILE



Working Example 2:

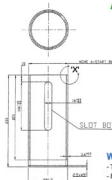
- Plunge feed thread on scaffolding prop sleeve
- 76.5 mm O.D. seamless mild steel pipe of 5 mm thickness
- TWO-START Thread x 8.2 mm Pitch (29°) x 2 mm Depth



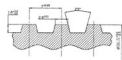
PROP SLEEVE



**DOUBLE-START
ROLLED-THREAD DETAIL AT 'X'**



SLEEVE



VIEW AT 'X'

▲ *Model PM-3D-150*
Model PM-3D-200

Working Example 3:

- Through-Feed thread on scaffolding prop sleeve
- 86.5 or 89 mm O.D. seamless mild steel pipe of 3.6 mm thickness
- FOUR-START Thread x 7 mm Pitch (29°) x 1.8 - 2 mm Depth

STANDARD EQUIPMENTS:

- Each machine standard equipment is ready for production suits for both Through-Feed Production (unlimited thread length) and Plunge-Feed Production (short and fixed thread length).
- Universal Die-Spindle Driving Mechanism and Rolling Dies Housing Mechanism with adjustable inclination rolling degree, micro adjustment for rolling dies thread profile teeth-by-teeth, micro adjustment for a unique parallelism accuracy rolling result.
- Adjustable hydraulic rolling pressure, hydraulic die feed stroke and micro rate of die penetrations.
- Complete Hydraulic System with pressure meter, oil level indicator, solenoid valves, overload device etc.
- Electrical Equipment with safety standard and control.
- Centralized Control Panel.
- one set = 3 pieces Thread Rolling Dies for one of customer's thread sizes thru-feed or plunge-feed rolling.
- Complete Coolant System.
- Splash Guard and Safety Covers.
- Foot Operated Brakes.
- Tool Box with Adjusting Tools.

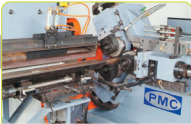
OPTIONAL EQUIPMENTS/ACCESSORIES:

- Front Supporter and Rear Supporter for long Tube up to 1 M - 6 M long (when in thru-feed production specially for Tube's full length throughout thread).
- Economical Slant Type Material Loader with material line up by manual arrangement, plus Auto Tube Feed and Auto Thread Rolling.
- Fully-Automatic Production by Bundle Magazine Loader (auto stock storage, line up, stand-by and drop down) + Auto Feeder + Auto Thread Rolling + Auto Out-Feeder features for tube's thru-feed thread rolling production in adjustable thread length in one-cycle-time by PLC-control.
- Through-Feed or Plunge-Feed Thread Rolling Dies for normal taper thread (PT or NPT) and parallel thread (PF or PS) etc.
- ... ditto ... but for ACME thread, ball screw thread, special pitch and special degree thread etc.
- Special supply of By-Speed Thru-Feed Thread Rolling Dies for thread forming 2-Start, 3-Start, 4-Start etc. of different degree trapezoid thread etc.
- Variable Speed Die-Spindle Motor (Frequency Converter).

(S) = STANDARD (O) = OPTION

MODEL		PM-3D-30	PM-3D-60	PM-3D-80
SPECIFICATIONS				
Maximum Rolling Pressure		10 TONS	20 TONS	30 TONS
CAPACITY	PIPE (tube) Outside Diameter Range	12 - 30 mm	20 - 60 mm	30 - 80 mm
	BAR Outside Diameter (subject to approval)	30 - 40 mm
	Thread Pitch Range	0.5 - 2.5P 48 - 10 TPI	1 - 6P 24 - 4 TPI	2 - 8P 12 - 3 TPI
	Maximum Thru-Feed Thread Length	Unlimited (free extension thread length)		
Die-Spindle Diameter (3 pieces roller spindle)		25.4 mm (S)	40 mm (S)	54 mm (S)
ROLLING DIES AND SPEED	Max. Outside Diameter	80 mm	120 mm	150 mm
	Rolling Dies Bore Diameter	25.4 mm (S)	40 mm (S)	54 mm (S)
	Max. Rolling Dies Width	40 mm	50 mm	100 mm
	Die-Spindle Rolling Speed Range	100 - 300 RPM (S)	80 - 250 RPM (S)	60 - 200 RPM (S)
Variable Die-Spindle Speed		0 - 360 RPM (O)	0 - 300 RPM (O)	0 - 250 RPM (O)
Max. Inclination of All-3-Spindles		From 0° up to 8° (set for Thru-Feed Production)		
MOTORS	Die-Spindle Main Drive	2 HP (S)	7.5 HP (S)	15 HP (S)
	Variable Speed Drive	3 HP (O)	10 HP (O)	20 HP (O)
	Hydraulic Motor	2 HP	3 HP	7.5 HP
	Coolant System	1/8 HP	1/8 HP	1/4 HP
Machine net weight (approx)		600 kg	1300 kg	2600 kg
Machine gross weight (approx)		720 kg	1480 kg	2850 kg
Machine dimension L x W x H (approx) cm		112 x 92 x 140	138 x 132 x 151	181 x 171 x 176
Shipping dimension L x W x H (approx) cm		132 x 108 x 160	158 x 152 x 173	205 x 192 x 200

OPTIONAL EQUIPMENT:



Economical Type Auto Feeder



Fully-Automatic Machine with Bundle Magazine Loader + Auto Feeder, Auto Thread Rolling and Auto Out-feed



Model: PM-3D-30 with Vibration Tank and Auto Feed



Model : PM-3D-60 with Hopper Magazine Loader and Auto Feed

(S) = STANDARD (O) = OPTION

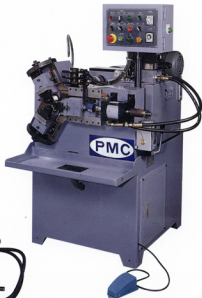
MODEL		PM-3D-100	PM-3D-150	PM-3D-200
SPECIFICATIONS				
Maximum Rolling Pressure		45 TONS	70 TONS	100 TONS
CAPACITY	PIPE (tube) Outside Diameter Range	38 ~ 102 mm	50 ~ 153 mm	75 ~ 204 mm
	BAR Outside Diameter (subject to approval)	38 ~ 70 mm	50 ~ 100 mm	75 ~ 132 mm
	Thread Pitch Range	2 ~ 12P 12 ~ 2 TPI	3 ~ 25P 8 ~ 1 TPI	4 ~ 32P 6 ~ 0.8 TPI
	Maximum Thru-Feed Thread Length	Unlimited (free extension thread length)		
Die-Spindle Diameter (3 pieces roller spindle)		70 mm (S)	85 mm (S)	85/100 mm (S)
ROLLING DIES AND SPEED	Max. Outside Diameter	190 mm	230 mm	280 mm
	Rolling Dies Bore Diameter	70 mm (S)	85 mm (S)	85/100 mm (S)
	Max. Rolling Dies Width	150 mm	210 mm	280 mm
	Die-Spindle Rolling Speed Range	0 ~ 100 RPM (Variable Speeds Drive by Frequency Convert Motor as standard equipment)		
Variable Die-Spindle Speed				
Max. Inclination of All-3-Spindles		From 0° up to 8° (set for Thru-Feed Production)		
MOTORS	Die-Spindle Main Drive	30 HP	40 / 50 HP	60 / 75 HP
	Variable Speed Drive	Frequency Converter	Frequency Converter	Frequency Converter
	Hydraulic Motor	10 HP	15 HP	20 HP
	Coolant System	1/2 HP	1 HP	2 HP
Machine net weight (approx)		3800 kg	6450 kg	10000 kg
Machine gross weight (approx)		4150 kg	6950 kg	10700 kg
Machine dimension L x W x H (approx) cm		215 x 205 x 200	270 x 228 x 230	335 x 258 x 250
Shipping dimension L x W x H (approx) cm		240 x 225 x 225	300 x 253 x 255	365 x 388 x 278

Design and specifications are subject to improve and modify without notice.

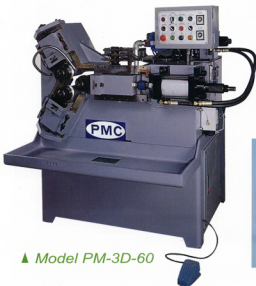


3-Roll-Type Tube Thread Rolling Machines

3 Rolling Dies
Tubular Threads
Equal 120° 3D Set
Hydraulic Drive
High Accuracy



▲ Model PM-3D-30



▲ Model PM-3D-60



● Example of Products



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